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THE ROLE OF COMPETITIVE FORCES IN THE DETERMINATION
OF WAGE INCREASES IN LESS DEVELOPED ECONOMIES:
THE CASE OF KENYA

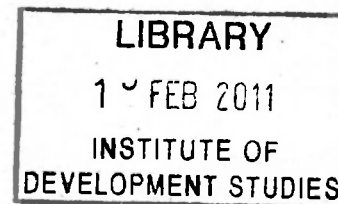
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ABSTRACT

The theoretical literature concerned with rural-urban migration in LDCs has almost always assumed that the real wage differential between these sectors is fixed by the institutionally determined modern sector urban money wage and the relatively constant average product of labour in agriculture. An equilibrium flow of migrants is then determined by the "expected" wage differential, defined as some function of the money wage differential and the urban employment rate.

Little attention has been given to an empirical estimate of the role played by the rate of unemployment in the determination of modern sector wages in LDCs. The major hypothesis tested here is that competitive forces are at work and that increases in the supply of labour tend to dampen the other institutional forces that serve to increase wages in the modern sector.

The model is tested with data for 34 districts of Kenya and the major hypothesis is rejected.

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Introduction

In recent years economic development literature has focused attention on the problems created by high rates of population growth and widening disparities in income distribution. Rural-urban migration has been, in part, a response to pressure on land in rural areas as well as to the high wages paid by a relatively capital-intensive modern sector in the cities and towns. However, the labour absorptive capacity of this sector has been very low with the result that the aspirations of some of the migrants have not been fulfilled. Many find employment in the labour-intensive, low-paying informal sector which has sprung up to serve the needs of the urban poor for services and low cost manufactured goods.¹

The unemployment problem in Less Developed Countries (LDC's) is said to be aggravated by the "wrong" factor price ratio between capital and labour; partly because of institutionally determined modern sector wages and partly because of an artificially low price of capital attributable to an overvalued exchange rate and various investment incentives. This line of reasoning, by invoking a neo-classical framework, then attributes the slow growth of employment to the modern sector wage being too high.²

The authors wish to express their appreciation to the International Labour Office and the International Development Research Centre for providing the funds for the research, to the Institute for Development Studies, University of Nairobi for facilitating the research, to the Dean's Committee, University of Nairobi for funding computer time and to the Central Bureau of Statistics of the Ministry of Finance and Planning for providing the unpublished data necessary for the analysis. Also, we express our appreciation to the research assistants at the Institute for Development Studies for their assistance in data preparation.

The views expressed in this paper are those of the authors and should not be interpreted as reflecting the views of any of the supporting agencies.

1. The recent ILO mission to Kenya placed great emphasis on the expansion of this sector as a means of expanding income and employment opportunities. International Labour Office, Employment, Incomes and Equality: A Strategy for Increasing Productive Employment in Kenya. Geneva, 1972.
2. Considerable attention has been given to estimating the elasticity of substitution or the wage elasticity of demand for labour in LDC's. Some examples for Kenya are: J.R. Harris and M.P. Todaro, "Wages, Industrial Employment and Labour Productivity: the Kenyan Experience," Eastern Africa Economic Review, (June, 1969); J.K. Maitha, "Capital-Labour Substitution in Manufacturing in a Developing Economy: the Case of Kenya," Eastern Africa Economic Review, (December, 1973).

Trade unions and government minimum wage laws have invariably been sought out as the forces responsible for setting modern sector wages.³ Multi-national corporations, by adopting the most recent vintages of technology, which require very little unskilled labour, have been blamed for the increasing inequality in income and employment opportunities.⁴

The theoretical literature concerned with rural-urban migration in LDC's has almost always assumed the real wage differential between these sectors is fixed by the institutionally determined modern sector urban money wage and the relatively constant average product of labour in agriculture. An equilibrium flow of migrants is then determined by the "expected" wage differential, defined as some function of the money wage differential and the urban employment rate, so that the flow of migrants exceeds the number of new urban jobs giving rise to persistent urban unemployment. The flow of migrants exerts downward pressure on the expected wage differential by decreasing the employment rate so that in equilibrium, the marginal migrant is indifferent to moving because his expected real wage differential is zero.⁵

We do not deny that the general level of modern sector wages are protected to some extent by institutional factors such as minimum wage laws, trade unions exerting subtle political pressure on government and foreign-owned firms and oligopolistic firms sharing their excess profits with labour, perhaps to buy a low rate of labour turnover in an effort to maximize profits in the long run.⁶ However, little attention has been paid to empirical estimate of the role played by the rate of unemployment in the determination of modern

3. D.P. Ghai, "Incomes Policy in Kenya: Need Criteria and Machinery," East Africa Economic Review, (June, 1968); Harris and Todaro, Loc. cit.

4. S. Langdon, "Multinational Corporations, Taste Transfer and Underdevelopment: A Case Study from Kenya," Review of African Political Economy, (January-April, 1975).

5. M.P. Todaro, "A Model of Labour Migration and Urban Unemployment in Less Developed Countries," The American Economic Review, (March, 1969).

6. Elsewhere the authors have examined the evidence for the role played by trade unions, the oligopolistic industries and the government in wage determination in Kenya. The hypothesis that unions play a significant role in determining inter-industry wage rate differentials was rejected. Rather, emphasis was placed on the influence of firms operating in imperfectly competitive product markets. Typically these firms tend to be large in size and foreign owned. W.J. House and H. Rempel, "The Determinants of and Changes in the Structure of Wages and Employment in the Manufacturing Sector of the Kenyan Economy," Journal of Development Economics (forthcoming) Discussion Paper No. 207, Institute for Development Studies, University of Nairobi, (December, 1974); W.J. House and H. Rempel, "The Impact of Unionization on Negotiated Wages in the Manufacturing Sector in Kenya," Working Paper No.244, Institute for Development Studies, University of Nairobi (September, 1975).

sector wages in LDC's. The major hypothesis to be tested here is that competitive market forces are at work and that increases in the supply of labour tend to dampen these other forces that serve to increase wages in the modern sector.

Under competitive market conditions the level of wages and employment at a point in time in the labour market will be determined simultaneously by the forces of supply and demand. In a dynamic situation, however, both labour supply and demand conditions are changing and the market response need not be instantaneous. Should factor prices change, new technology cannot be employed immediately while the labour response to a wage change may be delayed because people have to relocate, obtain additional skills or terminate existing employment obligations. Therefore, at a given wage level there may exist either a labour surplus or a labour shortage, but these would be temporary only because market forces, given time, will move toward elimination of the problem through adjustments in the wage and price mechanism.

An attempt was made to establish the existence of competitive forces in the labour markets of Kenya. We would not expect to observe factor price equalization amongst the regional, occupational and industrial labour markets even if factor markets were very responsive to changes in supply and demand. Given a simple supply and demand model and given the presence of excess supplies of labour in the market at the going wage rate, we would expect to find that rising excess supplies of labour would tend to dampen the growth of wages if competitive market forces are at work.

The Theoretical Model

In the spirit of Todaro's work on rural-urban migration⁷ the following model attempts to capture the relationships hypothesized here.

The exponential rate of growth of modern sector employment (y) is assumed to be exogeneously given so that the level of employment at time t is $N_0 e^{yt}$

$$(1) \quad N^*(t) = y$$

The exponential rate of growth of the urban labour force (S^*) is composed of two components, the natural growth rate (β) and migration which is hypothesized to be a linear function of the rural-urban wage differential. This gives us

$$(2) \quad S^*(t) = \beta + \delta \frac{\{W_u(t) - W_r(t)\}}{W_r(t)} \quad \delta > 0$$

7. Todaro, loc.cit.

The rate of growth of the urban wage is made up of an exogenous component α (determined by institutional factors such as political and trade union pressure and the presence of multinational corporations) and a component representing a linear function of labour market slackness.

$$(3) \quad \dot{W}_u(t) = \alpha + k \frac{\{S(t) - N(t)\}}{S(t)} \quad k < 0$$

The rate of growth of rural earnings is given exogeneously by agricultural labour productivity as λ

$$(4) \quad \dot{W}_r(t) = \lambda$$

The employment rate at time t is $E(t)$.

$$(5) \quad E(t) = \frac{N(t)}{S(t)}$$

The equilibrium condition is that the employment rate attains a constant \bar{E} so that

$$(6) \quad E^* = N^* - S^* = 0$$

From (1) (2) and (6)

$$(7) \quad y - \beta - \delta \left\{ \frac{W_u(t) - W_r(t)}{W_r(t)} \right\} = 0$$

Substituting (3) in (7)

$$(8) \quad y - \beta - \delta \left\{ W_{uo} \exp \int_0^t \alpha dt + \int_0^t k \frac{(S(t) - N(t)) dt}{S(t)} - W_{ro} e^{\lambda t} \right\} = 0$$

Transposing

$$(9) \quad \exp \int_0^t (\delta - \lambda) dt + \int_0^t k \frac{(S(t) - N(t)) dt}{S(t)} = \frac{(\delta + y - \beta) \cdot W_{ro}}{\delta \cdot W_{uo}}$$

Taking natural logs of both sides

$$(10) \quad (\alpha - \lambda)t + k \int_0^t \frac{(S(t) - N(t)) dt}{S(t)} = \ln \left\{ \frac{(\delta + y - \beta) \cdot W_{ro}}{\delta \cdot W_{uo}} \right\}$$

$$(10a) \quad k \int_0^t \frac{(S(t) - N(t)) dt}{S(t)} = -(\alpha - \lambda)t + \ln \left\{ \frac{(\delta + y - \beta) \cdot W_{ro}}{\delta \cdot W_{uo}} \right\}$$

But from (5) and (6), $\bar{E} = \frac{N}{S} = \text{a constant}$

Therefore

$$(11) \quad k (1 - \bar{E}) \int_0^t dt = -(\alpha - \lambda)t + \ln \left\{ \frac{(\delta + y - \beta) \cdot W_{ro}}{\delta \cdot W_{uo}} \right\}$$

$$\text{or } (11a) \quad kt(1 - \bar{E}) = -(\alpha - \lambda)t + \ln \left\{ \frac{(\delta + y - \beta) \cdot W_{ro}}{\delta \cdot W_{uo}} \right\}$$

Therefore,

$$(12) \bar{E} = 1 + \frac{(\alpha - \lambda)t}{kt} - \ln \left\{ \frac{(\delta + \gamma - \beta) \cdot \frac{W_{ro}}{W_{uo}}}{\delta} \right\}$$

or

$$(13) \bar{E} = 1 + \frac{(\alpha - \lambda)}{k}$$

since the third term of (12) disappears as $t \rightarrow \infty$

Thus, if $\alpha > \lambda$ and $0 > \frac{\alpha - \lambda}{k} > -1$, then the

employment rate is < 1 . Then the urban-rural wage differential is still positive but the unemployed exert downward pressure on W_u . The larger $|k|$ the smaller is the rate of growth of the urban labour force; hence the higher is the equilibrium employment rate.

An Empirical Test of the Model

Perhaps the best test of the influence of changes in the supply of labour on wage increases would be found in an analysis of the informal sector,⁸ removed from the influence of trade unions, multi-national corporations and government minimum wage laws. However, since migrants are believed to aspire to the high wage level of the modern sector we shall concentrate on estimating the competitive forces at work in the determination of modern sector wages. In any case very little information has been generated on wages and employment in the informal sector.

Because of the lack of time-series data of adequate duration in Kenya we had to resort to using cross-section data from 34 districts.⁹ Some of the data used are in an unpublished form, collected by the Central Bureau of Statistics in its Annual Enumeration of Wages and Employment in the Modern Sector.

If competitive forces are at work there will be a two-way relationship between changes in the supply of labour to a district and changes in the district's average wage. On the one hand, if workers are responsive to wage incentives they will migrate to those districts where wages are rising

8. The informal sector consists of small-scale urban and rural labour-intensive industries generally found in LDC's. Invariably the majority of the activities in this sector are not enumerated and quite often discouraged by the authorities.

9. The districts of North-Eastern Province and the four districts in Eastern and Rift Valley Provinces formerly in the old Northern Province were excluded because of the lack of modern sector activity located there.

fastest. Presumably they will be responding also to such factors as existing wage levels and new employment opportunities which will need to be incorporated into the model. On the other hand increases in the supply of labour should serve to dampen any tendency for wages to rise as a result of changes in the demand for labour. We shall assume that the demand for labour is wage-inelastic in Kenya's districts since the technology used in a significant part of the modern sector is invariably imported from the economically advanced countries.¹⁰ Therefore the model is applicable in the short-run.

The Hypotheses

For estimation purposes the structural equations of our model are assumed to be linear and of the form:

$$(14) \quad S^* = a_0 + a_1 W + a_2 W^* + a_3 U + a_4 E^* + a_5 N + a_6 D + a_7 M + a_8 B$$

$$(15) \quad W^* = b_0 + b_1 S^* + b_2 U + b_3 E^*$$

where equation (14) hypothesizes that the rate of change in the supply of labour to a district (S^*) or alternatively the absolute change in the supply of labour (ΔS) in some time period is linearly related to:

- (1) some average of past years' modern sector wage levels (W);
- (2) the average rate of change in the recent past in the district's wage level (W^*) or alternatively as the absolute change (ΔW) in the recent past in the district's wage level.
- (3) the employment rate of the district (U). The wage level and the employment rate constitute the "expected" wage of the migrant in the district to which he moves;
- (4) the rate of change in the demand for labour (E^*) in recent past periods or alternatively as the absolute change in the demand for labour (ΔE), reflecting increasing employment opportunities;
- (5) the proportion of children in the district aged 5 - 14 with at least one year of formal education (N). This reflects educational opportunities in the district and may act as a pull-force to the district for migrants seeking education for their children;

10. If we do not make this assumption then the model requires a third equation and becomes unnecessarily complex, given the aggregated nature of the data available to test it. Annable makes a similar assumption in his international cross-section study of the interaction between urban in-migration and the urban traditional sector. J.E. Annable, Jr., "Internal Migration and Urban Unemployment in Low-Income Countries: a Problem in Simultaneous Equations," *Oxford Economic Papers*, new series, (November, 1972).

(6) the distance travelled by the average in-migrant to the district reflecting the loss of home ties and the material costs of migrating (D). The coefficient is expected to be negative;

(7) the proportion of employment in the district in manufacturing (M) which reflects the diversity of activities in the district to which migrants are attracted;

(8) the degree of urbanization (B) in the district as reflected by the proportion of people living in towns of more than 5,000. This reflects the social and other amenities of urban living to which migrants aspire.

The inter-district difference in the growth in the supply of labour is made up of two components, namely the difference in the natural growth rate and the difference in net migration. It might be argued that two separate equations are needed to estimate the two components of supply changes, yet we would argue that, in the context of a LDC, some of our more important explanatory variables influence the two factors in a similar direction.¹¹ Higher than average wage levels and increasing employment opportunities, in addition to attracting migrants, can also increase the supply of labour by reducing infant mortality rates as a result of better food and medical attention. This assumes that the lag in changes in fertility is longer than that of the reduced infant mortality.

Equation (15) hypothesizes that the rate of growth (W^*) or the absolute growth (ΔW) in average district wages of a district is linearly related to:

(1) changes in the supply of labour (S^*) or (ΔS). The sign of the coefficient is expected to be negative;

(2) the employment rate (U) as an index of labour market tightness, which, in turn, is a function of past period changes in the demand and supply of labour;

(3) changes in the demand for labour (E^*) or (ΔE).

The Data and Measurement of the Variables

The major sources of data were the Census of Population for 1962

11. Of course, even though the direction of causation is the same they may be of very different dimensions. This need not concern us here.

and 1969¹² and the Employment and Earnings in the modern Sector Reports¹³ for the years of our study. The variables were measured in the following manner.

S^* is measured as the average annual growth and ΔS as the absolute change in the labour force of the districts for the years 1962 to 1969. These estimates were made as follows: ILO labour force projections provide an age specific estimate of males' and females' labour force participation rates for 1960, 1965 and 1970 for Kenya. A constant rate of change between these years was assumed to obtain labour participation rates for 1962 and 1969. These rates were then applied to the 1962 and 1969 Census totals to generate labour force estimates by district for these years. The average annual cumulative rate of growth as well as the absolute change in the labour force between 1962 and 1969 were used.¹⁴

W is the average earnings in the modern sector of each district for the years 1964 - 1966, taken from the Annual Enumeration of Employment and Earnings reports. These years were chosen to reflect the pull force for migrants and to avoid the interaction between wage levels and the changes in wages for the whole period.

W^* is the average annual growth rate of district modern sector wages and ΔW the absolute change in average district wages. The sub-periods 1964-1968 and 1964-1970 were tried in the model.¹⁵ The wage data are taken from the Annual Enumeration of Employment and Earnings reports.

U is the average modern sector employment rate for the years 1964-1966. The level of modern sector employment was contained in the Annual Enumeration of Employment and Earnings reports and was divided by our estimate of the district labour force for 1964 to 1966. These years were chosen to try and avoid the interaction between the employment rate and changes in the demand and supply of labour for the whole period.

12. Republic of Kenya, Statistics Division, Ministry of Economic Planning and Development, Kenya Population Census, 1962, Vol. III, African Population, (October, 1966); Republic of Kenya, Statistics Division, Ministry of Finance and Economic Planning, Kenya Population Census, 1969, 3 vols., 1971.

13. Republic of Kenya, Statistics Division, Ministry of Finance and Planning, Employment and Earnings in the Modern Sector 1963-1967, (1971); Republic of Kenya, Statistics Division, Ministry of Finance and Planning, Employment and Earnings in the Modern Sector 1968-1970, (June, 1972).

14. For greater detail on the estimation methodology used see H. Rempel, "An Estimate of Kenya's Labour Force," Working Paper No. 159, Institute for Development Studies, University of Nairobi, 1974.

15. 1964 is the first year for which reliable estimates of average wages by district are available.

E^* is the rate of change and ΔE is the absolute change in the demand for labour in the district as measured by the change in modern sector employment. The sub-periods 1964-1968 and 1964-1970 were used and both average annual growth rates and absolute changes were used as alternatives.

N is the percentage of each district's population aged 5 - 14 who had completed at least one year of formal education by the census year 1969.

D is a measure of the distance travelled by the average migrant to the district. This was found by weighting the road distance from all other district headquarters to district j 's headquarters by number of migrants.¹⁶ The latter was contained in unpublished data from the 1969 Census of Population which enumerated the birthplace, by district, of all persons living in district j in 1969.

M is the proportion of modern sector employment in manufacturing in 1967, the first year for which the Annual Enumeration of Employment and Earnings provided a sectoral breakdown of activities by district.

B is the proportion of a district's population living in towns of more than 5,000 and was taken from the 1969 Census of Population.

The Regression Results

Because of the two-way relationship between wage changes and supply changes it was necessary to estimate the equation of primary interest, equation (15), by the method of two-stage least squares since it is over-identified. Using this approach the endogenous explanatory variable S^* or ΔS is fitted initially by the method of ordinary least squares as a linear function of all the exogenous variables in the model, which are all contained in equation (14). Then S^* or ΔS is replaced by its predicted value \hat{S}^* or $\hat{\Delta S}$ from the first stage in equation (15) to yield, from the ordinary least squares regression of \hat{W} on \hat{S}^* or ΔW on $\hat{\Delta S}$, a consistent estimator of b_1 . Equation (14) is not identified but this was not our major interest. Many other studies of migration in LDC's have revealed the major determinants of the decision to move and some have concent-

16. For any one district D was calculated as:

$$D_j = \frac{\sum_{i=1}^{33} n_i d_i}{\sum_{i=1}^{33} n_i}$$

where: n_i is the total number of migrants from district i living in district j in 1969; d_i is the road distance from district i 's headquarters to district j 's headquarters.

rated on Kenya.¹⁷

Both absolute and percentage changes in wages, the supply of labour and employment were tried but the best results were obtained by using absolute changes for the period 1964 to 1970. The simple correlation matrix for the exogenous variables of equation (15) is provided in Table 1.

The equation estimated in the first stage was of the form:

$$(16) \Delta S = -.800 + .0076W - .0013U + .0003\Delta E + .044N + .007D - .019M \quad R^2 = .504$$

(.579) (.905) (.050) (1.495) (1.230) (2.005) (0.239)

Together the exogenous variables were able to explain 50 per cent

Table 1: Correlation Matrix of the Explanatory Variables

	<u>W</u>	<u>ΔS</u>	<u>ΔE</u>	<u>U</u>	<u>N</u>	<u>D</u>	<u>M</u>	<u>B</u>
W	1							
ΔS	. .	1						
ΔE	0.701	0.838	1					
U	0.376	0.519	0.665	1				
N	0.316	0.651	0.539	0.599	1			
D	0.175	. .	0.039	-0.127	0.050	1		
M	0.507	0.599	0.509	0.541	0.463	0.310	1	
B	0.760	0.758	0.810	0.721	0.398	0.155	0.560	1

of the variation in the absolute changes in labour supply to the districts. Various forms were tried for equation (15) and the best results are reported in Table 2 with student's t statistics in parentheses.

In equation (17), 21.5 per cent of the inter-district variation in average wage changes is explained by labour supply changes. The coefficient for ΔS , while significantly different from zero, is positive. When employment changes are added in equation (18) supply changes remain significantly positive but the change in employment is not significant. When other variables are added the overall explanatory power of the equation in (19) increases to 49.6 per cent of the inter-district variation in wage changes. The coefficient of ΔS is now negative and is not significant at the five per cent level.

17. H. Rempel, "Labour Migration into Urban Centers and Urban Unemployment in Kenya," unpublished Ph.D. dissertation, Department of Economics, University of Wisconsin, 1970; H. Rempel, "The Nature and Extent of Migration into Kenya's Towns," Working Paper No.160, Institute for Development Studies, University of Nairobi, 1974.

Table 2: Regression Coefficients for Absolute Changes in Average District Wages as a Function of Absolute Changes in the Supply and Demand for Labour

Dependent Variable	Constant	$\hat{\Delta S}$	ΔE	\underline{U}	\underline{N}	\underline{B}	\underline{R}^2	\underline{R}^2
(17) ΔW	35.072 ^a (3.561)	0.00084 ^a (2.962)					0.215 ^a	0.165 ^a
(18) ΔW	29.781 ^b (2.426)	0.00116 ^b (2.218)	-0.0023 (0.732)				0.229 ^b	0.151 ^b
(19) ΔW	35.457 ^a (3.017)	-0.00088 (1.694)		-1.247 ^a (3.279)	2.104 ^a (3.461)	1.477 ^a (3.569)	0.496 ^a	0.406 ^a

a = significant at the 1 per cent level.

b = significant at the 5 per cent level.

The coefficient of determination was tested for significance by means of the F-ratio.

However, the change of sign ΔS is due to the collinearity amongst the explanatory variables as seen in Table 1. $\hat{\Delta S}$ is highly correlated with \underline{U} , \underline{N} and \underline{B} , suggesting supply increases fastest where the employment rate and the degree of urbanization are high and where educational opportunities are greatest. Clearly the evidence from equations (17) and (18) is that differences in labour supplies do not exert a significant downward pressure on wage increases in the districts of Kenya.

In equation (19) the negative sign of the coefficient of the rate of employment (\underline{U}) would not be predicted if competitive forces were at work in the determination of wage increases. The significantly positive coefficient of \underline{N} suggests that wages rose faster in districts with the better educated population so that \underline{N} could be interpreted to reflect occupational skills of the labour force. As expected, the degree of urbanization, \underline{B} , is significant, reflecting the pressure of better paying industries and jobs in districts where employees and towns are based.¹⁸

A similar conclusion on the non-response of wages to excess supplies of labour was arrived at by Verma in a study of regional wage differences in India. He concluded: "... in general an excess supply of labour did not seem to depress wages in the low wage states. An important factor in this regard

18. When percentage changes in wages, labour supply and employment were used, instead of absolute changes, the overall explanatory power of the model was low and at no time was the coefficient of \underline{S} significantly negative.

may have been state intervention in wage determination."¹⁹

In Kenya it is reasonably assumed that government minimum wage laws are enforced in the modern sector and would help to maintain the overall level of average wages in the districts. The industrial and occupational compositions of the districts are very different and we tried to incorporate their influence on wage changes in our model through the use of N and B. However the authors have estimated that less than 50 per cent of inter-district average wage differentials could be attributed to these factors and that the greater part of these differences could not be explained.²⁰ Elsewhere we have argued that inter-firm and inter-industry differences in wages are influenced by such factors as differences in "ability-to-pay", which may be a function of product market imperfections and capital-intensity, as well as the presence of foreign-owned firms.²¹ The regional distribution of these firms and industries would help to explain inter-district differences in wages, especially for the unskilled.

Conclusions

The major finding of this study has been that average district wages appear to be unresponsive to changes in the supply of labour in the districts of Kenya. Given the level of aggregation of the data and the inability to examine employment and labour force changes by skills in each district, this result gives no more than a general indication of the extent to which market forces are at work. Further research is needed in the determinants of modern sector wages which requires a finer breakdown of wage and employment data.²²

It need not follow from this conclusion that reducing the above average wages will serve to slow the excessive flow of labour to certain districts such as Nairobi and Mombasa. If wages are unresponsive to growing supply pressures, only the declining employment rate serves to reduce the

19. P. Verma, "Regional Wages and Economic Development: a Case Study of Manufacturing Wages in India, 1950-1960," The Journal of Development Studies, (October, 1973), p.29.

20. W.J. House and H. Rempel, "An Analysis of the Variation in Modern Sector Earnings among the Districts and Major Urban Centres in Kenya," Working Paper No. 243, Institute for Development Studies, University of Nairobi, November 1975.

21. W. J. House and H. Rempel, "The Determinants of and Changes in the Structure of Wages and Employment in the Manufacturing Sector of the Kenya Economy," loc.cit.; W.J. House and H.Rempel, "The Impact of Unionization on Negotiated Wages in the Kenya Manufacturing Sector," loc. cit.

22. An attempt will soon be made to test the model with data from the thirty-four towns of Kenya with a population of more than 2000. It seems more reasonable to conceive of these towns as compact labour markets than the districts, which are so diverse in character.

"expected" rural-urban income differential and so migration might not be deterred to the extent it would if the money wage differential were responding also to the employment situation in the labour market. But, given the prestige and job security associated with the high wage modern sector jobs, labour will likely continue to gravitate in significant numbers to where such employment is located rather independent of any further increase in the regional money wage differential. In a surplus labour situation, employment in the public sector and in the proportion of the private sector characterized by oligopolistic product market conditions is desired for more reasons than merely the ability-to-pay above average wages evident there.