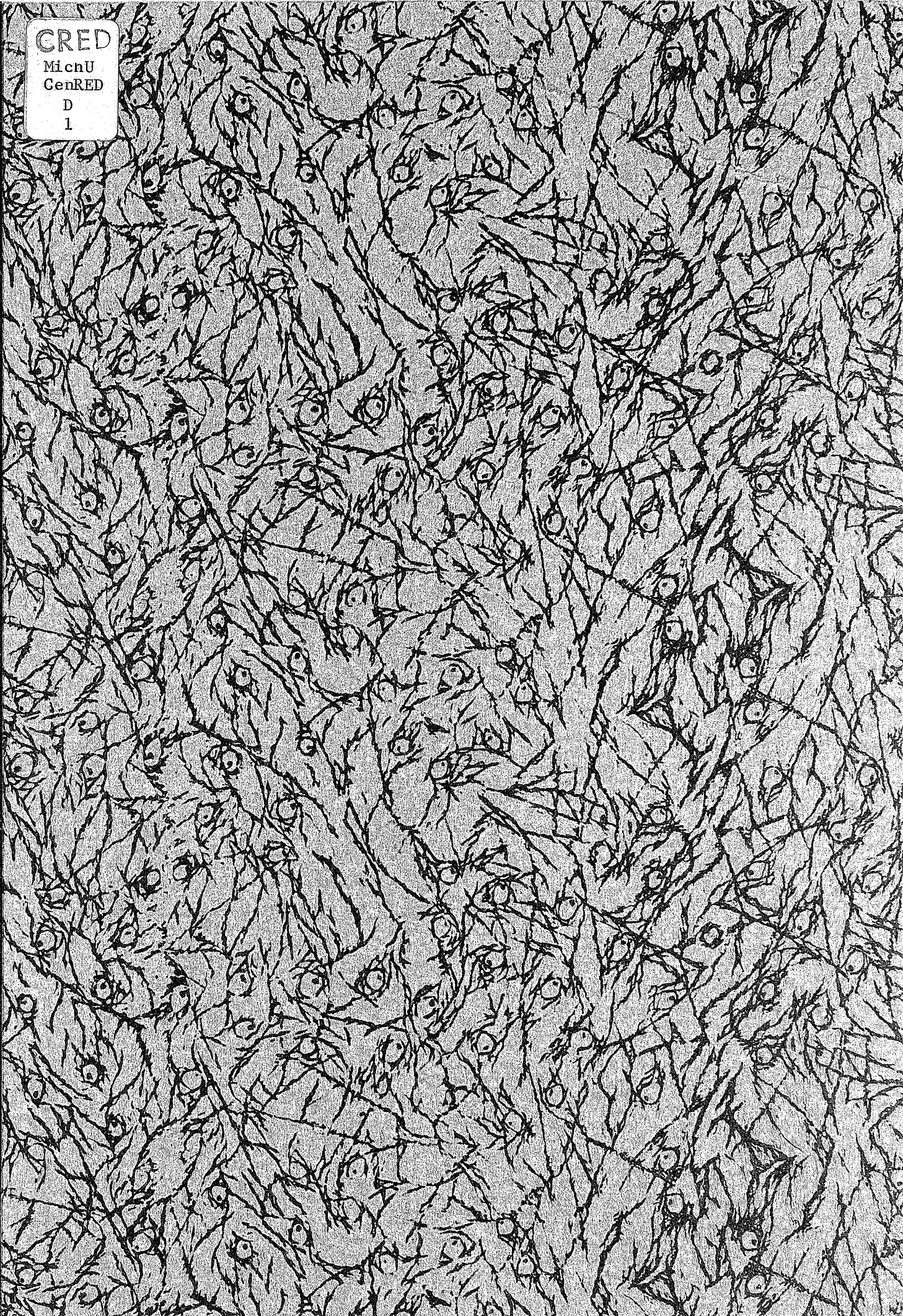


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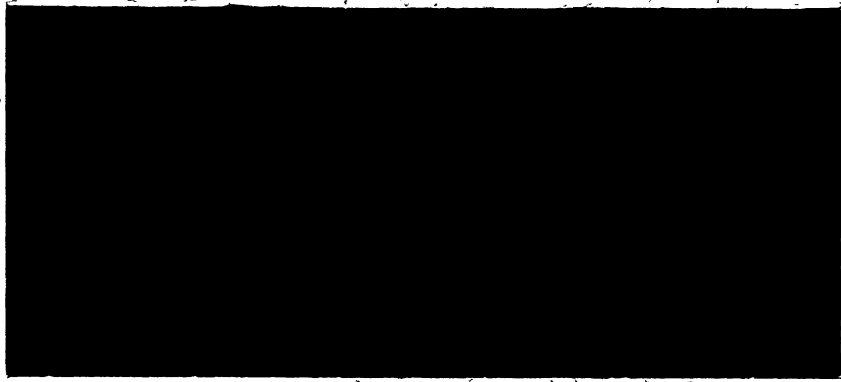


**CENTER FOR RESEARCH ON ECONOMIC DEVELOPMENT
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Center for Research on Economic Development

**University of Michigan
Ann Arbor, Michigan 48104**



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Wage Structure in Less Developed Countries

by

Elliot J. Berg

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Center for Research on Economic Development

University of Michigan

Ann Arbor, Michigan 48104

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INTRODUCTION *

Issues of wage structure--how the various sets of wages in the economy are and should be related to each other--are at the center of wage policy questions in the less developed countries. Yet they have not received theoretical attention; the theoretical literature on economic development focusses only on the general level of wages. Nor have they received much empirical study either. To my knowledge, there is not a single country study examining in detail the wage structure of a less developed economy.

The wage structure even of a simple economy involves numerous wage relationships--between sectors, geographical regions, industries, firms, occupations, sexes, races and others. Only a few of these diverse aspects of wage structure are considered in this paper. Nothing is said, for example, about geographical differentials, nor about differentials between races and sexes. The important issue of the composition of remuneration is discussed very briefly, and only in connection with the effects of fringe benefits on skill margins. The main reason for these omissions is that it is simply impossible to say anything very meaningful about all these elements of wage structure, covering the whole underdeveloped world, within the confines of a short paper, if at all, given how little is known about these matters.

One set of differentials which is not discussed demands special mention: income differences between farmers and wage earners, or between traditional agriculture and the wage earning sector. This is the most important set of differentials of all, from the point of view of allocation of labor, since it is the relationship between average incomes in traditional agriculture and wage rates of unskilled wage earners which is a major determinant of the supply of labor to the wage sector. This relationship is decisively in favor of the wage sector in most of the less developed world, and is becoming more so. The result is stimulation of

*This paper was prepared for presentation at a "Symposium on Wage Policy Issues in Economic Development," organized by the International Institute of Labour Studies, in Copenhagen, Denmark, Oct. 24-27, 1967.

migration to wage sectors already experiencing substantial unemployment. These vital differentials are not discussed further here mainly because they will surely be the subject of analysis in other papers in the Symposium.

Another important omission from this paper is a general discussion of "suitable" or "optimum" wage structures for less-developed countries. The formal definition of an optimum wage structure is rather easy. It can be defined as a set of relative wage rates in which every rate is just high enough to induce each kind of labor to present itself in the needed quantities, provides just enough inducement for workers to acquire skills and accept responsibility, and just enough incentive to meet required standards of performance. Put in another way, the best wage structure is a minimum supply price structure, without extensive "quasi-rents" and without discontent-producing inequities. When we try to spell out more precisely the assumptions under which a "minimum supply price" wage structure is optimum, however, the analysis becomes very slippery. To the extent, for example, that the effectiveness or effort with which people work is wage elastic; or that non-wage private incomes are expatriated and the relationship between profits and investment is uncertain; or that government revenues are spent on non-developmental public consumption--to the extent that any of these possibilities are true, a minimum supply price wage structure is not optimal for development. The issues involved are complicated, and do not lend themselves to brief or casual analysis. Since they are also not altogether essential for the analysis of specific problems of wage structure, and this paper is already too long, they are not considered further.

Instead of trying to deal with all these interesting and important aspects of the wage structure problem, I have chosen to focus on a limited number of issues that are either most discussed in the literature or are particularly important from the policy point of view: one aspect of inter-industry wage structure--the impact of high wage industry on other wage rates; differentials between skilled and unskilled manual workers; manual-clerical or blue and white collar differentials; and several issues of wage structure in the public sector--policy on differentials between

highest and lowest paid government employees and the problem of wage relationships between various layers or segments of the public sector.

The level of generalization is fairly high throughout. It cannot be otherwise in discussing some 80 countries about whose wage structures very little is firmly known. The evidence cited is distressingly casual and simple. For many of the less developed countries that is all the evidence there is.

Inter-Industry Differentials

Defining an optimum theoretical relationship between wage rates for the same kind of workers in different industries is easy. Expanding industries, in which output and employment are growing and profits and productivity are higher than normal, pay higher than average wage rates to attract the labor they need. Inter-industry differentials should be such as to serve this allocative function.

In practice, and in terms of the policy problems raised by inter-industry wage relationships, the issues are a good deal more complicated. The major complication arises from the disruptive effects of a high-paying industry or group of industries on the overall national wage structure, from the tendency for the leading industries to pull up the general level of wages in the rest of the economy.

The problem is particularly acute in the less developed countries because of the uneven nature of these economies. In many of them there is one highly profitable industry, producing for export; the petroleum industry in the Middle East, Venezuela and other places is a prime example.¹ Mining is another example, with the copper industry in Zambia and Chile being especially pertinent cases. In addition, there are a number of industries in the manufacturing sector of most less developed countries, which produce for or serve the local market, and are ordinarily very profitable since they are highly protected against foreign competition. The usual examples of this latter group are breweries, cigarette manufacturers, petroleum marketers.

The root of the wage problem lies in one fact: the export giants and local monopolies are willing, and often more than willing, to pay high wages. It allows them to choose the cream of the available labor force. It encourages commitment to the enterprise, and there is always a possibility that it might reduce turnover and absenteeism, where these are problems. It encourages the acquisition of skill, or at least the attraction of people most likely to be interested in acquiring skills. It doesn't cost a great deal; labor costs are usually a small portion of total

¹Dudley Seers, "The Mechanism of an Open Petroleum Economy," in Social and Economic Studies, March 1964.

costs in these industries, and local labor costs a much smaller portion. Profits are more than adequate. Where marginal tax rates on profits are very high much of the cost of the wage increase is shared with government. Granting generous wage increases avoids labor trouble. It is also excellent public relations, strengthening the industry's political position locally and providing good copy for annual reports to stockholders and clients of the company abroad.

The result of all these incentives to pay high wages by big export firms and internal monopolies is a distorted inter-industry wage structure, with a few enterprises paying rates way out of line with those in the rest of the economy. In Iraq and Iran the oil companies minimum age is 2-1/2 or 3 times higher than the basic minimum in the rest of the economy, and oil workers receive abundant fringes in addition.¹

The disparity in wage levels is not quite as large in the high-wage manufacturing and services sector, but is still substantial. Petroleum marketers, breweries, and cigarette manufacturers usually pay unskilled labor 50-75% above the prevailing minima, and offer better fringes.²

In Zambia in the mid-1950's, the lowest paid unskilled copper ^{worker} earned more than most skilled craftsmen in other industries. Since the mid-fifties, and partly under the stimulus of the leading wage sector, the general level of wages has risen sharply, though differentials between the copper industry and the rest of the economy remain large.³

¹In Iraq the basic daily minimum in 1960 was 250 fils (\$.70 U.S.); the oil industry minimum was 600 fils. (U.S. Department of Labor, Labor Law and Practice in Iraq, p.22.) In Iran, the statutory minimum was 40 rials, the oil industry minimum 125 rials. (U. S. Department of Labor, Labor Law and Practice in Iran, Report No. 276, p.60)

²In Lebanon, for example, the oil industry minimum wage is L£235 a month, while the prevailing minimum in the rest of the economy is L£150. (U.S. Department of Labor, Labor Law and Practice in Lebanon, B.L.S. Report No. 304, November 1966. p. 71) In Uganda in 1966 the oil industry minimum was 266 E. A. Shillings, the statutory minimum 150 shillings. The tobacco companies in East Africa have minimum rates almost twice as high as the legal minima.

³Since the mid-fifties, average African earnings in Zambia have risen at a rate of about 10% a year. In 1966, the differential between the minimum rate paid by the mines and the statutory minimum wage in the rest of the economy was still substantial, though less than in the mid-50's; the mine minimum was £22/7 a month, the statutory minimum (line of rail) £10/8.

Even if the high paying firms could be isolated from the wage structure of the rest of the economy, it would be hardly desirable to have this kind of distortion in the national wage structure, for obvious and well-known reasons. There is no good economic reason why men doing similar work in different industries should be paid vastly different wage rates, the existing differentials in almost all cases being far beyond necessary to recruit workers of desired quality. Nor is there any economic justification for allowing higher than normal profits to be shared only by workers who happen to be in the highly profitable firms or industries; profits should rather be shared by the society as a whole through government taxing and spending.

More serious than this diversion of wages from society as a whole is the pattern-setting effect of the high wage industry or industries on the rest of the economy. The terms and conditions of employment in the high wage industry stand out so sharply that they create concrete standards of comparison and goals for other sectors of the economy. Where wage determination remains relatively decentralized, as it seems to be in most Latin America and in India, the economy can live with its high wage islands. But where wage fixing becomes centralized, as it is tending to do in much of Africa, the existence of these leading industries, in combination with other pressures working in the same direction, tends to pull wage levels up. This tendency is accelerated when wage and incomes policies become explicit. In public sector wage discussions, in collective bargaining where it exists, in industrial courts, wages boards, and commissions of inquiry, the high wage sector becomes the point of comparison. The process has worked in a fairly clear fashion in East Africa in recent years, where the mining sector and the local monopolies have consistently made wage settlements which unloosed succeeding rounds of general wage increases.¹

¹There is one further aspect of inter-industry differentials which should be mentioned in passing. The existence of enterprises which are willing and able to make wage settlements well out of line with those in the rest of the economy magnifies the need for an incomes policy, just as full employment does in the advanced countries. Meaningful collective bargaining is not impossible when government regulates the "quality" of agreements, but in countries where collective bargaining is poorly developed its further development is certainly retarded if the terms of agreements are regulated. In most less developed countries, independently negotiated agreements are hard enough to come by; agreements that

are in accord with the public interest (i.e., agreements that would not distort the inter-industry wage structure) are likely to be even harder. This makes for the existence of another obstacle to the development of free collective bargaining in the developing countries.

Occupational Differentials

Three kinds of occupational wage differentials deserve attention: those between skilled and unskilled manual workers; those between manual and clerical workers or between blue and white collar workers; those between people with little or no education and training and people with higher level education and training. The first type of differential has received the most attention in the literature, both in the developed countries and in the less developed countries. The second type (blue vs. white collar) generates the most heat; it is the example usually cited in discussions of the "unsuitability" of wage structure to development needs. The differential between high and low level jobs has received less systematic attention than the others. It can be considered a special case of general skill differentials. But it has unique aspects, not least that it arises mainly in the context of the civil service. It will be considered in a later section, on public sector wage structure.

Skilled-Unskilled Manual Worker Wage Differentials

It is surprising how little hard information there is about skill differentials in the less developed countries. The problem is not that numbers lack; there is an embarrassment of figures on skilled and unskilled wage rates--in the July supplements of the International Labour Review, in the series on Labor Law and Practices put out by the United States Bureau of Labor Statistics and elsewhere. The real problem is to make some sense of these abundant figures.

The general methodological difficulties involved in measuring and comparing skill differentials are well known. Job definitions and contents differ between countries and sometimes within countries over time. Different definitions of wages are used. Minimum, prevailing or average wage rates are most common. Earnings data are not generally available. Fringe benefits are rarely taken account of systematically. In many countries, and--as will be emphasized below--particularly in the underdeveloped countries, the range of rates or earnings for various skill categories is very wide, presenting problems of choice of representative wages. The richest source of wage data--the ILO October surveys, upon which much of

what is known rests, often contain questionable figures; despite the intensive efforts made to assure uniformity of definitions examination of the data reveals that these efforts are not always successful. It is perhaps in part because the data are so messy and the methodological problems so forbidding that there are so few close and detailed empirical studies of wage structures in less developed countries.

Generalizing about the magnitude and behavior of skill differentials throughout the less developed world, then, involves a good deal of groping in the dark. Aside from the inherent methodological problems practically nothing is known or available about wages or wage trends in perhaps 50 of the 80 or so countries usually called "underdeveloped." Such information as is available about most of the rest is unsystematic, uncertain, often contradictory.

From the available data only one general statement can be put forward with any firmness, and it is hardly novel or daring: differentials for skill are much bigger in most of the less-developed countries than in the advanced industrial countries. This is clear from the ratios in the last column of Table I, which gives estimates of ratios of skilled to unskilled wages for various countries, as they have been recorded in a number of recent studies. Except for India, their original source is I.L.O. October survey data. Despite the fact that uncertainties in job definition and wage measurement make inter-country comparisons risky, the differences in skill margins between developed and less developed countries are so gross as to be unmistakable. In fact, there is good reason to believe that the differences in magnitude of skill differentials between advanced and less developed countries are bigger than is indicated in Table II. The ratios in the table generally understate the premium for skill, both in advanced and less developed countries. But because of certain characteristics of underdeveloped country labor markets, the degree of understatement is greater in the less developed countries than in advanced countries.

Two major decisions are involved in attempts to summarize, in one measure, the magnitude of skill differentials in a country. What level of skill should be taken? How should it be measured? In most existing comparative studies, the practice is to take middle skill levels and to use means or medians of wage rates (earnings, where available) as the main measure.

TABLE I
Ratios of Skilled to Unskilled Workers' Wages, 1948/52 and 1958/62
 (Unskilled Wage = 100)

<u>Region and Country</u>	<u>Rates Used</u>	<u>Years</u>	<u>Ratio</u>	<u>Years</u>	<u>Ratio</u>
<u>Europe - Industrial Countries</u> ¹					
Austria	(a)	1950	123	1960	127
France	(b)	1950	137	1962	139
Germany (Fed. Rep.)	(c)	1952	127	1962	123
Italy	(d)	1952	112	1962	108
Netherlands	(e)	1952	120	1962	118
Switzerland	(f)	1952	118	1960	130
United Kingdom	(g)	1954	119	1962	118
<u>Europe - Less Developed</u> ²					
Greece	(h)	1948/52	113	1958/62	149
Portugal	(h)	1948/52	166	1958/62	162
Spain	(h)	1948/52	158	1958/62	131
<u>Asia</u>					
Hong Kong ¹	(i)	1952	196	1962	175
India ³	(j)			1959	168
Pakistan ¹	(k)	1952	169	1962	159
<u>Africa</u> ⁴					
Algeria		1954		1960/62	201
Congo (Brazzaville)		1954		1960/62	287
Congo (Kinshasa)		1954	338	1960/62	268
Ghana		1954	229	1960/62	240
Ivory Coast		1954	190	1960/62	197
Nigeria				1960/62	157
Senegal				1960/62	253
Tanzania		1954	218	1960/62	211
Tunisia		1954	195	1960/62	179
<u>Latin America</u> ² (m)					
Argentina		1948/52	144	1958/62	132
Brazil		1948/52	206	1958/62	184
Chile		1948/52	194	1958/62	209
Colombia		1948/52		1958/62	181
Mexico		1948/52	219	1958/62	212
Peru		1948/52	167	1958/62	171
Venezuela		1948/52	154	1958/62	186

TABLE I - Continued
Ratios of Skilled to Unskilled Workers' Wages, 1948/52 and 1958/62
 (Unskilled Wage = 100)

Footnotes:

1. H. Gunter, "Changes in Occupational Wage Differentials," International Labour Review, Vol. 89, #2, Feb. 1964
2. John R. Ericksson, Wage Structures and Economic Development in Selected Latin American Countries, (Ph.D. Dissertation, Univ. of California, Berkeley, 1966) Table 33, p. 219.
3. Commission of Enquiry on Emoluments and Conditions of Service of Central Government Employees, 1957-1959.
4. I.L.O., Second African Regional Conference, Addis Ababa, 1964, Methods and Principles of Wage Regulation (Geneva, 1964), Mimeographed, Table VIII, p. 25.
 - (a) Rates in Vienna, manufacturing industries and construction; "skilled" undefined.
 - (b) Rates actually applied, Paris; skilled workers (are ouvriers qualifiés).
 - (c) Gross hourly earnings, mining, manufacturing, construction; "skilled" undefined
 - (d) Rates in collective agreements; skilled workers are operaio qualificato.
 - (e) Seven occupations, from I.L.O. October Surveys.
 - (f) Average hourly earnings, "skilled" unspecified, industries unspecified.
 - (g) Average minimum wage ration, 12 industries, nationwide.
 - (h) From Enbsson, based on I.L.O. October Surveys.
 - (i) Six skilled occupations, from I.L.O. October Surveys.
 - (j) Government scales, 1959; mid-points of peon scale compared with mid-point of skilled worker general scale. Dearness allowance included.
 - (k) Four skilled occupations, from I.L.O. October Surveys.
 - (l) Averages of 4 crafts (iron molders, machine compositors, electrical fitters, carpenters) in four industries. Minimum rates used most frequently, otherwise prevailing or average rates on average earnings. In some countries data available only for one year and for fewer crafts.
 - (m) Computed from data in Eriksson, who used I.L.O. October Surveys data for these estimates; means of mean differentials selected skilled occupations, 3 different industry groupings in most countries.

Even in the advanced countries the choice of middle skill levels can be misleading.¹ It is more so in the less developed countries.

It is everywhere noted and reflected in published figures on prevailing wage rates in less developed countries, that the dispersion of rates or earnings for any given skill classification is extremely wide. In the industrial countries, the existence of apprenticeship schemes, well organized systems of trade testing, and collective bargaining arrangements gives some semblance of homogeneity to job classification and definition; it is usually possible to tell the book by its title, as it were.

This is not ordinarily the case in the less developed countries. Even where formal classification schemes exist, exceedingly large variations in pay for the same job titles are common; in Lebanon, to take one example, the range of salaries for the post of assistant cashier in four of the biggest firms in the country was as follows in 1962.²

<u>FIRM</u>	<u>MONTHLY SALARY RANGE</u> (L£)	<u>AVERAGE MONTHLY SALARY</u> (L£)
"A"	797-1330	1316
"B"	730-1090	910
"C"	225-400	250
"D"	175-350	250

These differences are for a fairly well-defined job. In most cases the definitions are fluid. In Iran, for example, four levels of craftsmen are defined. The average daily gross wage for the lowest grade of electrician in 1958 ranged from 48 rials to 214 rials, and for the highest grade ("master electrician") 178 to 826 rials. This means that one "electrician"

¹The ratios in Table I for France and Italy, for example, use "qualified workers," rather than "highly qualified workers" as the groups whose wages are compared with unskilled labor rates. If "highly skilled workers" are used, the differential in France, for example, was 165 in 1962, compared with 139 in the table, and in Italy 123 instead of 108.

²United States Department of Labor, Labor Law and Practices in Lebanon, BLS Report No. 304, November, 1966, Page 69. This job is defined as requiring a high school diploma with a course in commerce. The job content is defined as receiving cash collections and preparing statements involving the handling of between L£2 million and L£4-1/2 million.

could be paid 17 times as much as another, and one "master electrician" four times as much as another.¹ In Uganda, a government commission recently noted that there were six grades of craftsmen, the wage rate of the top grade being some two and a half times as high as the bottom grade.²

Given this tremendous dispersion of wages for skilled occupations, the choice of the measure to be used determines the character of the conclusion regarding magnitudes of skill differentials--a not unusual situation but particularly dramatic in this case. The more significant point, however, is not simply that there is wide dispersion of wage rates for any skilled job title, but that the distribution of skills (and hence of wage rates) is probably skewed heavily to the low skill side within any classification. This appears to be true at all levels--"skilled workers" as a whole, particular crafts ("electricians," "carpenters," etc.) and the various levels within each craft ("maintenance electrician," "master electrician," "Artisan Grade I," "Leading Artisan," "highly qualified worker," etc.). The distribution is especially heavily skewed in the broader job descriptions ("skilled workers" or "carpenters"). Most workers so classified in the less developed countries possess in fact very slight degrees of skill; they are more often than not specialized semi-skilled workers.

That the skill distribution takes this form is suggested by casual observation--this is the way it strikes the visitor to enterprises in many less developed countries; these enterprises have organized production and services so as to economize on the use of highly skilled craftsmen (who are very scarce and expensive). No one who has visited a construction site in Africa, for example, can fail to be impressed with the rarity of journeyman-level building tradesman. In maintenance departments of manufacturing enterprises there is most often one or two true craftsmen surrounded by a crowd of semi-skilled helpers, most of whom are classified as craftsmen.

In these circumstances the use of average rates (or even earnings) for broad job classifications, as the in October surveys, understates the true premium for skill in the less developed countries. If minimum rates

¹United States Department of Labor, Labor Law and Practices in Iran, B.L.S. Report No. 276, Page 61.

²Uganda Government, Report of the Board of Inquiry into a Wages Increase Claim in Respect of Group Employees in the Uganda Public Service, (Entebbe, 1966), p. 8.

stipulated in internal wage structures of enterprises are examined, or minimum base rates for various skill levels as specified in national collective agreements, a different picture appears. Instead of the skilled-unskilled ratios of 150-200 which are most common in the October survey data, differentials of much greater magnitude are seen. In Senegal and Ivory Coast, for example, the highly qualified skill categories (nonsupervisory) have minimum base rates more than three times as high as the unskilled rate, and much higher than the comparable rates in France, as Table II shows. Similarly, examination of internal wage structures in East African enterprises shows that many of them have minimum base rates for highly skilled nonsupervisory workers which are over four times the minimum base rate for unskilled workers. While these are African examples, and African skill differentials appear to be the highest of any underdeveloped region, scattered data available for other parts of the world suggest that these magnitudes are not uncommon elsewhere--in Central America and in the Middle East, for example.¹ These very large differentials represent more realistically the true payment for skill typical in the underdeveloped world, though they are not everywhere so high. In Latin America, in particular, differentials for genuine skill seems to be somewhat lower

¹Thus in a number of countries skill differentials measured by average rates or earnings of broad skill classifications are as high or higher than those found in African countries. In Guatemala, for example, the ratio of average hourly earnings, electrical fitters to laborers was 7:1 in the early 1960's. The ratio of carpenters' wages to unskilled laborers wages in construction was 5:1. (U. S. Bureau of Labor Statistics, Report No. 223, Labor Law and Practice in Guatemala, 1962, p. 15). In Saudi Arabia in 1960, the median ratio of carpenters and auto mechanics wage rates to laborers wage rates in seven construction firms, was 328. (U. S. Department of Labor, BLS Report No. 269, Labor Law and Practice in Saudi Arabia, p. 36.) In Singapore (Sarawak) in 1963, the ratios between Government skilled and unskilled rates was 250. In Egypt, average weekly earnings of semiskilled workers in all industries were more than three times as high as unskilled earnings in 1960. (U. S. Bureau of Labor Statistics, BLS Report No. 275, Labor Law and Practice in the United Arab Republic (Egypt), p. 69.

TABLE II

Minimum Base Hourly Rates
National Collective Agreements
France, Senegal, Ivory Coast

<u>JOB CATEGORY</u>	<u>COUNTRY AND YEAR</u>		
	<u>France, 1961</u>	<u>Senegal, 1961</u>	<u>Ivory Coast, 1963</u>
Manoeuvre 1	1.81 NF	40 Fr.CFA	42.2 Fr.CFA
Manoeuvre 2	1.86	46.3	46.6
Ouvrier Spécialisé 1	1.92	50.9	56.0
Ouvrier Spécialisé 2	2.03	64.4	67.6
Ouvrier Professionel 1	2.24	82.5	86.6
Ouvrier Professionel 2	2.47	96.1	106.7
Ouvrier Professionel 3	2.70	124.3	133.3

Sources:

Coumba N'Doffene Diouf, Georges Vermot-Guichy and Charles-Francis Brun, La Question des Salaires au Sénégal, Supplement de Afrique-Documents, Numéro 79, 1965, pp. 44-45.

Republique de Côte D'Ivoire, Supplement Trimestriel au Bulletin Mensuel de Statistique, Etudes et Rapports, 2eme trimestre 1966, Statistiques du Travail, p. 13.

The collective agreements are for "Mechanique Générale" for Sénégal and Ivory Coast; "Ouvriers de la Metallurgie du Rhône," for France. The figures for Senegal and Ivory Coast are understated since the highest non-supervisory category is excluded; the actual O.P.3 category in the Ivory Coast, for example is 201.8 francs CFA.

than in the rest of the developing world,¹ though not enough is known about Asian wage structures to be certain this is so.

A second generalization suggested by the available evidence is that there has been some tendency toward compression of skill differentials in most of the underdeveloped world in the past 20 or 25 years. This is very clear in the case of differences in pay between highly trained and educated wage earners and unskilled workers, as will be shown later. But the pattern of change in differentials between skilled and unskilled manual workers is not very sharply defined in available data, and the tendency toward compression is weak in many of the countries for which data are available.

On the basis of the usual preconceptions in these matters we would expect an unambiguous and substantial narrowing of skill differentials as compared with the pre-World War II situation. Price levels everywhere rose sharply after 1939, flat-rate cost of living allowances were introduced in many countries, and minimum wage legislation become more wide-spread. But the only systematic study tracing differentials back to the pre-war years is John Eriksson's recent doctoral dissertation on Latin American wage structure. A summary statement, computed from data in his more detailed tables, is given in Table III. It shows a clear compression in four countries (Argentina, Brazil, Chile and Venezuela), a slight increase in Mexico and a slight decline in Peru. Other data presented by Eriksson show increases in differentials for Peru and Chile, and a more substantial increase in Mexico than is shown in Table III. The conclusion drawn is that skill differentials clearly declined in three of the six countries studied, (Argentina, Brazil, Venezuela), increased in one (Mexico) and probably increased in two others (Chile and Peru).

The limited data available for the period after World War II similarly show no pronounced or general trend, though differentials expressed in terms

¹Eriksson analysed skill differentials in seven Latin American countries using straight-time rates of highly-skilled "maintenance type" craftsmen (electricians, lathe operators, mechanics). The mean of the mean differentials for these three occupations in 1960-1962 was as follows in each of the countries: Argentina: 123; Brazil: 193; Chile: 186; Colombia: 190; Mexico: 194; Peru: 210; Venezuela: 216. (John R. Eriksson, Wage Structure and Economic Development in Selected Latin American Countries: A Comparative Analysis, Unpublished Ph.D. Dissertation, University of California, Berkley, p. 69.)

TABLE III

Ratios of Skilled to Unskilled Worker Wage Rates
1939-41 and 1960-62
Selected Latin American Countries

	<u>1939-1941</u>	<u>1960-1962</u>	
Argentina ^a	142	120	15/3
Brazil ^b	288	164	43%
Chile ^c	174	155	11%
Mexico ^d	170	178	+3%
Peru ^e	255	219	14%
Venezuela ^f	256	158	38%

- a. Median rates, 4 occupations (carpenter, electrician, lathe operator, mechanic) at higher skill levels (maintenance craftsman or equivalent), from collective agreements, Buenos Aires.
- b. Means of average hourly rates, 20 construction firms, São Paulo.
- c. Means of average daily rates, two firms, Chamber of Construction, Santiago, data only for one occupation (carpenter).
- d. Average hourly rates, 9 industries, Mexico City; for mechanic 10 industries, for lathe operator 4 industries.
- e. Average hourly rates, food products, cotton textiles for carpenters, basic metals for electricians; cotton textiles and basic metals for lathe operators.
- f. Average hourly rate, construction industry, Caracas for carpenters; construction, light and power, telephone for electrician; machinery for lathe operator.

Source: Computed from data in Eriksson, pp. 80 ff.

of average wage rates seem to have narrowed in most cases. The pattern shown in Table I is certainly not very clear. Of 13 non-European countries for which data are given for the early 1950's and the early 1960's, skill differentials seem to have fallen in 8 and risen in 5. But the fall recorded in the table for one of the countries (Mexico) is probably erroneous, and in several others the degree of compression is too small to be significant, given the unevenness of the data.

It is possible that more and better information would reveal a more consistent pattern of compression. Table IV, which uses different measures than those in Table I, shows a marked narrowing in West African countries. But these are ratios of basic minimum rates; it is not certain--in the French-speaking countries at least, that earnings trends are similar to trends in base rates, or even that the fall in differentials in rates has been so substantial as indicated in the table.¹

Cost of living allowances have been a part of the wage package in most less developed countries since World War II. They are periodically consolidated into base pay, but reappear when consumer prices rise. Since they are usually granted on a flat rate basis, or on a steeply graduated scale, we should expect relatively sharp contractions in skill differentials in countries where cost of living allowances have been particularly important. Unfortunately the evidence is too sketchy to know whether this has happened. Cost of living allowances have been prominent feature of the wage or social policies of many of the countries listed in Table I, but, as noted above, the general trend toward compression of skill differentials in the countries listed is not very sharply defined.

India is the classic case of reliance on cost of living allowances as the major instrument of wage policy. Throughout most of the post-World War II

¹If we use three year averages (1962-1964 compared with 1947-1949), differentials in base rates between qualified workers and unskilled laborers fall only from 290 to 245. In Nigeria, on the other hand, if we use the federal government minimum rate for unskilled labor and the top rate for Grade I artisans, the skilled-unskilled ratio drops more from 368 in 1947-1949 to 274 in 1964-1966 for Lagos. In other cities in Nigeria the compression during these years is even greater: in Ibadan from 671 to 351 and in Kaduna from 760 to 411. (Government of Nigeria, Federal Ministry of Labour, "An outline of the Development of Wages and Wage Structures in Nigeria," February 1966, mimeographed.)

TABLE IV
Ratios of Skilled to Unskilled Wage Rates
1949 and 1960
Selected West African Countries

<u>Country</u>	<u>Skilled-Unskilled</u> <u>Ratio, 1949</u>	<u>Skilled-Unskilled</u> <u>Ratio, 1960</u>
Ivory Coast	606	312
Senegal	563	300
Ghana	418	348
Nigeria	309	277

Unskilled labor rate is statutory minimum, capitol city, for Ivory Coast and Senegal, government rate, capitol city, for Nigeria and Ghana. Skilled labor is minimum base rate, highly qualified worker (ouvrier hautement qualifié), which is 6th category of the 8 specified for manual workers in the national collective agreements in Ivory Coast and Senegal. For Nigeria and Ghana it is the base rate for "Leading Artisans" in the Civil Service.

period in India "dearness allowances" were equal to or exceeded basic wage rates of lesser-skilled workers in most of the wage sector. In 1960, just before "dearness allowances" were consolidated into base pay, they amounted to one-third the total remuneration of unskilled workers employed by Government; from 1947 to 1949 the proportion was higher.¹ In private industry the proportion of total wages made up by "dearness allowance" was frequently higher.²

Given the lack of serious studies of Indian wage structure it is not possible to know how significantly the cost of living element in wage remuneration has compressed skill differentials. It obviously compresses them as compared with base rates. In coal mining, for example, where there is a specified job classification scheme, the differential in minimum base rates between the top non-supervisory category and the bottom category is 257%; dearness allowance reduces it to 170%.³

It is also certain that in India and elsewhere the practice of utilizing dearness allowances as the major form of wage increase contributes (as does minimum wage policy in general) to the bunching up of average earnings among unskilled and semi-skilled workers--a tendency which has been noted elsewhere⁴ and which has basic causes alluded to previously--the predominance of unskilled and slightly-skilled workers in the labor force.

¹In 1947-48, for example, the starting base salary of the lowest paid Government employee was Rs. 30 a month and dearness allowance was Rs. 25. In 1957 base pay was still Rs. 30 and dearness allowance was Rs. 45., though part of dearness allowance was being treated as "pay" for retirement and other purposes. After the consolidation of dearness allowances in 1960, employees receiving base pay of up to Rs. 150 a month received Rs. 10 in dearness allowance. Those on base pay of Rs. 150 to Rs. 300 received dearness allowance of Rs. 20. For base rates above Rs. 300, no dearness allowance is provided. (Ministry of Finance, Government of India, Report of the Commission of Enquiry on Emoluments and Conditions of Service of Central Government Employees, 1957-1959, Ch. IX, esp. Table V, p. 78; and A. J. Fonseca, Wage Determination and Organized Labour in India, (O.U.P., 1964), Appendix II, Table 4.

²Fonseca, Ibid.

³Minimum base rates from Rs. 28 to Rs. 72 a month; dearness allowance is 150% of basic wage up to Rs. 30, and 66% of basic from Rs. 51-100. (Fonseca, Ibid.)

⁴ Cf. H. A. Turner, Wage Trends, Wage Policies, and Collective Bargaining: the Problems for Underdeveloped Countries, (Cambridge, 1965), pp. 15-20.

It is less certain, though likely, that skill differentials are smaller in India than in many other less developed countries as a result of the dominance of dearness allowances. But there is no evidence that skill differentials are smaller now than they were 20 years ago. Given the industrial growth of the past two decades and the relative scarcity of highly skilled workers, earnings of those with genuine skill may have increased faster than unskilled worker earnings, even with dearness allowances.

Almost everywhere in the less developed world fringe benefits and non-pecuniary advantages form a significant--sometimes a predominant--portion of total remuneration.¹ The effects of these fringe payments on differentials must therefore be considered.

It is not inevitable, of course, that fringes compress differentials at all. Some of the most important and widespread fringe benefits are proportional to basic wages or earnings--bonuses ("13th month or other annual bonuses, productivity and attendance bonuses, etc.) and pay for time not worked (paid holidays, paid vacation, sick leave, severance pay, etc.), for example.² There are, moreover, some advantages which are given only to higher-paid personnel--motor car allowances and free or heavily subsidized housing, for example, given in some countries to highly-skilled non-supervisory employees.

Offsetting these benefits, which maintain or even widen skill differentials are family allowances, transport allowances, free or subsidized food or meals, free uniforms, and many others which are usually on a flat-rate basis and hence tend to compress differentials in remuneration.

On balance, the net effect of fringe benefits on skill differentials is probably not very significant. It does accentuate the tendency toward a bunching up of average remuneration among lesser-skilled workers. It may also, of course, be undesirable in principle to have substantial portions

¹In most less developed countries, fringe costs comprise between 25% and 50% of the total remuneration.

²These fringes are not invariably proportional to base wages or earnings. There are cases, for example, of firms which give "13th month" bonuses on a sliding scale, with the rate of bonus highest for lowest-paid workers. (Cf. U. S. Department of Labor, Labor Law and Practice in Lebanon, B.L.S. Report No. 304.) Such practices do not appear to be common, however.

of remuneration made up of payments unrelated to performance on the job. But there are two reasons why differentials for skill are probably not much affected. The first is that so many fringes are proportional to base rates. The second is that family allowances are the biggest single flat-rate fringe benefit in most countries. And more family allowance payments probably go to skilled workers than to unskilled, since the skilled tend to be older and more stable and to have larger families.¹ Such evidence as there is, which consists mainly of some comparisons of differentials with and without fringes in a number of Latin American countries, supports the view that fringe benefits have not had an appreciable effect on skill differentials.²

A number of factors have been put forward to explain the differences in skill differentials between countries and the behavior of these differentials over time. The most popular general hypothesis is what has come to be known as the "natural history of wage structure": that skill differentials follow a "natural" evolution, based on changing market conditions over time. In very simplified form the argument is that differentials are wide in early stages of development because the supply of unskilled labor is relatively abundant, the supply of skilled labor relatively scarce. As development proceeds, average education levels rise, and hence the supply of skills. Unskilled labor, meanwhile, becomes less attractive and less

¹Some indication that this is true is provided by some evidence from Chile, where family allowances in 1960 amounted to almost a quarter of the basic wage. A 60 firm survey completed in the late 1950's in Chile revealed that net remuneration exceeded base rates by 33% for single manual workers and by 75% for married manuals. (Eriksson, p. 120). Numerous surveys undertaken in connection with family budget studies in African countries also suggest that skilled workers have larger families than unskilled.

²Eriksson found in Chile, Colombia and Venezuela that skill differentials measured by total remuneration were either close to or greater than differentials measured in basic wages. (pp. 119, 125.) In Egypt, where between 1/3 and 1/2 of total remuneration is made up of fringes, average semi-skilled earnings are still (1960) three times higher than those of unskilled workers. (U.A.R. Department of Statistics and Census, Statistical Pocket Year Book, 1960 and 1962, (Cairo, 1962), pp. 51-54; table of average earnings given in U. S. Bureau of Labor Statistics, Labor Law and Practice in the United Arab Republic (Egypt), B.L.S. Report No. 275, p. 29.)

abundant. The market response is a compression of relative awards to the two types of labor.¹

The second commonly cited factor is inflation. Skill differentials are said to become compressed during periods of rising prices because of the prevalence of flat rate cost of living wage adjustments during such periods.²

A third set of explanatory factors is usually grouped under the heading "institutional." These refer mainly to government wage and social policies, minimum wage regulations, the degree of centralization of wage determination, collective bargaining policies and practices.³

All three of these factors provide insights, but neither separately nor together are they adequate to explain the behavior of skill differentials in the less developed countries in the past 20 years. The "natural history" notion does help in understanding the broad cross-sectional differences in magnitudes of skill differentials between countries at different stages of development. It underscores the importance of market forces, relative supply and demand for skilled and unskilled labor, in determining these differences. The tendency for skill differentials to narrow as development proceeds is suggested by the broad pattern within the less developed world: differentials are highest in Africa, and lowest in Latin America, with most Asian countries probably somewhere in the middle.

As an analytic device for explaining short-period evolution of skill differentials, however, particularly in countries at early stages of development, the "natural history" notion is not very useful. In the less developed countries unskilled labor supply at existing wage rates is highly elastic, unemployment is widespread, the demands for unskilled workers increase relatively slowly as output grows. The supply of skilled workers is inelastic, and the demand for them increases relatively rapidly as output

¹L. Reynolds and C.A. Taft, The Evolution of Wage Structure, New Haven, 1956, pp. 259-60. See also M. Rothbaum, "National Wage Structure Comparisons" in G. W. Taylor and F. C. Pierson, (eds.), New Concepts in Wage Determination, N. Y., 1957, pp. 299-327.

²J. T. Dunlop and M. Rothbaum, "International Comparisons of Wage Structure," in International Labour Review, April 1955, pp. 575-592.

³G. Gunter, op. cit., pp. 150-155.

increases. There is thus no obvious reason why market forces should induce a narrowing of differentials until late in the development process.

The proposition that changes in skill differentials are related to changes in the general level of prices points up one important fact: that inflation is a significant permissive factor; it creates the conditions allowing rapid compression of differentials. If, however, it is interpreted to mean that countries with more rapid rates of inflation tend to have greater compression of skill differentials, it is extremely doubtful empirically; casual inspection of the data for Europe, Latin America and Africa reveals very little relationship between rates of inflation and rates of compression of skill differentials. In any event, inflation is not really an explanatory element by itself: the true causal factor is the attempt of governments and trade unions to protect lower wage groups more effectively than better paid workers during inflationary periods, usually by the granting of flat rate cost of living allowances or minimum wage increases. So the inflation hypothesis merges into the institutional factors influencing the evolution of skill differentials.

These institutional factors, and in particular Government policies, appear to be most important, if not decisive, in explaining changes in skill differentials in the less developed countries during the past two decades. Governments in most of the less developed countries are main employers on their own account, and exercise major influence over wage determination through minimum wage and social legislation, and industrial relations policies. The policies pursued in these areas have tended, directly or indirectly, to narrow skill differentials. This is so for several reasons.

First, prevailing ideology in most less developed countries is equalitarian; over a large part of the world socialism of one variety or another is official doctrine.

Secondly, political fragility characterizes most of these states. Wage earners may not be disposed or able to mount the barricades in most less developed countries, but the possibility that they might do so haunts unstable governments and conditions their wage decisions. To dilute possible political discontent, wage decisions tend to favor the most numerous groups of wage earners--the unskilled workers.

Finally, governments in the underdeveloped world have an exceedingly low threshold of tolerance for strikes, partly because of their unsure political hold, partly because they see stoppages as costly to development efforts. The result is a widespread tendency to intervene quickly in disputes and to seek settlements, with the price of the settlement often of secondary importance. These imposed settlements tend to favor the unskilled.

The impact of these government policies on skill differentials has not been uniform. In most African countries, in India and probably in other Asian countries, they have led to significant compression in terms of basic wage rates. Compression in terms of remuneration has probably been less extensive, since skilled workers are often paid more than basic rates while unskilled workers are often paid below the statutory minimum--at least in the small employer sector not easily accessible to labor inspectors. That skilled men are paid above the basic rates is the near-universal assertion of employers in many countries, and is borne out by occasional bits of evidence.¹

In Latin America, minimum wage and other government social policies seem to have had less effect on differentials than in Africa or Asia. In four South American countries of the seven studied by Eriksson, fairly aggressive minimum wage policies were pursued, but apparently without significant effects on the evolution of skill differentials. A correlation analysis (by rank) between annual percentage changes in the legal minimum and annual percentage changes in skill margins in Brazil yielded a weak, though significant relationship.² On the other hand, the Latin American country with the most compressed wage structure is Argentina, a situation attributable to the labor policy of the Peron administration.

¹Prevailing wages in Karachi for skilled steel workers in 1963, for example, were almost twice as high as those set down by the ruling of the Minimum Wage Board--Rs. 9 a day instead of Rs. 5. (U. S. Dept. of Labor, Labor Law and Practice in Pakistan, B.L.S. Report No. 271, p. 52.)

²Eriksson, pp. 268-9. Eriksson's conclusion is that "On the basis of available evidence it must be concluded that Government policy has played a relatively minor role in effecting occupational wage structure change in several of the countries considered in this study.... One exception is Argentina where a labor-oriented Government (the Peron administration) apparently successfully intervened through the collective bargaining process to hasten skill margin decline." (Ibid.)

Such uncertainty as appears in the trends of skill differentials during the past 15 years is due--aside from the diversity of conditions within the underdeveloped world--to the fact that two contrary forces are at work. On the one hand, market forces are almost everywhere conducive to the widening of differentials. Except in a few countries where growth has been negligible or the economy has broken down (Indonesia, Guinea, Burma, for example), the post World War II period has seen unparalleled industrial development in the less-developed countries. This has meant that the demand for skilled manual workers has increased more rapidly and been greater in magnitude than ever before; in many countries, in fact, it is not until the post-war period that there is any appreciable industrial demand for skilled labor at all. At the same time, the post-war years have seen the virtual liquidation of colonialism, and the emergence of new national states. Now it is a striking fact--one that is not always appreciated--that the middle and higher skill levels in a vast part of the world have always been occupied by aliens--Chinese in most of Southeast Asia, and Europeans, Asians, Levantines in Africa and the Middle East, for example. Even within regions and continents, skilled workers were often "foreigners": Senegalese in Mauritania and Guinea; Togolese and Dahomeans in Nigeria and Ivory Coast; Ibos in Northern and Western Nigeria; Nyassas in Zambia; Kenyans in Uganda. One of the side effects of political independence and national consolidation in Africa and Asia has been the restriction of the market for labor, the "nationalization" of jobs. The consequence in many countries has been intensification of shortages of skilled workers.

Market pressures, therefore, have been on the whole strongly toward a widening of skill differentials. But political and ideological pressures have been working in the opposite direction--toward a "human needs" minimum wage for unskilled workers, protection of those on the margin of subsistence against erosion of real income as a result of price rises, and a closing of the gap between high and low-paid workers. The result is a tug-of-war between market forces and social objectives, with diverse and fluctuating outcomes in different countries. Another result is a conflict between social and economic objectives--between attainment and protection of a minimum level of income for all workers on the one hand, and the need to encourage skill

acquisition by adequate skill differentials on the other. The general disposition is to give priority to the social goal.¹

There remains the question of whether the existing pattern of skill differentials, such as it can be perceived from the scattered information available, is sufficiently wide to provide incentives for the acquisition of skill. It is obviously impossible to make flat and universal affirmations on this question. In Argentina, where skill differentials have been severely narrowed in the past several decades, and are now significantly lower than in neighboring countries, the answer would be different than for most of Africa. Nor could one answer be given for India and Malaya, or for many countries about which little or nothing is known.

In general, however, there are persuasive reasons to believe that skill differentials are adequate in most less developed countries. In the first place, they are relatively large, even when account is taken of the compression in total remuneration resulting from cost of living and fringe payments. The premium for skill acquisition is much greater than it was in the industrial countries at comparable stages of development. Secondly, the rates of return in alternative occupations are rarely as high as those available in the wage sector. Third, there is rarely any difficulty in recruitment to the ranks of the semi-skilled or lower-level craftsmen, precisely the group among whom compression of differentials is greatest. The supply of these workers, who are usually trained on-the-job, grows when demand for them rises. Fourth, there is everywhere in the less developed parts of the world a rapidly growing output of literate people; this is particularly so in the countries at earlier stages of growth--in Africa and

¹A classic case occurred recently in Uganda. A Commission of Inquiry into a wage claim of skilled and semi-skilled manual workers in the public sector recommended--on labor market and incentive grounds--a higher rate of wage increase for skilled workers than for unskilled. The Uganda Government unequivocally rejected this recommendation, and raised the lowest-paid groups the most. The reason given was the guideline in the National Development Plan which argued for wage restraint in general and increases only to lowest income groups, and "the already accepted principle of bridging the gap between the low income groups and those in the upper income brackets." (Uganda Government, Report of the Board of Inquiry into a Wages Increase Claim in Respect of Group Employees in the Uganda Public Service, (Entebbe, 1966); and Uganda Government, Sessional Paper No. 3 of 1966, p. 6.)

Central America, for example. The raw material base for skill development, so to speak, is thus expanding faster than ever before. Finally, in all less developed countries the ratio of skilled to unskilled in the wage labor force is very low, so the pool from which to draw people upward on the skill ladder is large.

It is true that there exist certain phenomena not entirely consistent with this argument. One is the persistent scarcity of certain kinds of highly-skilled workers in many less developed countries. Another is the tendency in many countries for students in vocational and technical schools to take jobs before completion of their training. The extent of this latter problem and its specific causes are not well known. As for general scarcities, it does seem that they are restricted to highly skilled workers--true craftsmen. The fact that in many countries these jobs, and most of those at higher skill levels, were traditionally in the hands of alien groups, who are now increasingly unwelcome if not yet repatriated undoubtedly has something to do with the persistence of scarcity. In many countries, also, the output of educated people was so small until recently and their opportunities in other directions (notably clerical and administrative jobs) so great, that the sources from which to draw and train local workers for the more highly skilled occupations were restricted. In any event, in the absence of persuasive evidence to the contrary, and for most countries, the inadequacy of training facilities and shortages of literate people to be trained would seem to be the main factors explaining scarcities of highly skilled manpower, not inadequate wage incentives.

White and Blue Collar Differentials

No element of wage structure calls forth so much passion as the differences in pay and conditions between manual and clerical workers. The argument is universally made that white collar workers are overpaid relative to manual workers; this is almost invariably the major specific example (often the only specific example) of wage structure characteristics not suitable to development needs. Thus one author writes:

...in many underdeveloped countries, wage and salary differentials exist that are quite unnecessary or even harmful...A notorious case, is, of course, the relative remuneration of manual and non-manual jobs. It is not

uncommon for wages of, say, motor mechanics to be quite low compared with those paid to people with no other qualifications than the ability to use a typewriter.¹

White collar pay advantage is a recurring theme in Indian writing on wage problems.² And according to a recent report on African wages: "It is generally agreed that a relative overvaluation of clerical work, as compared with manual work, is widespread in Africa."³

If it is true that clerical workers are overvalued compared with manual workers then labor is being misallocated, perhaps seriously. A relatively high wage to white collar workers would lead employers to hire fewer of them, while it stimulated workers to pursue white collar occupations. At the same time a relatively low wage received by skilled manual workers would encourage employers to hire more of them but discourage entry into skilled manual occupations. The "distortion" in relative wages would thus lead to or exacerbate the unhappy disequilibrium found in many countries--a glut of clerks coexisting with a scarcity of skilled tradesmen.

The first question to be asked is whether it is true that white collar workers are "overvalued" in comparison with blue collar workers. Leaving aside the fact that the concept of "overvaluation" in this context is not free from ambiguity, evidence in its support is very sparse and difficult to interpret because of job definition and wage measurement problems. In the African wage study mentioned previously, comparisons are made between wages of bank tellers and carpenters on the basis of I.L.O. October survey data. The data show the two occupations roughly at wage parity in the advanced countries, while in 10 African countries the bank teller earns between two and three times as much as the carpenter.⁴ For reasons already discussed,

¹H. Zoetweij, "Wage Policy and Economic Development," in International Institute for Labour Studies, Lectures on Labour and Economic Development delivered to First Study Course, Sept. 17-Dec. 7, 1962 (Geneva, 1963) p. 8.

²Cf Shreekant, A Palekar, Problems of Wage Policy for Economic Development, (N. Y., Asia Publishing House, 1962), p. 207.

³I.L.O., Second African Regional Conference, Addis Ababa, 1964, Methods and Principles of Wage Regulation, Geneva, 1964), p. 27.

⁴Ibid., p. 28. The ranges are roughly the same for Latin America, with the exception of Argentina and Costa Rica. See H. A. Turner, Wage Trends, Wage Policies and Collective Bargaining: The Problems for Underdeveloped Countries, Cambridge University Press, 1965, p. 18.

however, these figures can't be taken as true indicators of skill differentials. They underestimate payment for manual skills, since job definitions for "carpenters" are looser than for "bank tellers," the range of skill among "carpenters" is wider, and the distribution of average rates or earnings of "carpenters" is undoubtedly more heavily skewed to the left. While it may be true that in most less developed countries a genuinely qualified carpenter is paid less than a bank teller, data on average or prevailing wages do not demonstrate it convincingly.

It should be noted that even using the October survey data the pattern of clerical-manual differentials is not uniform throughout the less developed countries. Table V, for example, compares average earnings (from October survey data) of garage mechanics and clerks and stenographers in several Latin American countries. It shows substantial differentials in favor of mechanics in Argentina and Mexico. In Peru and Chile the contrary seems true, but the Chilean data for Concepcion is based on average rates; when earnings are used (as for Santiago), the differential turns in favor of the garage mechanic. Other data for Latin American countries show differentials of 50-75% in favor of auto mechanics in Brazil, and of 33% in Colombia.¹

Casual examination of civil service scales in a number of African countries does not reveal any systematic advantage to whitecollar as against blue collar jobs. Sub-clerical and sub-technical grades are usually aligned as are clerical and technical grades. In the national wage scales contained in country-wide agreements in the French-speaking countries of West Africa the minimum base rates for manuals and office workers are similarly aligned.²

It is true that in India there is, or has until recently been a systematic differential in favor of white collar workers. In determining "fair wages" for clerical workers, labor courts and boards decided that it was necessary to take account of the different style of life of the lower-middle class clerical workers as compared with unskilled workers. A differential of 80% was judged "proper" and found its way into the wage structure.³

¹Eriksson, p. 235

²Cf. Republique de Cote d'Ivoire, Ministere des Finances, Statistiques du Travail Supplement Trimestriel au Bulletin Mensuel de Statistique, Etudes et Rapports, 2eme Trimestre 1966 (mimeographed), pp. 1-25.

³See Fonseca, op. cit., pp. 171-173.

TABLE V

Ratios of Average Earnings of Garage Mechanics in Motor Vehicle Repair to Average Earnings of Wholesale Grocery Stock Clerks and Stenographer-Typists, Selected Latin American Countries

<u>Country</u>	<u>Occupation</u>	<u>Year</u>	
		<u>1959</u>	<u>1963</u>
Argentina	Clerk	224	186
	Stenographer	195	186
Chile	Clerk ^a	121	79 ^c
	Stenographer ^a	103	46
	Stenographer ^b	---	137 ^d
Mexico	Clerk	186	---
	Stenographer	174	---
Peru	Clerk	---	46
United Kingdom (London)	Clerk	106	99
United States (Chicago)	Stenographer	143	150

- a. Concepcion
- b. Santiago
- c. Average rates
- d. 1963

Source: Eriksson, op. cit., p. 236; computed from I.L.O. October surveys, Statistical supplements to July issues of International Labour Review.

It is interesting in this respect that the Indian Central Government Pay Commission of 1957-1959 rejected the demand of mechanics that their scales be aligned with clerical workers, and recommended the continuation of their considerably lower scales.¹

It is also true generally that starting salaries of clerical workers tend to be higher than starting wages of manual workers with equivalent training.² And almost everywhere, conditions of employment favor clericals-- hours tend to be shorter, vacation and sick leave privileges better, other fringes more generous.

It is true, finally, that white collar employments enjoy enormous prestige everywhere, while manual labor receives its glorification only in the writings of economists and sociologists and the exhortations of Ministers of Economic Development. Preferences for white collar employment may not be so strong everywhere as they seem to be in Peru, where, according to the findings of one survey of vocational school students, some 30% said they would under no circumstances take manual occupations, and another third would not take manual occupations even if relative rewards were overwhelmingly

¹Government of India, Report of the Commission of Enquiry on Emoluments... 1957-9, p. 312.

²Thus a recent study of technical and commercial school graduates in Senegal (people with the C.A.P. Industrial and the C.A.P. Commercial) reveals that one year after graduation, 48% of the industrial C.A.P.'s are earning 15,000 to 20,000 francs CFA monthly, while only 14% of the commercial C.A.P.'s are in this range of earnings; 60% of the commercial C.A.P.'s are earning 20,000 to 25,000 francs a month, while only 32% of the industrial CAP's earn this much. (At the same time, a much higher proportion of the clericals were unemployed for relatively long periods of time after graduation.) (République du Sénégal, Ministère de l'Enseignement Technique et de la Formation des Cadres, Situation des anciens élèves des établissements d'enseignement technique, sortis en juin 1963 et en juin 1964. (Dakar, 1966) mimeographed, pp. 89-90).

in their favor.¹ But the preference is everywhere strong, and there are in most places unemployed primary and middle school graduates seeking clerical jobs while skilled craftsmen are scarce. Clerical wages are obviously higher than the supply price of clerical workers. Why aren't relative rewards more dramatically in favor of manual occupations?

The most common explanation is that social conventions obstruct an economically rational relationship between white and blue collar pay. According to an Indian writer:

"These disparities reflect partly the interplay of market forces, but more so a pattern of incomes distribution based on an age old and obsolete social structure. It is the man who is paid, not the job. A man sitting behind a desk is paid more than a man working behind a machine, not because the latter's contribution to national output is less than that of the former, nor because the desk workers in India are in short supply, none of which is true, but mainly because the man doing paper work belongs to a social group which has traditionally enjoyed a higher standard of life than the group to which the manual worker belongs."²

Considerations related to social structure are undoubtedly a factor in Indian blue and white collar pay differentials. But even in India this appears to be changing. Wage boards and tribunals have begun to do away with the "traditional" differential based on the different ways of living of clerks and laborers.³

Other than in South Asia, in any event, social structure in the sense of differentiated "needs" for different classes, does not seem to have so direct a relationship to wage determination. In few places in the world is

¹"Among these boys, who were supposedly being educated to be skilled workers, only 13.3% chose obrero (laborer) when offered the same amount of pay they would receive as an empleado (clerical worker). On the other hand, 31.1% chose obrero only if they received 300 soles (between U.S. \$11 and \$12) more per week, and 35.5% said, 'Under no circumstances would I be an obrero.' In other words, two-thirds of these boys flatly rejected the possibility of being an obrero or else imposed conditions that are extremely difficult, if not impossible to realize." W. F. Whyte and E. Flores, "High Level Manpower for Peru," in F. H. Harbison and C. A. Myers, Manpower and Education: Country Studies, (N.Y. 1965). The degree of credibility to be attached to these results is uncertain; it is in particular unclear what they do if no clerical jobs are to be found. They clearly would not prefer starvation to manual labor.

²Palakar, p. 216.

³See Fonseca, p. 173.

social stratification so rigid as in India, and although there are many traditional societies in which manual labor is not regarded highly, there is little evidence that this is an important factor in determining social ideas of "proper" wage relationships in the modern economy. In fact, to the extent that the ideology of the modernizing elites is relevant to the formation of such ideas, "proper" wage relationships could be those which favored manual workers. For in this ideology it was (and is) the artisan or technician who was noble, not the clerk. In most colonial areas, the call--almost from the beginning of the colonial presence--was for more people who would work with their hands, more technical education, better pay for artisans.¹ But the market persistently and irascibly give contrary signals.

Most of the explanation for the pattern of blue and white collar differentials in fact lies in the labor market. On the demand side, it is worth remembering that the major demand in economies at early stages of development is for clerical and administrative workers. Before World War II, in fact, there was relatively little demand in the underdeveloped world for skilled manual workers, and even in the post war period the demand for white collar people has remained relatively more intense in many countries. In one West African country, for example (the Ivory Coast), during a recent period of rapid growth (GDP rose at about 8% annually between 1960 and 1966), employment of office workers increased by twice as much and at a faster rate than employment of skilled manual workers; and this during a period when industrial production was growing at over 10% a year. Nor do projections for the near future in this country indicate a change in the pattern of demand for labor; between 1966 and 1970 it is estimated that some 20,000 new office workers will be needed as against 7,000 skilled workers.

On the supply side, it is again worth underscoring the fact that until relatively recent years, educational outputs in the majority of less developed countries were small. It is not until the mid-1950's in much of the less developed world that substantial numbers of graduates emerged from primary or middle schools. It was true then and remains true in some

¹For a discussion of some aspects of this ideological disposition, see Philip J. Foster, "The Vocational School Fallacy in Development Planning," in C. Arnold Anderson and Mary Jean Bowman, Education and Economic Development, (Chicago, 1965), pp. 142-166.

places today, that most literate people can still find white collar jobs.

In many of the less developed countries, then, supply and demand conditions have only recently begun to shift in favor of higher relative rewards for blue collar workers. And in most of the less developed countries employers are prepared to pay relatively higher wages to white collar workers not because they think it is "just" or because they are interested in maintaining the social status of those who work in offices, but because they feel their contribution to output is relatively greater.

If it is asked why, in countries which have long had a glut of white collar job seekers the market hasn't acted more decisively to reduce their relative wages, several possible answers exist

1. In the absence of reliable studies we do not in fact know how fast the wage pattern has shifted in favor of manuals in the recent past. There is some evidence that it has been shifting. In India, as already noted, recent tribunal and wage board decisions have tended to bring junior clerical and unskilled labor wages to near parity in at least some industries.¹ In Nigeria, wages of clerks since World War II have increased at a much slower rate than most other occupations.²

2. Higher level clerical and administrative personnel undoubtedly remain scarce in most of the less developed countries. In most less developed countries they are more in demand than highly skilled manual workers and trained technicians. This is at least part of the reason why so many technicians become administrators, why so many technical school graduates switch into white collar jobs. The main point is that for higher level

¹Thus in the sugar industry in the early 1960's, basic wages of unskilled workers were fixed at Rs. 60 and the basic rate of the lowest-graded clerk at Rs. 72; since dearness allowances are granted at approximately the same rate to both groups, differentials in net remuneration have shrunk sharply. (See Fonseca, p. 173 and Appendix II).

²Between 1942 and 1961 salary scales for the two lower grades of clerks in the Nigerian Civil Service increased between two and three times, while unskilled workers' wages and rates in many semi-skilled manual jobs rose approximately twice as much. (Colonial Office, Sir Walter Harragin, Report of the Commission on the Civil Service of British West Africa, 1945-46, Colonial No. 209, Appendix 4, and Nigeria, Guide to Careers in the Federal Civil Service, 1961.

clerical and administrative skills there is no glut.¹

3. Much of the labor market adjustment to changes in supply conditions seems to take the form of changes in quality of labor hired. Thus relative rates of clericals and manuals may be unchanged in the face of a surplus of clericals, but only the better educated and more effective clerical job seekers are hired. The relative "efficiency wage" of clericals thus falls without any changes in nominal wages. There is considerable evidence that this is happening in many countries, where the educational requirements for entry into clerical employments have been rising and more demanding standards are being enforced in entry examinations.

4. The problem should be looked at with some perspective. Changes in wage relationships rarely occur quickly. The fact that in many countries the public sector is the determining influence in setting relative wages further slows adjustment, since public sector wage structures are notoriously difficult to adapt to change market conditions.

PUBLIC SECTOR WAGE STRUCTURE

In the less developed regions with the exception of Latin America, the public sector is by far the largest employer of wage labor. Upwards of 40% of the recorded wage labor force is publicly-employed in a number of African countries (Nigeria, Ghana, Uganda and most of the French-speaking West African states, for example); in only a few (Rhodesia, Malawi, Zambia, Ivory Coast, for example) does the public sector employ less than 20%. Almost one-third of India's 18 million "modern" sector wage earners are in public employment.² Furthermore, the public sector is especially dominant as an employer of highly trained and educated manpower; in some of the newer states probably three out of four university graduates work for Government.

All the general issues of wage structure which arise in the economy as a whole exist of course in the public sector as well. There are however certain special features of public sector wage structure which call for

¹There are some obvious exceptions--notably India and Egypt, and possibly Iran and Argentina. (Cf. F. Harbison and C. A. Myers, Education, Manpower and Economic Growth, N. Y., 1964, p. 106.)

²Government of India, Report of the Commission of Inquiry on Emoluments and Conditions of Service of Central Government Employees, 1957-1959, p. 28.

separate attention. Only two of these will be considered here; the "gap" between high and low wage incomes, and the issue of wage relationships within the public sector--between levels of government and public bodies such as public enterprises. It should be noted in passing that there is in the academic literature an extraordinary silence about these matters, which have been a central concern of governments of less developed countries for some years.

Differentials Between Higher and Lower Level Manpower

In developed countries differences in pay between highly educated and trained workers, occupying positions of responsibility, and other workers, are generally not very wide. In the United States the ratio between the federal minimum wage and the common starting rate of a liberal arts university graduate is in the order of 1:1.5; the average annual earnings of a production worker in manufacturing exceed common starting rates of new graduates--often by as much as 30%. In the United Kingdom in 1960, average earnings in the highest income professions (medical doctors, for example) were no more than 4 times the average earnings of operators in manufacturing, and male teachers earned only about 40% more than operatives.¹

In the Soviet Union these differentials are even more compressed, as is suggested by the fact that in 1964 average industrial earnings exceeded average earnings of medical doctors by almost a third, and average teacher wages by even more.²

Comparable underdeveloped country differentials are much more substantial. In most African countries, where the disparities tend to be largest, the ratio between the usual starting salary of a university graduate in the civil service and an unskilled laborer in the capitol city was between 8:1 and 11:1 in 1963. In India, in 1958, the comparable ratio was 5:1.³ If we take the top of the scale reached by the most numerous graduate cadres and compare

¹Guy Routh, Occupation and Pay in Great Britain, 1906-1960 (Cambridge, 1965).

²A. Nove, "Wages in the Soviet Union; a Comment on Recently Published Statistics," in British Journal of Industrial Relations, IV, 2, July 1966, p. 215

³Government of India, Commission of Inquiry on Emoluments and Conditions of Service of Central Government Employees, 1957-1959, p. 79.

it to unskilled labor rates, the differential is, of course, much more striking--about 30:1 in most of Africa, and roughly the same in India

The basic reason for the existence of these large differentials is well known: trained and educated people are scarce in relation to the demand for their services, while unskilled labor is relatively abundant. The wage structure in ex-colonial countries may also have built into it certain conventional elements left over from the colonial past; wages of trained and educated people had to be high enough in the past not only to permit recruitment from abroad but also to permit a level of living considered "appropriate" to expatriates in a colonial society.

It is the overwhelming consensus of opinion as reflected in government reports and in the comments of outside observers, that these differentials are too wide, and notably that high level manpower is too highly paid.¹ The reasons for this opinion are everywhere the same.

1. It is felt to be not quite "right" or "fair" for one group of workers to be paid so much more than other groups--a young university graduate ten times more than an unskilled worker, for example, or a permanent secretary 30 times more, and an industrial manager in the private sector 80 times more. This social equity argument is made more strongly in countries which have an official commitment to Socialism or to a more general equalitarian doctrine--which is the case in the majority of countries in the underdeveloped world.

2 Related to the social equity argument is a more pragmatic consideration: that a policy of wage restraint is unlikely to be acceptable to the majority of wage earners when glaring inequalities in payment exist.

¹Cf. Government of India, First 5 Year Plan (Delhi, 1951), where it is stated: "...all wage adjustments should conform to the broad principles of social policy and disparities of income have to be reduced to the utmost extent..."; The Plan called for "a progressive narrowing down of disparities in the rates of remuneration of different classes of workers in the same unit." (Page 584). See also Government of India, Report of the Commission of Inquiry. . . . 1957-1959, for further comments (Chapter 8). Similar statements are found in Work for Progress, Uganda's Second 5 Year Plan, 1966-1971, p. 149; and the reports of the various Civil Service Salaries Commissions in African states since 1960: ADU Report (Tanganyika) 1961; ANI Report (Uganda) 1963; Pratt Report (Kenya) 1964; Morgan Report (Nigeria) 1964. For some outside comments see R. G. Gatkil, "Ex-Colonial and New Income Differentials in India," in Coexistence (Ontario, Canada), May 1964, pages 75-76; and S. A. Palekar, "Income Inequalities in India," in Coexistence, July 1966, pages 189-196.

3. Economic analysis, it is argued, supports the case for "reducing the gap," either by cutting money wages of high level civil servants, or holding these wages constant while other wages and prices rise over time. A number of related points are usually made:

a. The supply of high level manpower is not significantly related to existing wage differentials either in the short or long run. It depends rather on the output from Universities and higher training institutions. People in high level jobs are benefiting from "scarcity rents." The proper response is to increase the output of the scarce people, not to keep their wage high or to raise it, which will not affect overall supply but only the amount of "quasirent" received.

b. Incentives to acquire education and training at this level are already strong; where education facilities are adequate there are rarely shortages of applicants for further education or training.

c. The fact that private sector employers pay higher rates for highly trained people does not mean that the government should raise its rates. The private sector employer usually fixes his rates for trained people with reference to public sector rates. A rise by government would lead to a retaliatory rise by private employers, with no change in the pattern of manpower allocation. In any event, the public sector offers advantages other than pay: prestige, security, influence, a chance to participate in the building of the nation and sometimes better fringe benefits.

d. The world market influence, or the danger of the "brain drain" does not change the analysis. Differentials between world market wage levels and local wages are so large that effective competition is scarcely possible. The world market in any event reaches out only for certain senior experienced people in a limited number of occupations. If the problems of "brain drain" becomes truly urgent, direct efforts to deal with it should be devised, running from positive inducements to stay at home such as better study leaves, better working conditions and facilities, more sub-professional assistance, etc., to negative measures such as bonding or punitive taxes on those who work abroad, or--as a last resort--direct restrictions on movement abroad.

e. In many countries, most of the costs of education are financed by Government. Society has invested in certain individuals. There is no

reason why the return on these investments should be enjoyed only by those persons lucky enough or able enough to have benefited from them.

The counter-arguments--that the "gap" is not too large and that wages of highly-trained manpower are not too high--are implicit in the above. "Free market" rates for high-level manpower are said to be higher than existing rates, as evidenced by the steady increases in wages and salaries of trained manpower in the private sector, and by the "brain drain" to advanced countries and international organizations. As to "equity," it is said to be only right that people who bear responsibility and make important contributions to national development should be paid accordingly. Otherwise their incentives to perform efficiently will be impaired. The argument is particularly relevant to the Civil Service, which has a crucial role to play in development. Unless civil servants are adequately paid they will look for other ways to make money, either by dual job-holding (as in most of Southeast Asia and Latin America), or by less admirable means. Or they will quit the public sector altogether, leaving less imaginative and competent men in their places.

The case for "closing the gap" has prevailed in most countries--at least those for which information is at hand. In Africa there have been very few increases in upper level Civil Service salary scales since the mid-1950's, while wage rates of unskilled and less skilled workers have risen markedly. Thus by 1967, the ratio between university graduates' starting rates and the rate for unskilled labor in government employment had fallen to about 7:1 in much of the continent. In West Africa this represents a cut in the differentials of about 30% in a decade; in East Africa the reduction has been more than 50%.¹

The same process has been going on for a longer time in India, although there the greatest compression took place between the 1930's and the 1940's. The ratio between the starting salary of an Indian Civil Service officer and a laborer (Peon) working for the central government was 43:1 in 1939-40. It fell to less than 7:1 in 1947-48, and was approximately 5:1 in 1959. Since 1959 further compression has occurred; the Salaries Commission of 1957-59 raised only lower salary scales and recommended no cost of living (dearness)

¹There is to my knowledge, only one country in Africa which has bucked this trend. This is the Ivory Coast, which in 1965 raised top level salary scales in the civil service by approximately 45%, and lower level scales by under 10%.

allowance for those on relatively high salaries.¹ There is some indication that similar tendencies exist in Latin America. This at least is suggested by some evidence for Brazil, where the ratio between maximum and minimum base salaries in the civil service fell by over 80% between pre and post World War II years, from 18:1 in 1936 to under 4:1 in 1963.²

The apparently universal trend toward sharp contractions in civil service differentials, which indicates a general decline in premia paid for advanced education and training, is not a recent phenomenon. Scattered evidence such as that available for Brazil, suggest that it has been going on for some decades. Similar evidence is found in West Africa, where the salaries of senior civil servants appear to have increased very slowly since the 1920's. In the mid-1950's they were little more than twice their 1925 level, while unskilled rates had risen by at least six times, in colonial British West Africa the ratio of an administrative officer's starting salary to the rate for unskilled labor in capitol cities fell from 35:1 in 1925 to 13:1 in 1946 and 10:1 in 1960.

This secular decline of differentials for higher education, which began well before any explicit policy of "closing the gap" had come into play, might be taken as evidence of underlying market forces at work. In some countries, such as India, Brazil, Iran or Egypt, where local output of educated manpower had become sizeable before World War II, some market influences are probably at work. But in most of the underdeveloped countries there was exceedingly little in the way of university output until after World War II, and in almost all these countries in any event the demand for their services grew much more rapidly than their supply. So in these countries, changing supply-demand relationships can hardly have been significant factors in explaining the behavior of civil service differentials up to 1950.³

¹Government of India, Commission of Inquiry on Emoluments. . . 1957-59, pp. 87ff.

²According to some figures supplied by Eriksson the ratio of maximum to minimum rates in the Brazilian civil service was 22:1 in 1914; 18:1 in 1936; 3.8:1 in 1948; 4.8:1 in 1955; and 3.8:1 in 1960. (John R. Eriksson, Appendix Table F-7.

³Except in one indirect sense; supply-demand conditions for educated manpower in metropolitan countries favored the export of high level manpower to colonies, and hence kept its wages relatively low, until the 1950's.

The basic causes are "institutional"--the desire of most governments to protect low income groups during periods of rising prices, coupled with related upward pressures on the level of unskilled wage rates arising from the adoption of "fair wage" or "human needs" criteria in minimum wage fixing; from equalitarian ideologies; from the decline of colonial rule; and from the pressures of trade unions. These factors began to operate mainly after 1939, and it is since 1939 that the rate of compression of differentials has been greatest.

The policy of "closing the gap" between high and low salaries in the civil service is undoubtedly necessary and in general correct. But much of the discussion of this problem in the developing countries and by outside observers is simplistic. It overlooks the complication inherent in the policy of compressing civil service salary structures.

Where there is a generalized shortage of high level manpower, restraints or reductions of higher level civil service salaries cannot be imposed without auxiliary measures, if they are to be effective. This is true even when there are no domestic alternatives to public sector employment, i.e., no private sector and no opportunities for self-employment. In this case at least two measures must be considered.

1. The various elements in the public sector must coordinate their manpower policies. Given the scarcity of competent high level manpower, there will be competition for them--ministry against ministry, state enterprises against civil service, local administrative units against central government, etc. Unless some system of allocation is developed, some form of rationing arrangements, the competition is likely to be irrepressible, taking disguised forms, such as overclassification.

2. It may be necessary also to control employment of nationals abroad--through disapproval of requests for work for international agencies, passport control, and so forth.

In much the more common case, where there are domestic alternatives to public sector employment, further measures may be called for. Not only is it necessary to have a coordinated manpower allocation policy within the public sector, and possibly control over employment abroad, but some way has to be found to restrain private sector remuneration and incomes from self-employment. Tax policy is one possible instrument, but its effectiveness is doubtful even where there exists plentiful administrative capacity.

The issues raised are too varied and complicated to be adequately discussed here. The essential point is that where there exists a general scarcity of high level manpower in relation to demand for it, and at the same time the government pursues a policy of "closing the gap" between high paid and low paid people in the civil service, measures beyond civil service salary control at the top will usually be required to make the policy effective.

It is the absence of these additional steps which is a major cause of the disruption commonly found in public sectors in the new states--heavy turnover of higher level staff between ministries, bidding away of civil servants and new graduates by public corporations, inability to compete with the private sector for the best people and the scarcest abilities.

Where compression goes very far, and where there is a significant private sector, the recruitment problem takes on unmanageable proportions. In Brazil, for example, if actual remuneration ratios between civil service maximum and minimum salaries are close to the base rate ratios mentioned above (less than 4:1) then the structure in Brazil is more compressed than in most advanced countries and it is hard to see how competent civil servants could be recruited or retained full time. The situation in the Congo (Kinshasa) is even more dramatic. In that country, the ratio between the maximum and minimum starting rates of the civil service fell from 25:1 in 1960 to 4:1 in 1965; in terms of real income all higher level posts for which a university degree is a normal requirement have salary scales which are only 20 to 30% of their 1960 levels. In the Congolese civil service today a new university graduate receives a starting rate only 2.2 times higher than that of a messenger. Because of sizeable family allowances and a progressive tax system differentials in net remuneration are probably smaller. Since there has been so much upgrading and promotion in the Congolese civil service in the last five years the compression of differentials has not affected those presently employed. But new university graduates must now be recruited and it is proving extremely difficult to find them in the face of private sector competition.¹

Even if governments of less developed countries are prepared to take all measures necessary to make a policy of "closing the gap" work, and have the

¹See Institut de Recherches Economiques et Sociales, Lettre Mensuelle, Mai 1967, (Université Louvanium Kinshasa)

administrative capacity to make these policies work reasonably well, and even where there is no severe problem of recruitment or retention of public sector employees, there remains the question of how far and how fast the "gap" can be closed without producing reactions harmful to the development process. The main reaction at issue is generalized discontent and disaffection and a consequent reduction of commitment and effort among the small layer of civil servants upon whom responsibility for the administration of government mainly depends. That the efficiency of civil servants is related to their "contentment" and "contentment" is a function of wages is an old argument, threadbare from long use in public sector wage discussion the world over. It is not usually an inspiring argument--true perhaps but not very interesting. In the case of civil servants in the less developed countries, however, it deserves respect. For at least in Asia and Africa higher level civil servants are men caught in social contradictions of a special kind, and exposed to inequalities which make them especially discontent-prone. This is indeed one of the less advertised dramas of the underdeveloped countries.

The contradiction has its origin in the enormous social dichotomy between the highly educated and the unskilled in these countries. However deplorable it may be, it is a fact that the style of life of the two groups is usually radically different. They often eat different foods, wear different clothes, speak different languages much of the time. In most of the ex-colonial countries, the whole process of education involved the deliberate creation of character. The process, for better or worse, was successful. The standard of living of many educated Asians and Africans, for example, in the sense of the inner judgements of what standards are "necessary" for a decent life, are essentially those of educated people in the advanced countries. This is why senior civil servants earning many times the average income of their country feel economically oppressed, why they are almost everywhere deeply in debt, why they are so often cold to arguments about their relative affluence or privilege.

Related to this is the fact that the groups with which senior civil servants are mainly in contact and with whom they compare themselves have much higher incomes than the civil servants. One such group is composed of expatriate technicians or managers. In both private and public sectors expatriates are relatively numerous in high level positions everywhere in the

underdeveloped world. Foreign managerial and technical personnel are very highly paid. But technical assistance personnel also receive comparatively handsome salaries. Both of these groups receive abundant fringe benefits. The public sector comparisons are particularly cruel. It is not uncommon for a technical assistance expert earning 12 to 15 thousand dollars a year, living in a house provided free or nearly free and driving a car provided free or nearly free to be working side by side with a local counterpart who earns \$2 or \$3,000.

Even where the income disparity between technical assistance personnel and local civil servants may not be a source of irritation, there is the effect of the growing differential between private and public sector remuneration which follows a policy of public sector restraint on high salaries. The Indian experience is revealing. In 1947 the salaries at higher levels of the central government were cut by 25%, and the rates remained unchanged throughout the 50's. Average earnings of higher level central government employees increased by some 13% over the period 1948-49 to 1956-67. In the private sector during these years, salaries of comparable people rose markedly; average earnings of income tax paying private sector employees rose almost 70%.¹

All the groups with which senior civil servants and high level personnel in public employment are likely to compare themselves, then, have higher incomes than the public employees. So in terms of relativities, the senior civil servants are likely to feel sorely aggrieved. The result is likely to be widespread withdrawal of interest and effort, and a threat to the effective operation of the machinery of the state, with grave consequences for economic development. This has already happened in much of the world where public sector salaries have been substantially outstripped by wage changes in the private sector, as in much of Latin America and Southeast Asia.² It is not yet a problem in Africa because the civil services there are young, and opportunities for promotion have been very good.

¹Government of India, Report of the Commission of Inquiry on Emoluments... 1957-1959, p. 83.

²For Southeast Asia see Naomichi Funahashi, "Labor Market and Wages in Southeast Asian Countries," in *The Developing Economies*, Vol. I, No. 1, January-June 1963).

Two implications of this discussion deserve emphasis. First even in countries where there is a general shortage of high level manpower, it is wrong to think of the supply of highly trained and educated labor as rigidly fixed in the short run. The numbers of people may be fixed, but not the effort or effectiveness with which they work. To the extent that wage levels (absolute and relative) are related to levels of satisfaction or discontent, and satisfaction or discontent is related to levels of satisfaction or discontent, and satisfaction or discontent is related to output of effort, the supply of effort is not fixed. In the case of high level manpower in the less developed countries, these relationships are likely to be closer than for any other group of workers.

Secondly, even where alternative employment opportunities are limited, and recruitment is no great problem, there are serious risks in going too far and too fast in restraining or cutting the salaries of higher level manpower. There are various levels of possible response, from participation in revolt (as in Dahomey) to a degree of disaffection which provides a rationale for corruption, to withdrawal either physically (dual job holding) or in terms of effort.

Wage Relationships Between Central Government, Local Governments and Other State Bodies

The public sector is everywhere a heterogeneous collection of wage-making units, differentiated in political, administrative and economic terms. Aside from Central Government there are State Governments (in federal systems) as well as local authorities with varying degrees of wage fixing autonomy. Often the railways and ports are under separate administrative authority. Teachers are sometimes grouped in a separate teaching service. Everywhere there are statutory boards of various sorts, and state enterprises.

The setting down of theoretical guidelines for "suitable" wage relationships between these various units of the public sector presents few difficulties in principle. Each unit works under a different budget constraint; each operates in a product market with different characteristics; each faces different supply conditions in the labor market. Thus some local government units are poor, without much opportunity to raise revenues from local sources, while others are relatively rich. Some are anxious to expand education, others are more interested in health or in better engineering services for their

public works department. Labor of various types may be abundant in one area, scarce in another, All of this should make for a rational diversity of wage levels and structure between the various levels of government. Diversity should also be expected between government units on the one hand and statutory bodies on the other; the latter, many of which work on "commercial principles" are usually created to meet need for greater flexibility than can be found within government departments, and particularly flexibility in hiring, firing and terms of employment. Wage levels and structures of these boards and enterprises should reflect the fact that they are competing with the private sector and seeking the best available administrative and technical talent.

Though easily dealt with in principle, the question of intra-public sector wage relationships is in practice extraordinarily complex and a continuing source of difficulty in many less developed countries. In most of these countries wage and salary diversity within the public sector is the rule. But its presence unlooses a Pandora's Box of problems and is the source of much dissatisfaction.

1. Central Government personnel works in all parts of the country, side by side with staff of local authorities; they are in regional and local offices of Central Government departments such as public works, agriculture, health and education, in post offices, in railway workshops, in outposts of statutory bodies such as marketing boards. In general, these employees of Central Government or statutory bodies are paid on a single national scale.¹ The Central Government scale is generally higher, sometimes much higher, than scales for local government employees, particularly at the lower skill levels. In India, in 1959, for example, minimum rates for state-employed unskilled labor in 8 states out of 14 were some 40% below the rate paid by the Central Government for the same labor in the same areas.² To have people at the same skill level working in close proximity at significantly different rates of pay leads to

¹Cost of living allowances may differ, but where such allowances are large parts of total remuneration, as in India, this is not the case. In the Federation of Nigeria, unskilled rates paid by the Federal Government vary by region, while all other grades are on the same salary scale wherever they serve.

²Government of India, Report of the Commission on Emoluments. . . . , 1957-1959, p. 47.

predictable consequences: generalized dissatisfaction among local employees, and pressures on local governments for parity.

2. A very few local authorities, usually those in "overdeveloped" capital cities, have the ability to pay higher salaries to their staff, both unskilled and high-level. The pressures of employee organizations also tend to operate with greater effect on these local authorities. But Central Governments do not usually look kindly at salary increases in these richer local government units. In part this is so because the Central Government finances some portion of the expenditure even of the relatively rich local authorities. But more important is the fear of pattern-setting wage agreements, which stimulate demand by staff of other local authorities and even of central Government itself. This can lead to situations such as that which developed in Kenya early in 1967. A strike occurred among Nairobi employees despite agreement by the Nairobi Town Council to grant a wage increase because the Ministry of Local Government refused to approve the increase.

3. Statutory Boards and State enterprises shake up wage structures by their free-wheeling hiring and wage policies. Where civil service scales are particularly out of line with "free market" rates these bodies engage in large scale piracy of scarce skills. A classic general instance is with respect to secretaries and stenographers, which are scarce everywhere. Civil Service scales are rarely adjusted to take account of this scarcity, mainly because of concern over internal relativities and the tendency for Civil Service structures to be related to levels of education. The result is that competent secretarial staff is paid two or three times the Civil Service scale by the private sector, statutory boards and public enterprises meet that competition and bid away from government departments the lion's share of competent secretaries. It is the same with high-level manpower; young administrative officers and technicians in many countries earn much more in a statutory body than in the Civil Service, and enjoy faster promotions as well.

These disparities would be unsettling even if higher salaries in the public bodies outside the Civil Service indisputably reflected greater ability or competence. In many instances however, politics and nepotism are governing factors, since the statutory bodies are free of the constraints exercised by central hiring bodies such as Public Service Commissions. Where this is frequent the discontent-producing effects of wage diversity are of course

exaggerated. Where it is not a factor, an internal "brain drain" from other Government units to the statutory bodies creates pressures within ministries to compete for available manpower, usually surreptitiously, by such means as overgrading and quick promotions.

4. Teachers are treated in various ways in the less developed countries. In some places they are completely in charge of the Central Government; they are civil servants. This is the case, for example, in countries formerly under French colonial rule. In other countries teachers are almost exclusively hired, fired and paid by local authorities though their costs are financed in part by grants from Central Government sources, either directly or indirectly. A third group of arrangements fall somewhere in the middle; under one common variant a Teacher's Service Commission or similarly named body sets down conditions of employment while local authorities remain responsible for day to day supervision.

The considerations involved in evaluating these alternatives are no different for teachers than for other government employees. It is only that teachers are so numerous, weigh so heavily in public payrolls, are usually well organized into professional associations or unions, and are politically articulate and influential so that their case has special interest.

The advantages of local determination of teacher salaries are obvious. It is a more flexible arrangement; local ability to pay can be taken into account and teacher salaries can be related to the general level of wages in the locality. This is especially significant since the supply of educational services and the level of employment of teachers are both related very closely to the level of teachers' salaries. Moreover, payment of teacher salaries by Central Government is not really consistent with local control over teachers, nor with local administration of education. Since education is the major function performed by local government in most less developed countries, Central Government determination of teacher salaries strikes at the roots of local government institutions.¹

¹It may be inevitable, or even desirable, that efforts to strengthen local government in many less developed countries--efforts marked everywhere by tremendous financial and administrative difficulties--should be abandoned. The assumption in the text, however, is that development of local government institutions is a policy objective.

With locally-fixed and hence differentiated salary scales for teachers, on the other hand, some poorer local authorities may find it difficult to recruit and retain good teachers. Moreover, local determination of salaries is usually associated with a diffusion of financial responsibility which generates frustration and discontent among teachers and their representatives. The problem arises from the fact that local authorities depend on Central Government grants for a substantial proportion of their expenditures. Local tax bases are uneven, and in most places small; tax systems are such that local revenues are inelastic. Any substantial increase in local expenditures therefore tends to depend on increased transfers from the center. But Ministers of Finance are not ordinarily disposed to provide increased transfers for expenditures (such as salary increases by local authorities) over which they have no effective control. The result is a no-man's land of decision-making, with local authorities telling teachers they want to give them more money but are unable to, and Finance Ministers saying teacher salaries are a local matter. Where schools are privately managed and financed (as with mission schools, still common in many less developed countries), the location of financial responsibility is even more difficult.

In addition to all of this, when conditions of employment for teachers differ between local authorities and/or are inferior to civil service conditions for occupations with similar requirements, dissatisfaction develops, and teacher organizations in many countries seem to be able to mobilize strong and continuing pressures for parity. It seems that many governments in the underdeveloped world have been able so far to resist demands for unified teacher salary scales; India is an important example. But many others find resistance to these teacher demands difficult. This is particularly so in Africa, perhaps because of the relatively strong teachers organizations commonly found there, the relatively low capacity to resist that characterizes many African governments, and the fact that teachers were the main source of political recruitment in the surge to independence.

Given the complexity of these problems and the diversity of conditions in the less developed countries there is no simple or uniform answer to the question of how these intra-public sector wage relationships should be handled. Economic analysis leans heavily in favor of diversity, which allows for maximum employment and provision of services and greatest flexibility in adjusting wages to

changing supplies of various kinds of labor. Diversity has other advantages as well. Local control over wage determination is essential to the survival or strengthening of local administration, where this is an aim of policy. Moreover, there is much to be said for dispersing the foci of discontent. When weak central governments are forced into confrontations over big wage issues, two risks are magnified: the danger of political turbulence and the danger of unwise wage settlements.

The maintenance of diversity however, also has its price. Demands for parity within the public sector are continuous. Disparities will be a source of grievance to the disadvantaged local government employees or teachers, with possible effects on the supply of effort. A stable diversity of salary structure, moreover, demands at least a minimum of coordination and control over the hiring and salary policies of public boards and corporations. It also demands that Central Government wage decisions take account of effects on local governments, a proposition that is often rejected because it conflicts with the "fair wage" goal of minimum wage policy.¹ Where the disparities are keenly felt, and demands for equality of treatment particularly insistent, as in the case with teacher demands in many African countries, it may be necessary to abandon diversity and grant uniformity with civil servant conditions. But this can hardly be viewed as anything more than a second-best solution, for which the only consolation may be that in public sector wage making the second-best is usually pretty good.

¹The Indian Pay Commission of 1957-1959, for example, considered the problem of local government-central government differentials in some detail; this was in fact one of the main reasons it was appointed. However, it concluded in effect that the Central Government should not deny "justice" to its own unskilled workers because unskilled employees of local authorities might be adversely affected. (See Government of India, Report of the Commission on Emoluments. . . ., 1957-59, Ch. VI, pp. 47-58).

de Vries -

Export performance of LDC
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1) Price Analysis

2) Rate of Growth of E earnings - Time series



