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Wage Problems and Policies in Indonesia

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THE REAL WORLD rarely conforms to the Tinbergen model where each policy instrument serves one policy objective. Under the manifold pressures of interest and expediency, governments tend to load multiple burdens on single instruments and to enlist a range of instruments in the pursuit of a single objective. In mixed economies which avoid allocation of labour by direct controls and compulsion except in emergencies such as war, a major function of the wage system is to serve as part of the market mechanism for the efficient allocation of resources. However, in all such economies to some extent, and in many developing countries especially, the wage system has also been assigned important social policy functions, generally to protect the weak by relating wages in some way to need.

In Indonesia this social function of the wage system has been, and remains, particularly prominent. Partly as a legacy of colonial paternalism, partly as a reflection of the state philosophy of *pancasila*, the wage system which evolved in Indonesia after independence was from the beginning weighted towards social security objectives. The high inflation of the mid-1960s strengthened this tendency. Among the features of the Indonesian wage system which illustrate this role, the most important are the payment of a high proportion of wages in kind; the practice of relating a high proportion of wages, especially those paid in kind, to the " needs of the worker ", e.g. the number of his dependants; the payment of a wide variety of allowances and fringe benefits; and manpower regulations designed to protect job security by limiting the right to dismiss. Another instrument of a socially oriented wage policy, namely

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minimum wage legislation, has not been seriously attempted in Indonesia but is partly implicit in some of the other measures.

An obvious reason why the wage system has been given such social policy functions in Indonesia and other developing countries is that effective alternative policy instruments have not been readily available. The financial resources and administrative capacity of government, already strained by demands for other purposes, have generally been quite inadequate to provide the social security and welfare services normal in developed Welfare States. For various historical and political reasons trade unions have failed to develop a significant role in collective bargaining or wage negotiations. In such circumstances, a wage system designed to reconcile the demands of economic efficiency and social security is a necessary compromise.

However, a price has to be paid for trying to make one instrument do two jobs, and in this case neither has been done well. The more a wage system is need-based, the less it promotes efficient use of a country's labour and other resources. Obviously the main reason for this is that relating wages to need detracts from the incentives provided by the operation of the labour market. A second reason is that, since " need " is itself a subjective notion, its use as a criterion in wage policy is liable to be highly arbitrary and controversial, if only because it leads to great diversity in wages paid to different individuals for the same work. As an instrument of social policy, such a wage system is unsatisfactory above all because it can benefit only those in wage employment, while large numbers who eke out a living as " self-employed " or who are unemployed may be in much greater need of social assistance.

Indonesia is now at a stage when it is desirable to relieve the wage system of most, if not all, of its social policy functions on account of the extreme urgency of economic development in a country faced with a Malthusian crisis of population pressure. At the same time this has become more feasible because of a considerable improvement in administrative capacity and the increase of revenue resulting from the rise in the world price of oil. The achievement of a fair degree of internal price stability has also reduced the need for such protective measures as payment in kind, which became common during the years of rapid inflation. There is now scope for policies to meet the needs of poorer people directly through services such as education, health care, housing and transport and at least the beginnings of social security schemes.[1]

As the wage system gradually loses its social policy functions it can be strengthened as an instrument for economic development. In this respect its role is to provide incentives which will help in four ways to

[1] See U. A. Aziz: " Wage, fiscal, social security policies and institutional changes as a means of redistributing income in developing countries ", in A. D. Smith (ed.): *Wage policy issues in economic development* (London, Macmillan, 1969), pp. 235-255.

TABLE 1. FAMILY RECEIPTS BY ECONOMIC ACTIVITY OF HEAD OF FAMILY (AVERAGE OF NINE CITIES)

Economic activity of head of family	Percentage of families	Family receipts as % of average
Government service	20.8	122
Agriculture	3.7	82
Mining and quarrying	0.5	166
Manufacturing	9.0	92
Construction	5.7	80
Commerce	27.3	103
Transport	13.8	80
Services	10.1	106
Other	9.1	87
All families	**100.0**	**100**

Source: Cost of Living Surveys, 1968-69. Unless otherwise stated, the source of all tables is the Cost of Living Surveys conducted in Djakarta, Bandung, Surabaya, Djogjakarta, Denpasar, Medan and Palembang by the Central Statistical Bureau in 1968-69; where reference is made to nine cities, these include Menado and Banjarmasin at 1970-71 values adjusted for 1968-69.

make the best use of the country's productive resources for economic development: first, to elicit maximum productive effort from the existing labour force; second, to promote full employment of the existing labour force; third, to induce optimum allocation of the existing labour force among regions, sectors, industries and enterprises; and fourth, to encourage desirable manpower development, i.e. changes in the size, composition and quality of the labour force.

Needless to say, the use of resources for economic development cannot just be left to market forces as in the oversimplified model of economic theory which assumes perfect competition in perfect markets. All kinds of government intervention in, and in some respects replacement of, market forces are necessary because of imperfections in competition and resource mobility, because of externalities, and because of excessive inequality of purchasing power. However, economic development policies are harder to carry out if a distorted price system pulls in the wrong direction or gives the wrong signals. The role of wage policy is to assist rather than hinder development and to correct such signals.

This article is, therefore, concerned with two issues of wage policy, namely how the wage system can be relieved of its social functions and how it can be made into a more effective instrument of economic development. Before entering into this discussion, however, let us consider some recent data on the relative structure of wages in urban areas. Table 1 shows that, among the major urban sectors, incomes above the average are earned by government employees, followed by commercial and other service workers, and incomes below the average by those in manufacturing, construction, transport and " other " activities. The incomes shown include both wage and other incomes. The structure of wages and salaries per worker by occupation [1] confirms this pattern, but also shows that professional, technical and managerial workers in the private sector earn more as a whole than government employees. Wages and salaries increase rapidly with level of education, since university graduates earn on the average five and a half times as much as those who have not finished primary school [2]; in fact, the variation of wages by occupation is mostly explained by the differences in the average educational level. Wages also increase with age but to a smaller extent, those between 25 and 44 earning on average nearly twice as much as those between 15 and 17; after the age of 45 average earnings decline slightly.[3]

Social objectives—alternative instruments

If the wage system is to become a major instrument of economic development it must, as already pointed out, be relieved of some of its present social functions, but if this is to be without allowing the social situation to deteriorate other instruments must be developed to promote the social objectives. This section considers alternative instruments for carrying out the social functions at present imperfectly performed by parts of the wage system.

Payment in kind

A characteristic feature of the Indonesian wage system is the high proportion of wages and salaries paid in kind (see table 2). The disadvantages of this practice have often been pointed out by economists. It entails substantial administrative and financial costs to employers, makes it difficult to relate wages to the productivity of individual workers, and limits the consumer's freedom of choice. For all these reasons, it should be phased out as soon as possible.

The chief purpose of part-payment in kind has been to protect wage earners from rapid inflation and, in the case of rice, from extreme price fluctuations. The rapid inflation of the mid-1960s was brought under control by 1969, but progress towards abandonment of the rice ration for government employees was set back by the rice crisis of 1972 and by the recrudescence of price instability under the joint influence of imported

[1] R. M. Sundrum: " Household income patterns ", in *Bulletin of Indonesian Economic Studies* (Canberra), Mar. 1974, p. 92, table 11.

[2] Ibid., p. 91, table 9.

[3] Ibid., p. 90, table 8.

TABLE 2. PROPORTION OF WAGES AND SALARIES PAID IN KIND

Economic activity of head of family	Percentage of total wages and salaries paid in kind
Government service	36
Agriculture	26
Mining and quarrying	29
Manufacturing	20
Construction	8
Commerce	17
Transport	24
Services	22
Other	24
Weighted average	**27**

inflation and excessive expansion of the domestic money supply during the following two years. Assurance of rice supplies and reasonable stability of rice prices remain essential conditions for conversion of the rice ration into cash wages and for monetary stability generally, and to achieve these conditions calls above all for an effective buffer-stock policy on the part of BULOG, the government procurement agency.[1] More effective control of inflation than has been achieved in the past two years is also obviously desirable for many reasons, but it is doubtful whether a rate of price inflation broadly in line with that prevailing in the rest of the world warrants the retention of more payment in kind than is practised in any other developing country.

Apart from rice, medical care, transport and housing have been important elements of payment in kind.[2] As can be seen, the chief beneficiaries at present are government employees. These goods and services are typically of a kind which the State has special advantages in providing, but the need for them is at least as great among the poor self-employed and unemployed as among employees. The great increase in revenue now accruing and in prospect puts the Indonesian Government in an exceptionally strong position to expand these services rapidly during the next few years. The recent announcement of a government programme for the construction of low-cost housing is welcome acknowledgement of this fact. As and when such programmes are implemented the need to provide corresponding services through the wage system will

[1] *Bulletin of Indonesian Economic Studies*, July 1973, pp. 8-9.

[2] Sundrum, op. cit., p. 88, table 5.

TABLE 3. FAMILY RECEIPTS BY FAMILY SIZE, URBAN AREAS, 1968-69
(in rupiahs)

Members in family	Monthly family income	Monthly income per earner	Per capita monthly income
1	3 756	3 756	3 756
2	5 030	4 137	2 515
3	6 486	5 450	2 162
4	7 868	6 308	1 967
5	8 465	6 676	1 693
6	9 948	7 665	1 658
7	11 137	8 123	1 591
8	12 480	8 506	1 560
9 and over	16 990	10 627	1 699
Average	**9 371**	**7 151**	**1 716**

disappear, thus permitting the wage structure to perform its economic function.

In the last year or two there has been some progress towards converting the physical distribution of goods to a financial payment of equivalent value. While this reduces financial and administrative costs, the problem of relating relative wages to productivity rather than to the needs of workers remains.

Dependants' and other allowances

A second feature of the system is the extent to which wages are based on family size (see table 3). The tendency for family receipts to increase with family size is probably partly due to the presence of additional earners in larger families and to the fact that their heads are usually older workers earning more on account of seniority and experience. Nevertheless, the main explanation is undoubtedly the practice of relating wages to need, especially through family-based payment in kind. This interpretation is supported by table 4 which shows a high correlation between family size and the proportion of wages and salaries received in kind.

A family-based wage system detracts greatly from the incentive role of wage differentials and makes it more difficult for workers with large families to find employment in a free labour market.

It has the further disadvantage that it runs counter to the government objective of family planning by giving positive economic inducements to large families. Yet social pressure against any movement away

TABLE 4. PERCENTAGE OF WAGE AND SALARY INCOMES RECEIVED IN KIND, BY FAMILY SIZE

Members in family	Percentage
1	13.6
2	15.5
3	16.4
4	19.8
5	28.8
6	28.6
7	30.5
8	29.4
9 and over	28.7
All families	**25.7**

from the practice is bound to remain strong until alternative means of support for dependants are devised.

In the long run the problem of support for dependants will be alleviated as the country opts for smaller families. Meanwhile, everything possible outside the wage system should be done to meet the needs of large families. The provision of education, health, housing and other social services free or at low cost, especially to poorer families, could contribute greatly to this end.

Apart from family benefits there are a number of others such as transport, rent and cost of living allowances. Allowances and fringe benefits are a prime cause of differentials which would be unacceptable if expressed directly in basic salaries. Rational decisions are unlikely to be made if a welter of allowances and fringe benefits makes it impossible to ascertain the actual structure of relative wages and salaries.

Minimum wages

Any minimum wage level will be ineffective if it is fixed below the prevailing level of wages, while if it is set above this level it may not be enforceable or, if enforced, may lose workers their jobs. The experience of many developing countries suggests that minimum wage legislation can usually be enforced only in small pockets of organised industry.

The legal minimum wage usually has to be fixed in money terms. In most Asian countries, as A. D. Smith has pointed out, " money wages move independently of the cost of living, [and] the cost of living can—and does—move independently of the money wage and have an

TABLE 5. PERCENTAGE OF THE POPULATION BELOW SELECTED LEVELS OF PER CAPITA CONSUMER EXPENDITURE

Level of per capita consumer expenditure (national average = 100)	Java		Outer islands	
	Urban	Rural	Urban	Rural
120	62	86	47	62
100	50	78	35	51
80	35	65	22	36
60	19	44	10	20
50	12	32	6	13
40	6	19	3	8

Source: *National Socio-Economic Survey, 1969/70.*

autonomous impact on real wages ".[1] It follows that " whatever goals Far Eastern governments establish for changes in real wages, the implementation of the policy would require that as much attention be paid to the production and prices of foodstuffs as to changes in money wages ".[2] All this suggests that, in Professor Galenson's words, " a national minimum wage that would have any substantial effect on wage levels does not make sense at the present time ".[3]

It should be an important objective of the data-gathering system to locate what may be called " low-wage pockets " in the economy. What level of wages should be regarded as low cannot be decided by absolute and unchanging standards, and it is useful to develop wage norms for different kinds of labour, sectors and regions. People usually think of norms in terms of what they regard as a decent standard of living, which is subjective and often controversial. Overoptimism is liable to aim too high, at a level which a developing country cannot afford. The best safeguard is to fix wage norms in terms of the country's own current per capita national income. If some employees are paid several times the per capita national income (multiplied by average family size) the norm acts as a wholesome reminder that this is at the expense of other workers.

The usefulness of such an approach may be illustrated by an example using Indonesian data on the distribution of consumer expenditures. Thus table 5 shows, inter alia, that in urban Java 12 per cent (but in rural Java 32 per cent) of the population have a per capita consumer expenditure less than one-half the national average. It is important to

[1] Smith, op. cit., p. 29

[2] Ibid., p. 30.

[3] Quoted in Asian Regional Team for Employment Promotion (ILO): *Manpower and related problems in Indonesia* (Report on a Mission to Indonesia, April-May 1972) (Bangkok, 1972).

note, as explained more fully below, that the comparison among regions needs to be qualified to allow for differences in the cost of living in different parts of the country. While the data so far available can be regarded as no more than suggestive, the technique of wage norms is likely to be so useful as to justify more detailed data collection and analysis for this purpose.

Wage norms should not be interpreted as legal minimum wages but rather as indicators to point to cases where the position of wage earners is unsatisfactory and requires remedial action. This will vary from case to case. Low wages may, for example, be due to difficulties faced by a given industry, so that the industry as a whole may have to be given technical and financial assistance to raise productivity, thus enabling it to pay workers better. In other cases workers may be helped to increase their productivity through further training.

Manpower regulations

In Indonesia manpower regulations—in existence though not universally enforced—have for many years required employers to obtain approval from the Department of Labour and Manpower if more than ten workers are to be dismissed, and to pay some indemnity. The regulations are designed to give employees in the private sector a degree of security closer to that enjoyed by government employees under a convention which virtually precludes any dismissals. As they stand, the regulations are aimed only at the larger employers, and it is doubtful how effectively they are enforced. Employers who comply find the process time-consuming and costly. At best such regulations protect those in employment at the expense of others looking for jobs; moreover, they discourage efficiency by making it more difficult for employers to maintain discipline, provide incentives or upgrade the quality of their workforce.

So long as there is extensive unemployment, those who are in jobs will naturally resist any moves to whittle away the protection which the manpower regulations afford them. In the long run, the only reliable way of providing reasonable job security is a policy for full employment. It is worth considering whether the economic disadvantages of direct controls enforced mainly on the more efficient enterprises do not outweigh the benefits.

Towards a development-oriented wage policy

As suggested above, a development-oriented wage system should provide incentives to induce *(a)* optimum productive effort, *(b)* full employment, *(c)* optimum labour allocation, and *(d)* desirable manpower development.

Optimum productive effort

Productive effort does not depend on material incentives alone. Status may be a more important motive than money, and the extent to which status attaches to productive activity, in business or manual labour, may have a strong influence on economic development. In all societies, however, material incentives play a part in eliciting productive effort and are to be preferred to compulsion. The simplest criterion is the extent to which the wage is related to the productivity of the individual worker.

So far removed is the present Indonesian wage structure from one designed to promote maximum productive effort that the reforms needed are extensive and will have to be spread over a considerable period. The phasing out of certain features of the traditional system such as payment in kind and family-based wages would be major steps in the right direction. Market forces would automatically assist the process as industrial activity expanded, but the elimination of traditional practices should take place according to a plan so that it can be co-ordinated with the expansion of the social services needed to replace them.

While this was happening, new systems of wage determination related to productivity would need to be worked out. In some industries it may be possible to adopt simple piece-rate systems. These are not always desirable in industrialised countries where work norms are better established and performance varies less from day to day and among individuals. Such variability as there is can be better controlled by managerial and supervisory skills. In these circumstances a sufficient link between wages and productivity can be achieved even with time rates which relate wages to the duration of work. In developing countries such as Indonesia such a link requires greater use of piece-rate systems, partly as a spur to individual effort and partly to build up an efficient industrial labour force by selecting those with an aptitude for industrial work. Bonus payments related to company profits have a similar effect, but annual increments and differentials based on seniority tend to work in the other direction.

In more complex industries where total output depends on the joint effort of both operatives and supervisors, and on the capital equipment at their disposal, the individual worker has little influence on productivity. This does not mean that the wage system cannot be made to encourage and reward the efficient worker, but the evaluation of performance will depend largely on the judgement of foremen and managers. Studies to measure the contribution of individual workers may be helpful but will need to be adapted to the very particular conditions of Indonesia. In some developing countries governments have made a start by setting up productivity councils, usually in the first instance for public enterprises. Skilful supervision and management are of course also needed to supplement financial incentives, and in order to ensure an adequate supply of such skills salaries must be adequate to attract well-qualified persons. In particular, regardless of the salary scales for administrators in government departments, the top executives of public enterprises must be paid salaries competitive with those prevailing in the private sector. When introducing new wage-determination systems a gradual transition may be achieved by initially relating a small part of the wage to productivity and then increasing this component progressively.

The greatest difficulties in relating wages and salaries to productivity arise in government, where the notion of output is vague. Salary scales for government employees are, therefore, " administered prices ". The standard practice in Indonesia is to fix the educational requirements for each job and to determine salaries accordingly. This has several undesirable consequences. It presents an obstacle to promotion by merit and tends to maintain unnecessarily large differentials for employees with higher educational qualifications.[1] In the early stages of economic development such persons are scarce and therefore earn relatively high salaries. As the spreading of education increases the supply, market forces should tend to narrow the differentials, but this does not happen easily if salaries are based on educational qualifications. The system thus tends to contribute unnecessarily to unemployment among the better-educated workers and particularly if, as usually happens, the differentials paid by government, as the largest employer of educated workers, set the pattern for the private sector.

One way of dealing with the problem was suggested by Professor Richard Jolly[2] and put forward by the ILO-sponsored inter-agency employment mission to Kenya.[3] This is to relate salaries more directly to the duties and levels of responsibility of the job rather than to the education of the worker, and to upgrade the educational requirements of all jobs continuously as the education system expands and the supply of graduates increases. This implies—as specifically recommended by the inter-agency mission to Sri Lanka[4]—that new recruits to the public service will receive the same salary as others already serving in the same position even with a lower educational qualification. To assist in this process, Professor Jolly has also recommended a system of " bonding ", whereby all persons completing a particular level of education would be required to work in government or as teachers for a stated period and at some minimum salary, which might be fixed below the market rate.[5] Where

[1] Sundrum, op. cit.

[2] See R. Jolly: " Employment, wage levels, and incentives ", in UNESCO: *Manpower aspects of educational planning* (Paris, 1968), pp. 236-247.

[3] ILO: *Employment, incomes and equality* (Geneva, 1972).

[4] Idem: *Matching employment opportunities and expectations* (Geneva, 1971).

[5] R. Jolly: *Planning education for African development* (Nairobi, East African Publishing House, 1969), pp. 158-159.

bonding has been applied only to teachers or some other type of government employee it has proved unpopular; but when organised and applied universally it can play a useful part in adjusting the salary structure to changing conditions of supply and demand for educated workers.

Full employment

Recent discussions of development problems all over the world have given much prominence to the problems of unemployment. It is said that economic development has been too slow and (under the influence of Western technology) too much biased towards capital-intensive products and techniques to absorb the rapid growth in the labour force. In order to minimise the hardships of unemployment and the waste of human resources it involves, it is essential, according to the proponents of this view, to orient all development policies towards full employment. This currently popular view is a dubious guide to wage policy for two reasons. First, the most serious problem in developing countries is not unemployment but low-productivity employment, and second, the contribution that wage policy can make to full employment is primarily the negative one of preventing unemployment being aggravated by excessive increases in the wage level in general and that of privileged minorities of workers in particular.

There is considerable confusion about the extent of unemployment that existed in Indonesia around 1971. In developing countries, indeed, the very concept of unemployment is fraught with difficulty. When a country is industrialised and has a well-established social security system it is a relatively simple matter to determine who is employed and who is not. Labour force surveys and censuses identify the unemployed as those who were not working and were seeking work during a reference period of one week preceding the survey. When this approach is applied in developing countries, it runs into problems. Owing to the highly seasonal nature of agricultural activity, which constitutes a large sector in such countries, many workers who are normally employed in it may not be working and may even be seeking temporary off-season work during the reference period. Special allowance can be made for such cases by excluding them from the unemployed. This was done with small-holders in the 1971 Indonesian census.

A more fundamental difficulty is that in developing countries unemployment is a luxury that the poor cannot afford, so that some of the poorest people are those who work extra hours to make an adequate living in activities where their productivity is very low, while persons from better-off families may prefer to remain unemployed because they are holding out for better jobs. Many persons who consider themselves unemployed are not seeking work either because they do not expect to find it or because they would have to move from their normal place of residence; while at the same time many persons seeking work are already employed.[1] In industrialised countries, to be unemployed means to suffer considerable deprivation, and the unemployed may be readily identified by their willingness to accept work. In developing countries, by contrast, one cannot assume a close correlation between those who are unemployed, those who are poor in the sense of having incomes below some specified minimum level, and those who are willing to accept work.

The real problem in developing countries is therefore not so much the unemployed as the working poor who need more productive employment. To identify such persons, some method other than the labour force approach is required, and a more disaggregated method suggested by Philip Hauser [2] is now being widely used in many developing countries in Asia.

Apart from these conceptual difficulties, there is confusion about the level of unemployment in Indonesia because the Census Office has published preliminary figures in its Series C publication and final figures (so far completely available only for Java) in its Series E. The unemployment rates for Java according to these two publications differ widely, being 8.3 per cent in Series E compared with 2.3 per cent in Series C. The estimates are based on the same data and differ only because of a change of procedure in cases where the information given in the returns was incomplete or inconsistent. Analysis of the differences suggests about 6 per cent as a plausible alternative estimate for the level of unemployment in Java in 1971.[3] In view of the large absolute increase in population between 1961 and 1971 and the economic deterioration during the earlier half of the decade, such a rate of open unemployment—well below those observed in several comparable countries—must be regarded as moderate and due no doubt to the acceleration of economic growth and development during the past few years.

The pattern of unemployment in Indonesia is similar to that in most developing countries, the rates being higher in urban than in rural areas. They are also higher among younger than among older workers, and increase with the amount of education up to about secondary level. The fact that this tendency is most pronounced among those seeking jobs for the first time suggests that the more educated workers have a higher unemployment rate not so much because of their education but because they are young. Unemployment rates are also reported to be higher for women than for men.

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[1] See, for example, Raj Krishna: " Unemployment in India ", in *Economic and Political Weekly* (Bombay), 1973, p. 476.

[2] P. M. Hauser: *A new approach to the measurement of the workforce in developing areas*, paper presented at the Conference on Manpower Problems in East and Southeast Asia, Singapore, May 1971.

[3] R. M. Sundrum: *Unemployment in Indonesia : analysis of census data* (forthcoming).

Employment problems are economically and socially serious for two groups in Indonesia, namely agricultural labourers in the rural areas of Java (in the form of underemployment) and the more educated young entering the urban labour force (in the form of open unemployment). It is likely that in the rural areas of Java landless labourers constitute almost a third of the agricultural labour force. Their plight accounts for a large part of the problem of poverty in Indonesia, and there is evidence that the situation is deteriorating with inevitable changes in technology.[1] However, higher wages could make only a marginal contribution to solving this problem, and any improvement in the condition of agricultural labourers will have to be sought by other means.

The main remedy must be the provision of alternative employment for those displaced from agriculture by population pressure and technical change. This has been the main object of the successful *kabupaten* programme of rural public works.[2] The question is how fast such programmes can be expanded to make a significant impact on rural unemployment and underemployment without putting too great a strain on the administrative capabilities of local authorities. Another and older approach to the problem of population pressure in rural Java, i.e. migration to the outer islands where labour is scarce, is more conveniently discussed in the next section.

The heavy incidence of unemployment among young educated entrants to the labour force is a political as much as an economic problem. Labour force projections show that the number of new entrants is likely to increase at an annual rate of 1.8-2.0 million in the 1970s. Some of the measures discussed here would help to improve their chances of finding employment in productive sectors, with public service continuing perforce to act as the employer of last resort. To some extent the problem can be dealt with by manpower development, and more will be said about this in the last section.

The relevance of wage policy to the objective of full employment arises, in the most general sense, from the fact that demand for labour tends to vary inversely with its price. A rise in unit labour costs, owing to wages rising faster than labour productivity, is liable to cause unemployment either by making domestic industries less competitive internationally or by inducing entrepreneurs to substitute other factors, especially capital, for labour. This gives rise to a potential conflict of interest between organised workers and the unemployed. As Professor Ranis has put it,

[1] See Widya Utami and John Ihalauw: "Some consequences of small farm size"; C. Peter Timmer: "Choice of technique in rice milling in Java"; and W. Collier, Gunawan Wiradi and Soentoro: "Recent changes in rice harvesting methods", all in *Bulletin of Indonesian Economic Studies*, July 1973.

[2] See Y. B. deWit: "The kabupaten program", in *Bulletin of Indonesian Economic Studies*, Mar. 1973; and Mark W. Leiserson: "Employment perspectives and policy approaches in Indonesia", in *International Labour Review*, Apr. 1974.

an increase in the wage bill rather than in the wage rate is what really benefits Indonesia's working classes and serves to redistribute income. The working élite which already has the jobs does not normally vote for the rights of the disenfranchised millions still unemployed or underemployed in either the " soft " services or agricultural sectors.[1]

Excessive upward pressure on wages in general has not yet become a problem in Indonesia, but there are some pockets in which workers earn relatively very high wages. Data collected by the ARTEP Mission in 1972 revealed examples in foreign companies and in some government enterprises.[2] While these pockets are probably too small to have significant effects on unemployment, they are liable to have adverse effects indirectly by setting standards which workers in other enterprises will seek for themselves. They may also cause a kind of domestic brain drain and have unfavourable long-term effects on the demand for labour by inhibiting the use of labour-intensive techniques.

A recent survey by Louis T. Wells on the problems of choice of techniques in Indonesia indicates a marked tendency to favour capital-intensive techniques during the recent rapid expansion of the large-scale manufacturing sector, a tendency which is the more striking since certain other firms in the same sector continue to compete effectively using labour-intensive methods.[3] Three factors seem to be at work in the general preference for capital-intensive techniques. One is the capital-intensive technology embodied in plant imported from industrialised countries. Another is the belief that only mechanised production ensures adequate quality control, although until manufacturing for export becomes important in Indonesia this may be largely rationalisation of " the interest of engineers in using their training to design and to operate advanced machinery ".[4] A third is that managers prefer machines because they " avoid the unpredictable problems associated with a large labour force ".[4]

If this analysis is correct, the solution to the problem is not primarily a matter of wage policy, although excessively rapid increases in pay rates might well aggravate it. This is not the place to discuss at length what can be done to encourage the use of more labour-intensive techniques. No doubt there is a case, as has frequently been suggested, for reconsidering the credit, taxation and tariff policies which at present discriminate in favour of capital-intensive techniques. In the long run the two most promising lines of approach are probably to make the most of Indonesia's competitive advantage in labour-intensive exports and to encourage

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[1] G. Ranis: *Brief reflections on the Indonesian economy: January 1972* (mimeographed).

[2] See Asian Regional Team for Employment Promotion (ILO), op. cit.

[3] L. Wells: " Men and machines in Indonesia's light manufacturing industries ", in *Bulletin of Indonesian Economic Studies*, Nov. 1973.

[4] Ibid., pp. 65 ff.

the supply of machinery and other capital equipment more suited to Indonesia's factor proportions, whether through imports from developing countries or through domestic production.

Optimum allocation of labour

It is in relation to the allocation of labour between occupations, sectors and regions that the signalling function of the wage system is most important. In themselves wage differentials are hardly ever sufficient to secure desirable movements of labour, but such movements are very difficult to bring about by any other means if the differentials are very small or even operating in the wrong direction. In order to perform their role in the distribution of labour, wages have to reflect the productivity of labour in particular sectors and industries accurately. This strengthens the case for phasing out the traditional features of the wage system whereby wages are related more to the needs of workers than to their productivity. There are, however, some cases where wage policy may have to go further.

The first of these is government administration. In many developing countries independence from colonial rule was followed by a great expansion in government employment, partly to replace former expatriate staff and partly in the belief that the government needed to play a much larger role in economic and social development. Consciously or unconsciously, the expansion of government employment often served to keep down unemployment. The salaries paid were generally somewhat below those of former expatriate staff but, at least in the higher grades, very high compared with average incomes in the rest of the country.

As mentioned earlier, the difficulty of measuring the productivity of persons engaged in public administration has led to salaries being fixed according to educational level rather than to jobs or even to educational specialisation. One result is that the civil service absorbs a high proportion of educated workers, especially those with a liberal arts education, and this in turn stimulates demand for such courses in the universities. As universities expand to meet this demand, the quality of instruction often deteriorates. At the same time, the ability of the administrative services to absorb the flood of graduates with a general education declines.

There is still a need for highly trained people who can provide the leadership and the " growing points " of the administration. As soon as development gets under way, however, the need in the public sector shifts towards professional, technical and managerial staff to work not only in capital cities where prospects of promotion are brightest but in rural and remote areas as teachers, agricultural officers, engineers and production managers of public enterprises. It is here that the salary structure in public administration becomes particularly important. Since it usually fails to reflect the need for technical and professional staff, developing countries suffer from unemployment among those with general education and shortages of personnel with technical and professional training.

The situation in Indonesia corresponds closely to that of other south-east Asian countries as described by Professor Hla Myint.[1] The incomes of government employees as a group are higher than those of other groups of urban workers and the Government employs a high proportion of the more educated workers. Within the service, salaries differ considerably from department to department. Very large differentials have been granted in the last few years to Ministry of Finance officials, while until the very recent salary increases teachers in rural primary schools earned about the same incomes as farmers with less than half a hectare of land.

Another problem is the allocation of labour between rural and urban areas. In Indonesia such scanty evidence as exists does not indicate a very high rate of rural-urban migration, though it may have accelerated in recent years.[2] This would at any rate be consistent with the evidence cited in the ARTEP report, which suggests that in purchasing power the wages of unskilled workers in urban areas are close to rural labour incomes. It may therefore be concluded that the wage situation in Indonesia does not seem likely to induce excessive rural-urban migration, at least of unskilled labour. No data are available concerning more educated workers.

A third problem is labour allocation between Java and the outer islands. In the absence of massive emigration, existing population pressure in Java is likely to be aggravated by the addition of another 18 million persons between 1971 and 1981. It is widely recognised that every effort should be made to reduce this pressure by migration. The relevance of this issue to wage policy is that such migration may be assisted, if not actually brought about, by wage differentials.

The 1969/70 National Socio-Economic Survey data show that per capita money incomes were about 47 per cent higher in the outer islands than in Java, but a regional price index [3] suggests that the difference in per capita real incomes was smaller because prices were also about 29 per cent higher. Given the many practical and psychological obstacles, income differentials of this order could hardly make a significant impact on the rate of migration.

Policy cannot directly promote increased wage differentials, but by reducing transport costs, providing more adequate infrastructure, etc., it should be possible to induce sufficient productive investment in the outer islands to exert a significant pull effect on labour from Java. By increas-

[1] See Hla Myint: *Economic theory and the underdeveloped countries* (London, Oxford University Press, 1971), pp. 223-237.

[2] In this connection see S. V. Sethuraman: " Urbanisation and employment: a case study of Djakarta ", in *International Labour Review*, Aug.-Sep. 1975.

[3] H. W. Arndt and R. M. Sundrum: " Regional price disparities ", in *Bulletin of Indonesian Economic Studies*, July 1975, p. 58, table 17.

ing the local demand for labour, such investment will automatically widen differentials. However inequitable these may seem, they should be welcomed for their incentive effects. The creation of assured opportunities for wage employment may well be a more promising approach to population transfer than the previous official policy of settling Javanese farmers in the very different environment of the outer islands.

Manpower development

We have so far considered how the wage system may be made more conducive to development through fuller and more efficient use of the existing labour force. No less important in the long run is the promotion of desirable manpower development, in other words changes in the size and quality of the labour force over a period of time. This mainly implies family and educational planning, to neither of which can wage policy make any major contribution. Here again, however, policy objectives will be more easily achieved if the wage system transmits the right signals, i.e. appropriate inducements and deterrents.

In relation to family planning, wrong signals are provided by a system which encourages big families through comfortable dependants' allowances in cash or kind. With regard to educational planning, the objective of wage policy must be to guide the demand for education and training of various kinds by means of appropriate differentials. In view of the extreme difficulty of estimating a country's requirements for various kinds of skill far enough ahead, and because of the long lags with which the supply of skills adjusts to changes in demand, it would be optimistic to assume that wage policy can perform this function in any detail. Nevertheless, some rules of thumb suggest themselves for a country in Indonesia's present circumstances.

It is clear, for example, that the financial rewards for secondary or tertiary education are high enough, indeed higher than they need be. As the pressure of demand on all available educational facilities demonstrates, differentials could be narrowed without diminishing the incentive for young people to pursue some sort of higher studies.

Whether it is possible to indicate desirable changes in relative wages or salaries to favour particular fields of study is more debatable. It is often said that there is an oversupply of graduates in liberal arts, commerce and law, as opposed to science and engineering. One reason is that graduates in the former fields can as readily obtain reasonably well-paid and secure employment in government administration. There are as yet no marked differentials in favour of science and engineering graduates because industrial development has not yet created sufficient demand for such skills. To induce much larger numbers of young people to study these subjects too far ahead of demand would be to risk generating an excess supply such as has developed in India. This may indeed be an effective way of reducing the cost of such labour and thus generating a massive increase in demand, but it is unquestionably a painful way. The social consequences can be softened by direct measures on the demand side. Wherever increasing demand for and probable shortage of specific skills can be foreseen, wage and salary differentials to attract students into these fields are obviously desirable. In Indonesia, where government is so much the largest employer of graduates, it should take the initiative.

Similarly, it is frequently suggested that the greatest shortage in Indonesia is of people with mechanical and practical skills which in most developed countries are acquired through apprenticeship, on-the-job training or technical education. This may well be true, but wage policy can do little to improve the situation. The first essential is a change in the financing of education [1] so as to give access to secondary schooling not merely, as at present, to children of the middle class who tend to aim at a university education and a subsequent white-collar career, but also to low-income earners who are not so likely to be deterred by status considerations from vocational training for jobs requiring manual skills.

On-the-job training in industry is likely to be provided fairly readily by employers provided it is specific to the firm. If the training is more general and the benefit may be lost to the firm when the worker changes jobs, he may in a sense be charged by being paid lower wages.[2] This classical case of " external economies " may warrant a government subsidy for on-the-job training, though it may also be possible to promote such training by making it a condition of foreign and other large-scale investment. Such subsidies for on-the-job training, as indeed for any employer- or government-financed vocational training, may be regarded as a development-oriented, as opposed to a need-based, fringe benefit.

Perhaps the most serious problem for educational planning in Indonesia, as in many other developing countries, is not so much the quantitative shortage of specific skills as a failure of the education system to achieve sufficiently high standards. This is not a problem for which there are any quick solutions, and wage policy provides no general answer. However, quite a number of the suggestions that have been made in the preceding pages—emphasis on promotion by merit rather than seniority, public service grading on the basis of job responsibilities rather than formal educational qualifications, salary differentials related to performance rather than need—would provide inducements to students and educators alike to aim at higher quality.

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[1] R. Daroesman: " Finance of education ", in *Bulletin of Indonesian Economic Studies*, Nov. 1971 and Mar. 1972.

[2] G. Becker: *Human capital : a theoretical and empirical analysis, with special reference to education* (New York, National Bureau of Economic Research, 1964).