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Urban growth and unemployment in Papua New Guinea

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It seems timely to attempt a review of the process of urban growth in Papua New Guinea because of the importance which is attached to the subject by planners and policy-makers, and widely-expressed fears of excessive urban growth and associated economic and social problems.* The report of an economic mission from a major international development agency which visited Papua New Guinea in 1976 listed uncontrollable urbanization and resulting urban unemployment as the major problem likely to confront the nation in future years. Such a view is based on the projection of past trends into a future where many of the parameters affecting the process of population redistribution are likely to assume new values. Discussion of these parameters and the forces influencing them is therefore a prerequisite to the review attempted in this paper.

But first of all it is necessary to examine past trends. The first national census of the indigenous people of Papua New Guinea occurred in 1966 with a complete enumeration of urban (described as centres with more than 500 residents) and rural non-village (including patrol posts, plantations and mission stations) populations, together with a 10 per cent random sample of the rural village population. This procedure was repeated in 1971 and is to be repeated again in 1979. Table 1 is a useful arrangement of data from the first two censuses for my purposes.

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This paper is a review of current knowledge and opinions rather than a piece of primary research. It draws heavily upon the work of colleagues in the Papua New Guinea Institute of Applied Social and Economic Research, and the Institute's lineal ancestor, the New Guinea Research Unit of the Australian National University, as well as the University of Papua New Guinea. I am grateful to Mr Robert Castley, Principal Economist, Manpower Planning, in the PNG National Planning Office for discussion of certain matters in the paper and for providing data from his files. Neither Mr Castley, nor Mr Allan Stretton and Dr Ross Garnaut (with whom I also had helpful discussions) should be held responsible for my conclusions.

Table 1
Indigenous Population Growth 1966-1971

	1966	1971	% Increase	% Annual Growth Rate
Papua New Guinea	2,150,317	2,435,509	13.26	2.50
All urban centres	103,645	231,873*	123.72	17.46
Port Moresby	31,983	59,563*	86.23	13.24
Lae	13,341	32,077*	140.44	19.18
Madang	7,398	14,695	98.63	14.71
Wewak	7,967	13,837	73.68	11.66
Goroka	3,890	10,508	170.13	21.98
Mount Hagen	2,764	9,257*	234.91	27.34

Source: Conroy (1976:175), annual average compound rates of growth calculated by the writer.

* Note: Some urban boundaries were redrawn prior to the 1971 census, incorporating settlements outside urban boundaries in 1966. Totals marked by asterisks are affected accordingly. In Rabaul (population 22,393 at July 1971) the revision was so drastic as to invalidate any comparison with 1966.

Between 1966 and 1971 urban populations were growing extremely rapidly, both in absolute terms and as a proportion of the total. Such rates of growth, high by any international standards, are attributed by Richard Jackson (1976:2) to the trend for reunion of families in urban areas, men being joined by wives and children after an initial period of separation, to the growing importance of 'casual' or independent migration as compared with the earlier dominant process of contract recruitment of workers for rural plantations, to the development of road networks on the mainland which permitted cheaper and easier movement, to the weakening of official attitudes and practices unfavourable to urban growth, and to expansion of recruitment for the public service. To this catalogue, however, one must add the influence of a healthy rate of urban employment growth in the private sector, due to a rising level of internal economic activity generated by Australian aid. Aid operated as the engine of growth throughout this period, and has only more recently become a brake on the growth of economic activity, as Ross Garnaut (1977:15) has pointed out.

An interesting feature of the pattern of urban growth over the intercensal period was some reduction in the 'primacy' or dominance of the principal town, Port Moresby, vis a vis the seven major towns following it in the urban hierarchy. This trend away from primacy of the major urban centre is not typical of third world experience. Commenting on the relatively rapid growth of regional centres, a trend he expects to continue, Richard Jackson has forecast that 'by the end of this decade Papua New Guinea could exhibit a fairly rare rank size distribution: one of regional centres with a "negative primacy" tendency overall' (Jackson 1976:10).

Projections from 1971

Data from the intercensal period 1966-71 formed the basis of projections of the growth and distribution of Papua New Guinea's population prepared by Laurie Lewis for the National Health Plan (Papua New Guinea 1974), which were subsequently adopted by the National Housing Commission in its planning (Papua New Guinea 1975) and employed by the Central (later National) Planning Office in a number of contexts (Central Planning Office 1975, 1976; National Planning Office 1977). The table which follows is reproduced directly from the last-named source.

Table 2
Total national population by sector 1971-1986

Population	1971	1976	1981	1986
Rural Village	1,982,700	2,097,900	2,233,200	2,400,600
Rural Non Village	222,600	318,000	436,400	585,700
Urban	230,200	393,100	607,600	884,900
Total	2,435,500	2,809,000	3,277,200	3,871,200

Population is assumed to grow at an increasing rate over the period to 1986; the projections above assume a rate of growth of 2.70 per cent in 1971, rising to 3.12 per cent in 1981. Within the overall total, the urban sector is expected to grow at an annual rate of 9.4 per cent over the whole period, while the rural and rural non-village sectors are projected

at 1.3 per cent and 7.7 per cent, respectively. The overall rate of growth of population over the period 1971-86 is 3.1 per cent annually (Papua New Guinea 1974).

Population projections depend on assumptions chosen to represent the most plausible values (or ranges of values) of the parameters of growth. The essentially mechanistic nature of such a procedure causes less concern to the planner or policy-maker the shorter is the time-span involved, and the more confined it is to basic population aggregates. Rates of natural increase are not subject to rapid change, and international migration is insignificant as a parameter of population growth in Papua New Guinea, thus permitting useful projection of the size and age-composition of the indigenous population. However the rate of transfer between sectors, of which process rural-urban migration is a part, is a far more unstable variable and correspondingly more difficult to project usefully. The greater margin of error in such estimates, when compounded over medium- and long-term periods, can result in seriously misleading information being made available for policy-formation. For this reason, it is necessary to examine these projections critically. Before doing so, however, I shall turn to a related series of projections concerned with employment and the workforce.

Staff of the National Planning Office believe that 'total government expenditure cannot be expected to grow by more than about 3 per cent per year in real terms over the next five years' (Papua New Guinea 1976:15), which is a rate considerably below that of the previous decade. This 3 per cent growth rate has been incorporated into the National Public Expenditure Plan. The multiplication of uncertainties beyond the next five years (among which the future level of Australian aid is perhaps the most important) makes it unreasonable to expect growth in the level of wage employment at more than 3 per cent annually over the next decade (Papua New Guinea 1976:19). On the basis of further assumptions about the rate of growth of urban employment, and the projections of urban population and age-structure discussed above, the National Planning Office has produced estimates of 'Growth in urban male labour force and unemployment' which are reproduced in table 3. The 'unemployed' in question are males of working age resident in urban areas but not engaged in formal sector

wage employment. The proportions 'unemployed' are startlingly large (ranging, in 1981, from 26 per cent in Port Moresby to 40 per cent in Lae) and are the result of a simple subtraction of the employment projections from the population projections. It is fairly obvious that to apply such a procedure beyond 1981 would produce even larger proportions of 'unemployed'. Not shown in the table, but resulting from the same exercise, are projections for 1981 of unemployment rates of 48.6 per cent in Goroka and 59.9 per cent in Mount Hagen! (Central Planning Office 1975:26). The omission of these two estimates is in tacit recognition of the reductio ad absurdum which they involve.

Table 3
Growth in Unemployment,
Urban Male Labour Force*

Urban Area	1971	% Unemployed 1976	1981
Madang	26.9	33.9	38.0
Kieta/Arawa/Panguna	9.4	41.4	32.4
Rabaul	22.0	28.4	36.1
Lae	22.2	31.6	39.9
Port Moresby	18.8	22.1	26.0

* Where unemployed persons are those without wage earning employment.

Source: derived from National Planning Office (1977:11)

The initial percentages of unemployed shown in the diagram are derived from the Urban Household Survey conducted by researchers from the Australian National University and the University of Papua New Guinea in all major towns in 1973-74 (Wright, Garnaut and Curtain 1975; Garnaut, Wright and Curtain, forthcoming). However, to put these earlier (and

considerably smaller) unemployment estimates into perspective it is necessary to discuss the definitions of unemployment used by Garnaut et al., and to consider the nature of urban unemployment in Papua New Guinea.

Ross Garnaut's classification of varieties of unemployment in Papua New Guinea (Garnaut 1972) is becoming standard usage in discussions of the subject. He makes the customary distinction between voluntary and involuntary unemployment and subdivides the latter category in these terms:

Three categories have been identified amongst persons who are involuntarily outside formal employment. Two categories comprise persons who have access to places in village society and economy: the hopeful, who prefer continued urban life without a job and anticipating that formal employment would become available, to returning to village life; and the trapped, who would prefer to return to a place in village society, but lack the financial means. The third category, the dispossessed, comprise persons who would like a wage job at the going rate if one was available and who lack access to the village economy. There may be no access for several reasons: perhaps they were born into the town, or their home villages have been physically absorbed into the expanding towns, or they have failed to fulfil social obligations in their home villages.

(Wright, Garnaut and Curtain 1975:4)

It is clearly vital to know what proportions of the unemployed fall into each of these categories. During the Urban Household Survey it was found that 'the proportion of men outside formal employment who are voluntarily in that state varies between about one half and two thirds, tending to be higher in the highlands towns' (Wright et al. 1975:29). This is supported by Ronald Skeldon's generalization that 'at any one time between 7 and 13 per cent of the total population of the larger urban centres in Papua New Guinea is made up of a short-term floating population', predominantly male, in the 15-29 years age group (Skeldon 1977a:25). Indeed in Goroka, where Skeldon conducted a census in 1976, the annual turnover of such 'floaters' was probably equal to the total population of the town itself! In such a situation one could quite reasonably decide that these people are not a problem, either to themselves or to society at large. Discussions of the 'burden' imposed on their employed kin (who may support them in town) is very commonly ethnocentric, ignoring the benefits derived by

long-term urban residents from the opportunity to maintain social relationships with people from their home villages.

So far as the involuntarily unemployed are concerned, it is one of the peculiarities of urban life in Papua New Guinea that their condition is closer to the open unemployment experienced in industrial societies than to the 'unemployment' typical of cities in the Third World (which is not often open unemployment but most usually some form of self-employment for very small returns). The absence of any substantial measure of 'informal sector' activity leaves the unemployed very largely dependent on savings and transfers from kinfolk in formal wage employment (Conroy 1973a; 1976:6-13). To the extent that 'trapped' or 'dispossessed' migrants are in this situation a social problem exists, and the Urban Household Survey has provided data on its extent in 1973-74 (Wright et al., 1975; Garnaut et al. forthcoming).

To return to the projections of urban unemployment to 1981 shown above, it will be recalled that they are derived by the simple procedure of subtracting projections of urban employment growth from projections of urban population growth - the latter being derived from the experience of the intercensal period 1966-71 when rapid expansion of urban economic activity supported rapidly growing urban populations. Can it seriously be supposed that rapid rural-urban migration will continue in circumstances of sluggish employment growth, such as are anticipated by planners? Only in the total absence of any feedback mechanism by which the changed economic environment of the town communicates itself to potential migrants does this seem possible.

More realistic forecasting requires identification of the variables which influence rural-urban population transfer; in other words, some model of the processes involved must underlie predictions of urban growth. In Papua New Guinea at present with an urban informal sector of negligible proportions, the process can be analysed in terms of a simple two sector model. Population is conceived as moving from a rural sector to an urban wage sector where incomes are derived from formal wage employment. As I have previously argued (Conroy 1976:61-64), Michael Todaro's influential model of rural-urban migration (Todaro 1969), which has been criticized for failing to incorporate the urban informal sector into its framework,

is likely to have greater explanatory power in Papua New Guinea than elsewhere. Todaro assumes that a positive differential between urban wage rates and rural incomes serves to attract an inflow of labour to urban areas, and that the probability of the migrant's finding work influences the volume of inflow. The probability of gaining employment is related to the number of job opportunities available per period (which is in turn related to the rate of growth of urban wage employment and the rate of turnover among those in employment) as a proportion of the number of job-seekers. Given a constant rural-urban income differential, the declining probability of finding employment as urban populations increase acts as an equilibrating force on the inflow of migrant job-seekers and the level of urban unemployment. Variations in the rate of inflow of labour and the rate of unemployment may be induced by changes in either the rural-urban income differential or the rate at which job opportunities are becoming available. However these two variables are not independent of one another, since changes in urban wage-rates may affect both the level of urban employment and the rate of labour turnover, and hence the probability of gaining work. Insofar as urban wage increases (which would be expected, ceteris paribus, to stimulate rural-urban migration) lead to a reduction in the absolute level or rate of growth of urban employment, or to a reduction in labour turnover, the result could be a decline in the rate of rural-urban migration. The net result depends on the sensitivity of employers to the increase in production costs represented by higher wages (the price elasticity of demand for labour) and the sensitivity of potential migrants in rural areas to the increased income differential (the supply elasticity of labour). As will be suggested below, the experience of urban growth of the mid-70s in Papua New Guinea may usefully be understood in such terms.

So unabashedly economic a framework of analysis will not appeal to all readers. I am personally convinced of the sensitivity of Melanesians to income incentives of the type discussed above (Conroy 1974a; 1976), and the results of the Urban Household Survey appear to be consistent with a Todaro-based analysis of urban unemployment rates (Garnaut et al. forthcoming). With some qualifications, this study establishes a significant positive relationship between the mean earnings of unskilled

migrants and each of three separate measures of unemployment, across all the towns surveyed. Similarly, there was a significant positive relationship between statutory minimum wages and rates of unemployment across the towns. This evidence serves to support the notion, derived from the Todaro model, of an equilibrium rate of unemployment appropriate to a particular differential between urban and rural incomes. Of course such evidence, gathered at a single point in time, can provide little support for the dynamic predictions of the model. Despite this, however, the notion that urban population growth in Papua New Guinea could continue at the rapid rates projected in the National Health Plan in the face of sluggish employment growth, with the consequent development of unprecedented levels of unemployment, is difficult to accept.

One possibility for sustaining such high rates of 'unemployment' (which, it will be remembered, consists in being an able-bodied urban adult not engaged in enumerated wage employment) is the growth and further elaboration of the urban informal sector. As mentioned previously, this source of income is comparatively ill-developed in Papua New Guinea. Opinions differ as to why this is so. Blaxter and Fitzpatrick attribute it to 'penetration of expatriates into areas that are normally confined [in other countries] to the informal sector', to 'comprehensive domination by expatriate interests of most areas of retailing and services' and to 'a plethora of laws' which inhibits and discriminates against small-scale indigenous enterprises (1973:5). While admitting the existence of these constraints, I have previously suggested that a more important reason is the freedom of most of the urban unemployed to return to the village sector, whose standard of living sets a base-rate for the levels of real income and physical exertion which rural-urban migrants are willing to tolerate (Conroy 1974b; 1976:180-82). This base-rate in Papua New Guinea is still too high to generate much informal sector activity in urban areas. Its further growth depends on growth in the numbers of 'trapped' and 'dispossessed' unemployed in the towns, and its elaboration (or diversification) depends on the spread of informal sector 'knowhow' or technology. A country in which charcoal is unknown is not going to develop sidewalk restaurants simply by repealing 'restrictive' food-handling and health legislation!

The Urban Household Survey (Garnaut et al. forthcoming) has shown that few of the urban unemployed in 1973-74 were trapped in Garnaut's sense, with the exception of a group in Port Moresby, which is physically isolated from a number of source areas of unskilled migrants. Moreover, one may conclude from the survey data that a dispossessed urban proletariat could not clearly be identified at that time, although the possibility was clear that such a group could arise among children born in the town (of whom about 25 per cent in Port Moresby, Lae and Rabaul had never visited the home village). Garnaut and his colleagues believe that 'It is only in Port Moresby that urban villagers had been so completely integrated into urban life that traditional means of subsistence no longer provided an alternative to wage employment for most people'. But among this group of people privileged access to sections of the labour market (described as a process of 'ethnic fragmentation') operated to their advantage vis-a-vis certain migrant groups. Moreover, while the most clear evidence of urban poverty was found in Port Moresby, the informal sector there was less developed than in many other urban centres. This is mainly the result of arid climate and land shortage in Port Moresby and says something about the under-development of the informal sector in Papua New Guinea, in which urban gardening is the principal activity. Since future urban population growth is likely to reduce the availability of urban garden land per head of population, it cannot be taken for granted that the informal sector will grow in relative importance. Neither, then, can it be assumed that projections of massive urban 'unemployment', discussed above, will be fulfilled.

A final point must be made about the Todaro model which relates to the growth of urban population, as distinct from urban workforce. The model concerns the inflow of adult job-seekers to the urban labour market, rather than the total inflow of migrants to urban centres. It says nothing about the sex or dependency ratios of migrant inflows, and it is an oversimplification of the model to attempt to relate changes in income differentials and employment probabilities to the rate of growth of total urban population. Urban population growth by migration could occur very largely as the result of inflows of dependent women and children, without any change in the absolute level or rate of unemployment among members of the workforce. This could occur under the circumstance of an urban wage increase being sufficiently

offset by a decline in the probability of finding employment to leave the rate of inflow of job-seekers unchanged. However at the same time the effect of the urban wage increase could be to facilitate family reunions as dependents move to towns. Such reunions, besides contributing to a more stable urban workforce and a lower rate of labour turnover in employment, would also reduce the capacity of employed persons to support unemployed adult kinfolk. This sequence of events would produce a qualitative change in the growth and structure of urban populations. Such a qualitative change was observed in Papua New Guinea during the intercensal period 1966-71, and has probably intensified since 1971 under the influence of substantial urban wage increases. The Urban Household Survey (Garnaut *et al.* forthcoming) documents the process to the end of 1973. Some such mechanism as described above has probably operated during this period and may well be continuing to operate.

Urban growth since 1971

No national population census has occurred since 1971 and limited evidence is available from other sources. An estimate of the population of Port Moresby in mid-1977, preliminary to an urban population survey, put the citizen population of Port Moresby at 102,000¹ which represents an annual compound rate of growth of 9.35 per cent since 1971. If accurate, this represents a marked deceleration from the rate of 13.24 per cent between 1966 and 1971, but corresponds quite closely to the overall urban growth rate (9.4 per cent) used in projections for the National Health Plan. There is, however, some evidence that growth rates in smaller urban centres may be well below this projection, with the result that overall growth rates are below the expected level.

Ronald Skeldon (1976) has reported the results of an unofficial census he organized in Goroka in 1976, and concludes that a significant decline in the rate of growth of the town is occurring. Goroka is approaching 'maturity' as an urban centre, with increasingly balanced sex and dependency ratios. Moreover, the decline in growth rate occurred during a period of rapid localization of the workforce, so that 'We can perhaps anticipate a further slowing of Goroka's growth in the future as most of the skilled and semi-skilled positions have already been nationalized and the unskilled

¹ Personal communication, Mr John Shadlow, Acting Statistician, PNG Bureau of Statistics, 1/8/77.

turn to search for jobs elsewhere' (Skeldon 1976:12). Skeldon further suggests, from evidence in Wewak (Curtain 1976) and elsewhere, that the growth of intermediate towns in Papua New Guinea is, in general, slower than has been projected. Instead, 'the migration streams are being channelled into fewer directions with rapid urban growth becoming concentrated in one or two centres', namely Port Moresby and Lae (Skeldon 1976:20). If this is true, Richard Jackson's optimism concerning the development of a balanced urban hierarchy (Jackson 1976:10) is unfounded. As against this, however, the pessimism of planning authorities concerning rapid urban growth will prove equally inappropriate. Stronger indications of trends will be available when the results of urban population surveys, to be conducted in five major and one minor town during 1977, are available. For the present, however, we are left with Skeldon's hypothesis (1977b) that Papua New Guinea is entering upon a stage in the evolution of its population in which Lae and Port Moresby are developing as twin national urban centres, drawing upon a nation-wide migration field.

Some evidence which may help to explain such a trend is available with respect to the growth of employment in Port Moresby and Lae, and to its stagnation in other towns. A sample survey of data in the files of the Department of Labour, conducted by staff of the National Planning Office, showed employment growth in the private sector at a compound annual rate of 11.7 per cent in the two major towns from 1972-73 to 1975-76. In other major towns total private sector employment actually fell by 6 per cent at the same time.¹ A similarly derived sample of all private firms in Papua New Guinea showed total employment (both urban and rural) to be static (actually declining by 0.3 per cent) over the same period. Interestingly enough, the period to 1974-75 saw a decline in total employment of 11.1 per cent, followed by an almost total recovery to 1975-76.² This movement corresponds fairly well with the pattern of minimum wage movements; the period to 1975 was a time of dramatic minimum wage increases which has been succeeded by a period of relative stability. Overall trends in wage employment are indicated by National Planning Office data

¹ Personal communication, Mr Robert Castley, August 1977.

² Ibid.

(1977:12), which show healthy growth during the late 60s (the period of most rapid urban growth) and absolute decline in the early 70s. An improvement has occurred since then. However the data on urban wage employment are far from satisfactory, and one needs to take into account the continuing growth of urban public sector employment to assess the rate at which employment opportunities have been opening up in urban areas, and the distribution of these opportunities by urban centre. Public sector employment has certainly grown rapidly during the 70s (National Planning Office 1977:18), and it would be surprising if the coming of self-government and independence had not concentrated a disproportionate share of this growth in Port Moresby. However the National Planning Office finds the data too contradictory for firm conclusions to be drawn (1977:15). Despite this, one is left with the impression that urban wage employment in the 70s is unlikely to have sustained urban population growth at the rate of the late 60s, and that unemployment is probably no worse in relative terms than at the time of the Urban Household Survey. Urban population surveys conducted by the Bureau of Statistics in late 1977 may confirm the first of these impressions, but the evidence on unemployment is less likely to be conclusive, since experience has shown that the unemployed are reticent in the face of official questioning.

Population pressure, education and urban drift

The argument presented in this paper has attempted to dispel the fear of a lemming-like rush of rural migrants to the cliff-face of urban unemployment. However two factors often mentioned in discussions of rural-urban migration have been neglected so far: the influences of population pressure and educational expansion in rural areas.

The existence of significant population pressure in rural areas might seem to support alarming projections of urban growth and unemployment. If the pull of urban areas is diminishing for economic reasons, the existence of a growing push derived from population pressure in rural areas may still serve to justify such projections. Discussions of an increasingly unfavourable man/land ratio tend to focus on the Chimbu Province, on certain districts within the East Sepik Province, and on

the Gazelle Peninsula of East New Britain. According to Garnaut and his colleagues, 'the most disturbing evidence from the Urban Household Survey was the very low wage levels and employment rates that Chimbu migrants with close links to home villages appeared to be prepared to endure' (Garnaut et al. forthcoming). This may appear to establish a prima facie case for the influence of population pressure, but it is clear from the quotation that the Chimbu migrants in question do not fall into the category of dispossessed. Evidence reviewed by Geoffrey Harris (1977) suggests that the relationships between population pressure and absenteeism in Chimbu may be rather more complex than at first appears. From data collected in twelve Chimbu communities with a population totalling more than 80,000, over the period 1962-73, Harris calculated

a significant positive relationship between absenteeism and effective acres per head, and between percentage annual change in absentees and effective acres per head. These were not the hypothesized signs and suggest that rather than encouraging absenteeism, low levels of land per head (i.e. high pressure on land) encourage people to stay at home, perhaps to protect their land rights. Alternatively, high levels of land per head is associated with high absenteeism, possibly because the need to stay to protect land is not pressing. The implication is that there is a desire by many Chimbu people to migrate, motivated by pull forces outside the province, but that they are restrained by the necessity to protect land rights in a land shortage situation. The shortage does not appear to be so great as to force people to leave.

(Harris 1977:5)

Moreover, despite population pressure on the Gazelle Peninsula, the only Tolai who migrate are those whose education and skills fit them for employment at rates above the urban minimum wage. Even in Rabaul, the commercial centre of the Gazelle, employment in unskilled occupations at the urban minimum rate is dominated by migrants from other areas (Garnaut et al. forthcoming). Despite obvious differences between the situations in East New Britain and Chimbu, the desire to retain land rights in the face of population pressure is probably a common factor. If this is the case, projections of an increasing volume of rural-urban migration based on rural push due to population pressure

are not persuasive.

The influence of the expansion of formal education in rural areas on the propensity of school leavers to migrate is now generally accepted. This propensity has been an economically rational phenomenon, based on the higher earnings and lower unemployment rates of the educated migrant vis-a-vis his uneducated counterpart in urban areas. However, there are no grounds for assuming that further expansion of education in rural areas will result in corresponding increases in migration by the educated. There are equilibrating forces at work which tend to reduce over time the propensity to migrate of school leavers at any particular educational level (Conroy 1975; 1976:19-37). (These same forces also tend to create political pressures for expansion of the education system at higher levels, but that is another problem and not the concern of this paper.) Evidence that these equilibrating forces are now at work comes from the Urban Household Survey, which detected higher rates of unemployment among standard 6 leavers in some towns than among persons of lower education (Garnaut et al. forthcoming). Together with the process of compression of earnings differentials for skill and education which has occurred as a result of wage-determination processes in Papua New Guinea in recent years, this will tend to lower the expected rural-urban income differential for the educated and to discourage their migration. Evidence that this is in fact occurring is available from the East Sepik Province (Curtain 1977) where it appears that a smaller proportion of standard 6 leavers is now migrating from home than in the past. The adjustment process is probably a slow one, and continued expansion of the education system at the secondary level will certainly generate more migration even though the average propensity to migrate of the educated may be falling. The fact remains, however, that projections of urban population and unemployment growth which depend heavily on the expansion in numbers of school leavers (National Planning Office 1977) are biased on the high side.

Conclusion

This paper has not been written with the intention of creating complacency about the future prospects for urban growth and unemployment in Papua New Guinea. Rather, it attempts to correct the rather alarmist projections

upon which policy discussion is based at present. A more realistic view of likely growth trends leaves no room for complacency, since urban population growth rates will still be high and unemployment widespread. In an earlier paper titled 'Urbanization in Papua New Guinea: a development constraint' (Conroy 1973b) I discussed the need to correct the imbalance of advantages between urban and rural life which results in socially dysfunctional rates of urban growth. That need is still urgent today.

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