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Cover: Partial reproduction of the earliest known map (1502) showing Brazil. Biblioteca Estense, Modena.

The Socioeconomic Status of the Brazilian Labor Force

José Pastore
Archibald Haller

Research on the social aspects of economic development is only just beginning. The first systematic attempts to identify social indicators and to use them to mark trends is a short ten years old (Moore and Sheldon, 1965; Bauer, 1966; Gross, 1967; Sheldon and Freeman, 1972). Such indicators provide a great deal of useful information by which to formulate and implement socioeconomic policies. In particular, they permit the evaluation of specific programs, they facilitate "social accounting," and they help to aid in ensuring the use of correct methods and to establish new objectives (Land, 1971).

Despite the fact that some countries such as the United States and Sweden include subjective aspects reflecting the quality of life as it is perceived by the population, for the most part governments have been employing only factual indicators (Andrews and Withey, 1974). The potential value of such indicators has not gone unnoticed in Brazil. Indeed, some are to be used in social planning during the years to come (Sistema de Indicadores Sociais, 1975). Current factual aspects concerning nine facets of Brazilian society are included; these are population, health, work and wages, education of qualified personnel, social security, family budgets, nutrition, basic sanitation, and housing. Thus the social indicators now being elaborated in Brazil will include data concerning "social inputs" (such as the institutional bases of education, health, and sanitation), as well as "social products" (such as the income, health, nutrition, housing and education of individual persons). Soon the nation will have the data needed to monitor trends in a number of important aspects of the quality of life of the Brazilian people. At the moment, historical data sufficient to provide a panoramic view of the social attainments of Brazilian society simply do not exist. At best, data presently available to officials provide a fragmentary picture of the changing quality of social life.

This article is an attempt to pull together, in as secure a way as possible, statistical data describing one aspect of the development of individuals, the conditions of employment, and how they relate to income and social mobility. Inasmuch as Brazil is a highly complex and diversified society, we have sought to assemble the available data in such a way as to cover the principal

foci of inequality—that is regions, rural versus urban areas, classes and social groups. Such an attempt would perhaps be especially timely at present, since the nation has just passed through a period of sustained economic growth. The consequent social benefits, if any, should soon start to become evident.

Employment

During the "growth decade" (roughly 1965 to 1975), Brazil's economic development was accompanied by changes in employment which are characteristic of a society in transition. First, in relative terms, the proportion of the population engaged in economic activities fell as a consequence of increases in educational opportunities for the young and of the number of retired people. Second, about a million new jobs were added each year, providing employment for large proportions of young people who annually entered the labor market. Third, there was a shift in balance of labor away from the extractive industries toward urban activities, especially of commerce and service. Fourth, there was an increase in the proportion of women in the labor force, especially in the service sector.

Thus the Brazilian labor market was quite active, despite chronic problems of unemployment and underemployment. Actually, statistical criteria used for labor analyses in Brazil make it hard to obtain a clear view of the true rates of employment during the growth decade. The best available definition of employment is the one used by the National Household Survey Research (NHSR). In it a person is considered to be unemployed if he did nothing other than to look for work during all of the week preceding the interview. This type of definition yields a nonemployment rate of about three percent.

This type of definition is used by many nations, mostly those having unemployment insurance programs (which is not the case in Brazil) permitting a person to spend full time looking for a job. In cases such as that of Brazil, which lacks such programs, the worker almost always combines the activity of job-seeking with small tasks which permit him to sustain himself. For this reason, underemployment is also an important part of employment analysis in Brazil. Such under- or unemployed persons have levels of income so low that their very lives are at risk. Data regarding this are presented in Table 1. In their attempts to analyze these employment phenomena, various authors use the same terms to refer to several different factors. The terms include the following: those unemployed as defined by the NHSR, those who are employed in part-time jobs but who would like to work full-time; those who are employed, but at such low levels that they earn less than the minimum required for survival; and all unpaid family workers who are not employed in agriculture (Salm, 1969; O'Brien, 1969). By this count the under- and unemployed are shown to be considerably more numerous—not less than 16 percent.[1] The data presented in Table 1 refer only to urban zones of different

RATES OF EMPLOYMENT MARGINALITY OF THE NONAGRICULTURAL POPULATIONS OF BRAZIL, BY REGIONS (1968)[a]

Region	Marginality		
	Unemployed %	Underemployed %	Total %
1. Guanabara and Rio de Janeiro	2.6	1.6	4.2
2. São Paulo	2.4	2.3	4.7
3. Paraná, Sta. Catarina, and Rio Grande do Sul	3.8	4.2	8.0
4. Minas Gerais and Espírito Santo	4.8	6.2	11.0
5. Northeast	4.4	17.4	21.8
6. Brasilia	5.5	-	-

Source: Salm, C., "Sub-Emprego Urbano," Rio de Janeiro: Instituto Econômicas E. Sociais, 1968 (Adaptado)

[a]The date refers to the fourth quarter of 1968 (NHSR).

regions of Brazil. In this table, the underemployed include those who worked part-time as well as those who earned less than 50 *cruzeiros* per month. As we see, about one-fourth of the economically active population (CEAP) of the Northeast was at best underemployed in 1968, contributing dramatically to the total underemployment in the nation.

Marginality regarding employment is also pronounced (eleven percent) in Minas Gerais and Espírito Santo, and to a lesser degree (eight percent) in the three most southerly states of Paraná, Santa Catarina and Rio Grande do Sul.

Using the same methods and source of data (NHRS) we can attempt to assess economic marginality in 1972.[2]

Table 2 shows that, on the whole, there was even more marginalization in 1972 than in 1968. It is true that the rates of unemployment were relatively lower than in 1968, having fallen in all regions, except the most industrialized (Rio de Janeiro and São Paulo) where it increased slightly. On the other hand, the rates of underemployment went up in all regions. In the Northeast for example, even though there was a decrease of about one percent in the rate of unemployment, the level of underemployment was quite a bit higher than in 1968. It rose from 17.4% in 1968 to 23% in 1972. Thus by 1972 more than one-fourth of the economically active people in the Northeast found themselves in employment

TABLE 2

RATES OF EMPLOYMENT MARGINALITY BY REGIONS (1972)

Region	Marginality		
	Unemployed %	Underemployed %	Total %
1. Guanabara and Rio de Janeiro	3.2	2.9	6.1
2. São Paulo	2.5	2.4	4.9
3. Paraná, Sta Catarina, and Rio Grande do Sul	2.6	5.3	7.9
4. Minas Gerais and Espírito Santo	3.3	7.7	11.0
5. Northeast	3.3	23.0	26.3
6. Brasilia	3.0	3.1	6.1

Source: NHSR, fourth quarter 1972.

situations which were quite precarious. There is no reason to believe that this condition will improve during the 1970s.

In sum, the data on unemployment and underemployment for the two periods show the following: 1) the opportunities for employment are inversely proportional to the development of the Brazilian regions; 2) regional differences are even more accentuated when one considers the data regarding underemployment; and 3) the persistence of regional differences implies that the rate of labor mobility among regions is still relatively low, despite the current migration; and 4) the rates of employment marginality increased between 1968 and 1972. A number of factors can produce employment marginality. These include the relative scarcity of new opportunities, seasonal fluctuations, economic cycles of expansion and recession, and discrepancies between supply and demand for skills (structural unemployment). In Brazil today the first and last seem most important: too few jobs and a poor match between the jobs' requirements and workers' skills. The effects of relative scarcity seem most pronounced in the Northeast, Minas, and Espírito Santo. Structural unemployment appears to be especially important in the most highly developed centers, where new jobs are not always promptly filled because they require skills which are not yet available.

The Circulation of Labor

The complete analysis of labor involves not only long term employment rates, but also the study of manpower circulation.

Circulation refers to temporary fluctuations in employment rates, generally market adjustments. From the point of view of the worker these are experienced as loss and insecurity. Preliminary analysis of the phenomenon in Brazil indicates that the group of workers who are affected by frequent layoffs and new jobs is really quite large (FIPE, 1975). This varies among regions, among sectors of activities, and among occupational groups. For example, the research mentioned above found the following patterns in the industrial sector: 1) In some industries—especially metals, motor vehicles, and electrical and electronic equipment—manpower absorption has actually decreased recently, beginning in the last half of 1974. During the last four months of that year total employment in these industries fell by three percent. 2) In almost all sectors one can see circulation rates are highest for less qualified workers. They are the first to feel the effects of an oscillation in the rhythm of activity in a sector. Unskilled workers are obviously easy to replace, so they are the first to be released in times of trouble. The great majority of the employed labor force falls into this category. So even short-term dislocations make life insecure for large numbers of people.

Employment and Technology

Employment, besides being dependent on economic cycles, seasonality, and the supply and demand for skills, is closely related to the technological development of the country. In turn, this depends in large measure on economic policies. Measures have been taken to subsidize the introduction of labor-saving technology in various sectors of the economy, especially in industry. This policy decision was taken in the 50's and Brazil has followed it ever since. Several specific choices lie behind this pattern. First, at the start of industrialization, exchange mechanisms were set up to encourage the importation of machines and equipment. Second, the so-called "Instruction 113" permitted the purchase of machinery with foreign capital, dispensing with *cruzeiro* transfers. Third, special benefits were provided to the important motor vehicle industry. Fourth, in the Northeast, the government (SUDENE) provided special tax incentives to encourage industrialization and these resulted in the establishment of capital intensive plants with relatively small manpower requirements (Goodman, *et al.*, 1971).

It seems fair to say that the regional disparities affecting employment opportunities are largely due to the technological alternatives adopted during industrialization. As we can see, rural manpower not absorbed by agriculture tends to move more into the tertiary than in the secondary sector: in 1950, commerce and services absorbed about 26% of the PEA; by 1960 they absorbed 33%, and by 1970 this proportion had grown to 38% of the PEA. In contrast, the absorption of labor by the secondary sector declined one percent between 1950 and 1960, and then rose again by about four percent in 1970 (see Table 3). In other words, in the three

TABLE 3

DISTRIBUTION OF THE EAP BY SECTORS OF ACTIVITY (1950-1970)

Sector of Activity	Year					
	1950		1960		1970	
	N[a]	%	N	%	N	%
Economically Active	17,117	100.0	22,651	100.0	29,545	100.0
Primary Sector (Extraction)	10,254	59.9	12,163	53.7	13,071	44.2
Secondary Sector (Manufacturing)	2,346	13.7	2,963	13.1	5,263	17.8
Tertiary Sector	4,513	26.4	7,522	33.2	10,807	38.0
Commerce	958	5.6	1,520	6.7	2,623	8.8
Services	1,672	9.8	2,732	12.1	3,260	11.0
Transportation & Communication	697	4.1	1,088	4.8	1,259	4.3
Social Activities	434	2.5	700	3.1	1,415	4.8
Public Administration	512	3.0	661	2.9	1,154	3.9
Other Activities	240	1.4	821	3.6	1,496	5.1

Source: National Censuses, Brazilian Institute of Geography & Statistics.

[a]In thousands of persons.

decades considered here, it may be seen that the primary sector (including crop and livestock production, lumbering, hunting and fishing, etc.) released about 16% of its labor force. The tertiary (service) sector absorbed about 12% and the secondary sector (manufacturing) took up the other four percent. On the other hand, the increase in manufacturing production was almost double that of agriculture. This was to a large extent based on the technologies which were capital intensive.

Occupational Distribution of the EAP

The census of 1970 provides the first data sufficient to show some of the ways people are linked to each of the major sectors of the economy. Data shown in Table 4 indicate that about 55% of the EAP were employees, about 35% worked for themselves and about one

TABLE 4

OCCUPATIONAL DISTRIBUTION OF THE EAP (1970)

Employment Status	Total		Primary		Secondary		Tertiary	
	N[a]	%	N	%	N	%	N	%
Employees	16,189	54.9	3,355	25.7	4,415	83.9	8,419	75.4
Self-Employed	10,086	34.2	7,135	54.6	720	13.7	2,231	20.0
Employers	463	1.6	220	1.7	92	1.8	151	1.3
Unpaid Workers	2,754	9.3	2,354	18.0	33	0.6	367	3.3
Total	29,492	100.0	13,064	100.0	5,260	100.0	11,168	100.0

Source: National Census, Brazil Institute of Geography & Statistics, 1970.

[a]In thousands of persons.

percent were employers. The remainder were unpaid workers. The major portion of the self-employed appeared in the primary sector (54.6%) and consists largely of small farm owners, renters, sharecroppers, plus those in a few other classes of typically Brazilian agricultural workers. Smaller proportions are to be seen in manufacturing (13.7%), where the employees predominate (83.9%). Employees are also in the majority in the tertiary sector (75.4%).

The volume of self-employed was relatively large (34.2%) in the EAP of 1970. In theory these are generally persons who make their own decisions about their employment and other economic operations. From this perspective, we might consider the Brazilian occupational structure to be quite flexible. Yet we should remember that among the so-called "self-employed," especially in the primary and secondary sectors, large numbers of people are really under employed. For this reason, the large number of seemingly self-employed would be more realistically seen as composed of individuals trying to establish themselves in precarious lines of work. Theoretically, we should expect that the income levels of the self-employed would be higher than those of the employed. Recent studies, however, show very little difference in incomes between the two categories (Langoni, 1973). The volume of unpaid workers (9.3%) is also worth mentioning. Not surprisingly, these are concentrated in the primary sector—no doubt in agriculture. Yet 3.3 percent of the EAP in the tertiary sector are also unpaid. Are these employed in family retail businesses?

Educational Distribution of the EAP

Census data for 1970 indicate that of the 29,545,293

Brazilians making up the economically active population (of ten years of age or more), there were about 11,000,000 who were completely unschooled. In other words, more than one-third of Brazil's workers are too poorly educated to participate effectively as workers in a modern economy or as citizens in a self-governing polity. Table 5 provides the details. Note the concentration of the unschooled, especially in the primary sector where it reaches about 60% of the EAP.

TABLE 5

EDUCATIONAL DISTRIBUTION OF THE EAP BY SECTOR OF ACTIVITY (1970)

			Sector					
	Total		Primary		Secondary		Tertiary	
Schooling	N[a]	%	N	%	N	%	N	%
No Instruction[b]	10,583	35.3	7,532	57.5	1,148	21.3	1,903	17.0
Primary Incomplete	8,378	29.0	4,148	32.0	1,588	30.8	2,642	23.5
Primary	6,306	21.3	1,253	9.6	1,691	32.1	3,362	30.0
Junior High	2,197	7.4	105	0.8	503	9.6	1,589	14.2
High School	1,405	4.7	21	0.1	218	4.1	1,166	10.4
University or College	672	2.3	11	0.0	112	2.1	549	4.9
Total	29,541	100.0	13,070	100.0	5,260	100.0	11,211	100.0

Source: National Census, Brazilian Institute of Geography & Statistics, 1970.

[a] In thousands of persons.

[b] Including those who did not indicate level of instruction.

Some of the regional disparities are even more dramatic. In the Northeast about 65% of the EAP is composed of those who have not attended school. In the primary sector, this rate rises to more than 80%. Even in the secondary sector (manufacturing) more than 50% had not had any schooling. Thus, especially in the Northeast, we see a vicious circle: industrial projects requiring capital intensive technologies (Goodman *et al.*, 1971) compensate for the scarcity of qualified or semi-qualified labor. In turn, such industries make little demand for education. So, obviously, the educational establishment is not encouraged to expand and improve.

Would it be possible to stimulate activities (including industrial) with a greater potential for absorbing easily trainable labor? Something like this would seem to be required if the Northeast is ever to develop an economy which can provide more remunerative employment for its inhabitants.

Employment and Social Structure

Recent publications on employment indicators permit a reasonable approximation to the study of Brazilian social structure, and consequently to the stratification system. One of the most useful is a classification of census occupations into 28 hierarchical categories by income and schooling (Silva, 1973). These can be even more broadly reaggregated so as to provide a system of strata which is comparable to those of other societies. Thus in this paper the occupational categories are grouped into five socioeconomic strata as shown in Table 6. Groupings such as this also serve as loose indicators of differences in styles of living and in opportunities for a good life, as is well known among sociologists.

As one can see, the base of the Brazilian social pyramid is exceptionally wide: about 70% of those who are in the EAP form the lowest stratum. It includes the great majority of the occupations requiring little in the way of educational qualification such as the rubber collectors, the retail clerks, shoe shiners, domestic servants, garbage men, sharecroppers, bakers, shoemakers, textile workers, and elevator operators. They also include occupations now almost unknown in the more developed countries: farm and highway construction workers whose only tool is the hoe; delivery "boys" who transport goods in pushcarts; men who "watch" cars—private operators who guard a car for a fee and who will slash its tires if the driver refuses to engage them. Within this stratum are found great pockets of rural and urban poverty composed of workers whose income never gets over the minimum wage. Brazilians would say that these people are usually paid up to one "*salário*." At present this is about $70 per month except in the Northeast, where it is lower.

The stratum immediately above it contains 13% of the economically active persons. It includes occupations normally requiring slightly more education or training, such as cabinet makers, carpenters, masons, glaziers, chauffeurs and truck drivers, machinists, merchant seamen, electricians, radio repairmen, pressmen, lathe workers, metal workers, plumbers, mechanics, and other similar workers. This does not necessarily imply that all of these workers have had formal schooling. On the contrary it appears that these positions are often filled by people who are trained on the job; Brazilians call these "*práticos*". These people normally earn between one and two times the minimum wage; or as the Brazilians say, they receive between one and two "*salários*".

Altogether, the two lower strata include about 80% of the

TABLE 6

SOCIOECONOMIC STRATA IN BRAZIL (1970)

Stratum	Occupational Categories	N	%
I—Elite	Factory owners; Professionals: Bank administrators; Large farm owners	517,252	2
II—Upper-Middle	Administrators of government agencies; Fiscal agents; Secondary teachers; Technicians in the secondary and tertiary sectors; Other administrators	858,613	3
III—Lower-Middle	White collar workers lacking a college education; Primary school teachers; Skilled agricultural workers; Owners of medium-sized farms; Foremen; Office workers	3,377,625	13
IV—Upper-Lower	Skilled and semi-skilled industrial workers; Transportation and communication workers; Construction workers; Wood and furniture workers	3,387,446	13
V—Lower-Lower	Skilled and semi-skilled non-industrial workers; Textile, leather, clothing, food workers, "arts and crafts" workers, manual laborers, domestic servants, workers in other services, servants, retail clerks, delivery men, farm laborers, unskilled miners[a]	18,089,052	69

Source: Silva, N. V., "Posição Social das Ocupações," Rio de Janeiro, Fundação IBGE, 1973 (adapted).

[a]Excludes item 28, "others."

Brazilians who are employed. In the writers' judgement, upward mobility leading to positions in the next higher strata would be quite difficult. Between the lower two strata and the two in the middle educational requirements rise sharply.

Together, the two intermediate strata form a middle region of the hierarchy which includes only 16% of the economically active population. The majority of these (13%) are located in the lower stratum. This stratum includes technicians in agriculture and

mining, shopkeepers, commercial artists, draftsmen, laboratory technicians, musicians, television and radio announcers, photographers, buyers, airline hostesses, primary school teachers, typists, office workers and such. Occupations in this stratum generally require schooling at about equivalent to high school, and usually pay from two to four "*salários*." The upper-middle stratum includes only three percent of the economically active. Among them is a large number whose jobs usually require the equivalent of a college education, but whose social prestige is not especially high, such as social workers, secondary school teachers, registered nurses, translators, editors and administrators. The normal income of workers in jobs at this level varies between five and ten times the minimum wage.

The stratum we call "the elite" is composed of the owners of factories and of large agricultural establishments, and of practitioners of the major professions which at least require a university degree—especially the most prestigious such as the physicians, dentists, engineers, lawyers, judges, economists, agronomists, veterinarians, sociologists, and journalists. Income varies enormously in this stratum. Yet most of these occupations usually pay more than ten times the minimum wage.

While these data do not permit an assessment of the rates of mobility in Brazil, they are sufficient to show that it must be extremely difficult for a worker to rise much above his present level. Brazil is a long way from being a society of "permeable" strata. In the bottom strata, the workers are almost uneducated and their pay is too low to permit them to accumulate enough to overcome this handicap; and as yet there are relatively few higher-level positions available to be filled anyway.

Data regarding change in the socioeconomic status structure are scarce in Brazil. Exact comparisons using precisely the same classificatory criteria are impossible. Yet earlier data are available by which to make a rough comparison. In 1950, Havighurst (1957) described the structure using criteria which are reasonably comparable to those of Silva (1973) which we have just reviewed. The structure he identified was quite similar to that of 1970, at least in the overall picture.

To be precise, mobility theorists now distinguish between what is called "changes in the central tendency" or "structural mobility," on the one hand, and changes in "flux" or "circulation mobility," on the other. The former refers to movements associated with the opening or closing of positions at higher or lower levels of a social hierarchy. Individuals move because the structure of opportunities changes. The later refers to the correlation of people's earlier positions with their later positions. Flux rates may be high or low regardless of the rate of structural mobility. Table 7 shows substantial stability among all five strata, especially of the elite and of the upper middle. On the basis of this comparison, these strata seem to be relatively impermeable, showing very little evidence of upward or downward mobility, at least in percentage terms. It is true that the effects of the sharp increase in educational opportunities noted in

TABLE 7

BRAZILIAN SOCIOECONOMIC STATUS STRUCTURE (1950 and 1970)

Social Stratum	1950[a] Percent	1970[b] Percent
Elite	2	2
Upper middle	3	3
Lower middle	12	13
Upper-lower	83	82
Lower-lower		

Source: [a]Havighurst, R. J., "Educação, Mobilidade Social e Mudança Social em Quatro Sociedades," in *Educação e Ciencias Sociais*, 2: nº 6 (1957).

[b]Silva, N. V., "Posição Social das Ocupações," *op. cit.*

the decade of the 60's could not be expected to show any effect on the socioeconomic structure before about 1972 to 1975. Nonetheless, the comparison indicates at minimum that the social benefits of economic development take many years to appear—if they are to come at all.

The similarity between the socioeconomic status structures of the two periods suggests that Brazil's economic growth has resulted in massive increases in the numbers of low-level jobs rather than in higher proportions in the upper levels. At least this is what has happened up to 1970. On the other hand, it is worth repeating that even though the proportions remained practically constant during the period, there was in increase in all strata in absolute terms. In other words, today's elite contains a great many more people than did the elite of 1950; similarly, in absolute terms there are more persons in the lower stratum today than there were in 1950: if *upward* structural mobility seems not to be in evidence, neither is *downward* structural mobility great enough to detect.

As we can see, the lower strata not only constitute the majority who are poorly paid, but also include the occupations whose incumbents experience the highest rates of intermittent unemployment. This implies a peculiar style of life and a limited pattern of consumption: such groups have severe restrictions on their general level of life and great difficulty sustaining long term credit payments needed to buy houses, furniture, etc., while also handling the day-to-day costs of health, nutrition, and transportation. Their housing is often of poor quality, located in the *favelas* (shanty towns). (From the point of view of the worker, this is advantageous because it provides cheap housing near the workplace. (From the point of view of economic policy,

expelling the *favelados* would require large investments in public transportation. One recent analysis correctly identified the housing question of these social strata as one of employment and income [IPEA, 1975]. As this study recommended, a realistic national housing policy would have to take into account the labor markets of the poorest strata. In other words, Brazil's housing policy must be strictly harmonized with its employment policy.)

Education and Occupational Mobility

The data presented in the previous section suggest that from 1950 to 1970 there was little upward mobility due to upward shifts of the stratification structure. Similarly, it seems hard to imagine that there would have been much upward or downward mobility within this remarkably stable stratification system. What are the factors that inhibit occupational mobility in Brazil, making it difficult for large masses of persons to move from a lower stratum into one that is higher?

The studies of social stratification conducted in various parts of the world indicate that the most important determinants of intergenerational mobility in modern societies are the person's occupational preparation, his first job, and his experience (Kelley, 1973; Mincer, 1974; Müller and Meyer, 1973; Pastore, Haller, and Gomez, 1975). In turn, these variables are partially determined by factors linked to the previous generation, such as the education and occupation of the person's father (Blau and Duncan, 1967; Haller and Spenner, 1974). For the great majority in Brazil the so-called "vicious circle of poverty" evidently functions. To one born and raised in the lower strata, the various handicaps reinforce each other, blocking access to the few occupational opportunities he encounters. This is especially true when access to education is limited. The rapid economic development of the last ten years created new jobs that came to demand types of workers who were still scarce in the labor market because of the restricted educational opportunities of past generations. Consequently, for the majority, occupational mobility was limited. This led to a substantial increase in the wages of the skilled minority, who were in short supply. These few workers then came to occupy a highly competitive position in the labor market. The less qualified have had great difficulty competing for jobs.

It is important to note that the great expansion in the tertiary sector generated innumerable opportunities in old occupations of low status: office boys, receptionists, typists, deliverymen, clerks, servants, etc. The number of such jobs also increased substantially in the secondary sector. Thus new job opportunities do not necessarily yield upward mobility. Jobs within existing occupations may simply become more numerous, repeating on a grander scale the generally low statuses which formerly prevailed. This has happened in Brazil. Rapid development has produced vast numbers of new jobs—about one million annually in recent years. It also produced shifts among occupational

categories within and among sectors. In the industrial sector, for example, during the last two decades the proportion of the labor force employed in civil construction went from 27% in 1950 to about 33% in 1970. Yet there was also a systematic decline in manufacturing, the extractive industries, industrial services, and public utilities (Almeida, 1974). The overflow from the latter was absorbed in civil construction, which employs armies of relatively unskilled workers. As Almeida (1974) shows, from 1950 to 1970 construction jobs increased most dramatically in the following occupations: tilesetters and flooring workers, 268%; concrete reinforcement workers, 249%; plumbers and pipefitters, 184%; masons and bricklayers, 125%. Among the occupations of low status in the tertiary sector, on the other hand, one may see: truck drivers and chauffeurs, 199%; street vendors, 142%; barbers and kindred workers, 188%; clerks and deliverymen, 83%. The same study also shows substantial increases in jobs in technical and scientific occupations: architects, 347%; engineers, 243%; agronomists and veterinarians, 179%; lawyers, 140%; medical doctors, 104%. Nonetheless the increments in low status jobs were made on an extremely large base. But in the overall picture the number of unskilled workers increased more rapidly than the number of more highly qualified. This may also be observed in Venezuela, Chile, and Costa Rica (ECLA, 1973).

Sociologists call this phenomenon "segmentation," the proliferation of additional structural units that do not differ qualitatively from those which existed before (Smelser, 1963). The segmentation of the labor markets has also occurred along the lines of occupations. The jobs of plumbers may change and even differentiate. But plumbers don't compete with electricians in the labor market. And typists don't compete with accountants, etc. (Stolzenberg, 1975). Various bits of evidence suggest that segments of the labor market are proliferating with great speed in Latin America (Calabi, *et al.*, 1974).

Yet the accelerated development of the Brazilian economy has in fact induced a new phenomenon relevant for upward mobility—an increasing tendency to use universalistic criteria in recruiting specialized personnel, particularly in the private sector. The number of job placement agencies has also increased in the last ten years, reflecting a decline in the old particularistic patterns—family and "pull."

How can we encourage upward mobility in a society which has high levels of universalism in recruitment together with a limited supply of most specialized workers? In-service training is one route. The fact is that recent studies in the industrial sector show a great majority (70 percent) of workers who occupied "middle level" jobs have not attended trade, vocational, or technical schools. Though they have jobs which require a technical competency together with the capacity to lead and give orders, rarely do they have an education corresponding to their jobs (Pastore, 1973). For this reason, among them the relationship between preparation and position is not very high (Pastore and Haller, 1976). In other words, many workers who hold important

jobs at the middle level (foremen, managers, and supervisors, etc.) lack the requisite training.

The labor market of the 70's reflects the inadequacies of the educational system of the 50's. This is why the nation is still short of trained personnel. From 1965 to 1975 there was a constant search for trainable manpower (Castro and Souza, 1974). Today, to fill its middle level skilled positions, business seeks those with the ability to learn, most of them at least literate, advancing those who do well on the job. Thus some upward mobility occurs during one's career. This is why one's first job and the opportunities it opens are important variables in the individual status attainment process.

Nonetheless a person who is trainable has a better chance in an area that is expanding than he does in one that is stagnating. From the point of view of supply the key factor is the trainable person. From the point of view of demand, the key question is to enter a sector which is developing and to move into higher positions (possibly within the same occupation). Recently, Brazilian educators have held that the educational system could be used to equilibrate the labor market, and thus encourage upward occupational mobility. Yet, on approving Law 5692 in 1971, it appears that Congress exaggerated the capacity of the school to serve the labor market. The fact is that structural unemployment—a poor match between the kinds of workers that are needed and those who are available—is endemic. Yet it cannot be denied that this attempt to offer occupational education on a massive scale, though inadequate, is a response to a serious problem, especially in certain regions of the country.

A number of questions may be raised about the attempt to provide mass occupational education through this new educational policy. Do the schools have the equipment and personnel to train the production managers, the project heads, the personnel supervisors, the marketing managers, and the other skilled workers for whom there is a strong demand? Would there, indeed, be a market demand large enough to absorb the numbers of people who would come out of the general education system as a whole? Would the schools be able to change their curricula so as to keep up with the accelerated rhythm of technological modernization in agriculture, industry, and commerce in the Center-South of the country? Would those in specific occupations (for example, draftsmen or project planners) be more mobile in the labor market and consequently have greater chances for occupational mobility?

With respect to the schooling apparatus, the response is obvious. Brazil's schools are not even ready to meet the normal demand for primary and secondary school. They are a long way from having the resources to equip the laboratories and workshops which would be necessary for training skilled workers during grade school and secondary school. They are even further away from having the teachers and the advisers who are sufficiently familiar with each of the myriad jobs to actually train people to perform them. It is worth noting that this strategy does not appeal even to the countries that might have the resources to do it, partly

because of the difficulty of estimating the demand from the labor market.

Beyond this, school is a weighty structure and it moves but slowly. It is slow to organize its curriculum, to train professors, and to educate students. Once trained, students run the risk of being transformed into obsolete workers. Workers whose specialities are geared to a specific pattern of technology tend to become obsolete as rapidly as technology changes. This creates new problems for the society. What can be done with an obsolete worker? Unlike the obsolete machine, the obsolete worker simply cannot be discarded or traded in on a more modern one. This would imply the need for retraining programs, which would not only be expensive but would be in competition with other educational programs. Moreoever, studies have demonstrated that the more specific a person's training is, the lower is his mobility in the labor market (Langoni, 1975), a phenomenon which occurs both in middle and upper level jobs, though a bit less so among the latter (Pastore, 1972). This argues for de-emphasizing the idea that school has the power to effect a good marriage between the supply and demand for labor. A major part of this adjustment occurs in the labor market itself. From the point of view of the individual, what is necessary is flexibility, and this means the capacity to learn to adapt to new conditions. For this reason a qualitative improvement in general instruction is a task of great urgency in Brazil. To have a better chance in the world to work a young person needs to think well, to write well, to summarize well, to understand mathematics, and to have a good knowledge of the origins of his civilization. This is a type of knowledge that specialized occupational education cannot provide.

A great part of the adjustment of the skills that the market demands and the workers offer takes place in ordinary life. This process is inevitable and it is probably cheaper than the school route. The market is flexible and dynamic, and it has the capacity to make adjustments if it receives good prime material. When this doesn't happen, the market itself stimulates the "para-educational" mechanisms such as SENAI and SENAC (the National Industrial and Commercial Apprenticeship Services). By means of these it provides the courses which are necessary to head off emergencies. Once these difficulties are met, it is possible to dispense with the educational schemes which were set up to handle the emergency needs, and they do this quite easily. Schools, however, rarely discard courses when they become useless.

Employment, Occupation, and Income

Unemployment itself is not the central problem of the lower strata. Income is the most serious issue. Stable work opportunities are next. In view of this, it becomes clear that opening the social structure depends not only on the creation of more jobs but above all on creating jobs that permit people in all social strata to obtain a reasonable level of living (Blaug, 1973).

It is now becoming clear that the problem of income distribution is more a political than a technical problem. The central question is to define clearly what level of inequality or equality is desirable for a specific society, and then to establish means for income redistribution which could be pursued by economic policies in general and employment policies in particular. From the technical point of view, the problem is limited to identifying the factors responsible for the concentration of income and to proposing policies appropriate to it which could then be left open to debate. As is well known such analyses have been carried on within various countries, including Brazil. Today the determinants of income concentration are really very well known. Some of the studies place a special emphasis on education of the labor force and on certain individual factors such as sex, age, color, family background, etc. Other works concentrate on the separation of capital and labor, or the consequences of technological advances, or the question of occupational hierarchy within firms. All of these are considered to be fundamental determinants of the great differentials in wages and income.

One of the most common proposals for improving the distribution of income has been the recommendation that the educational level of the population be raised. This presupposes that education would have three types of beneficial effects on the distribution of income. 1) Some of those who were educated would leave occupations of low income and go into higher paying occupational groups. 2) Wages for jobs at the lower income level would then rise. 3) Wages for occupations of high income would tend to decline. In this way an improvement of the educational system would automatically have three beneficial effects resulting in a generally more equalized distribution (Thurow and Lucas, 1973).

On the basis of these presuppositions many countries have launched massive programs of education and labor force training since World War II. It is said that the distribution of education has been substantially equalized as a consequence of such programs. Nonetheless income has become even more unequal than it was before. At best, education might tend to redistribute income only in the long run. Massive educational and manpower training programs have serious limitations for short run policy. What can education do to improve the income of the enormous mass of people in the lowest stratum—the unskilled workers, the domestics, the store clerks, the delivery boys?

Another type of recommendation is more direct. It is the reform of the tax system. Even though there are no technical difficulties in redistributing income via taxation, this technique seems to encounter political obstacles, especially when the decisions are made by minorities. Without a doubt, Brazil has made real advances regarding personal income tax. The greatest efforts of the reorganization and implantation of the taxation mechanisms began to show positive results beginning in 1969 and 1970.

Nonetheless it would be interesting to examine the equity of the income system in the various occupational categories. Table 8 shows data on those who paid 1973 income taxes. These are

arranged by the average proportion of total income paid in income taxes by occupation. The data are aggregated for the nation as a whole.

Among the occupations presented here, only six categories paid more than 10% of their reported gross income: bankers, actuaries, factory owners, engineers, authors, and judges. All other 51 occupations paid ten percent or less of their reported income. In 20 occupations the average was five percent or less. Liberal professionals seem not to pay very much. Indeed, physicians average 9.9 percent of their reported income, or about Cr$8,700.00 per year. Lawyers pay about 9.8 percent of the declared income, averaging Cr$6,900.00 per year. Even though factory owners gave a slightly higher percentage (11.9), their actual contribution was about Cr$6,000.00. Dentists paid about 4.8 percent of their declared income, or about Cr$2,200.00 in 1974.

Clearly, many of these averages are not very representative, given Brazil's regional and individual differences. Yet there are some occupational categories which are relatively homogeneous, such as the liberal professions noted above, especially dentists, physicians, and lawyers.

It is informative to compare the percentage paid with the income declared by contributors from the different occupational categories. The data for 1973 show some distortions that would appear to make the taxation system unequal in its effects on the distribution of income. There are three basic groups of contributors: those who pay a percentage which is relatively low in relationship to the income they declared; those who are opposite—who pay a relatively high percentage in relationship to the income which they have declared; and those whose reported income and tax percentages are in relative balance.

Table 9 presents the occupations according to these types. In the first group are almost all the high status liberal professionals: doctors, lawyers, dentists, architects, psychologists, etc. In these occupations are included those whose incomes are the highest in Brazil (see Table 10). On the other hand these categories enjoy certain flexibilities provided by special legislation which permit them to lower substantially the rate of tax on their income. Besides this, it is well known that professionals with high income tend to enter into other lines of activity—especially real estate, where the capital gains are taxed at a lower rate. In these conditions the income tax load is considerably lighter for those who were included in the first group. These results raise serious doubts about income tax as an effective device for redistributing income.[3]

The next category is made up of occupations whose income is relatively low when compared with the tax they paid. For example, actuaries make, on the average, about Cr$25,000.00 per year. They are in 32nd place on the income scale. Even so they pay out about 12 percent of their income in income taxes, thus falling in second place regarding tax paid (see Table 8). Sports professionals are in 36th place regarding income and 11th place in taxes. Physicists are 30th in income and 20th in taxes. Authors are 23rd in

TABLE 8

PERCENT OF THE GROSS INCOME PAID IN INCOME TAXES IN 1974
(averages for occupations)[a]

Occupation	%	Occupation	%
1. (1)[b] Bankers	23.0	31. (22) Coaches (sports)	5.5
2. (32) Actuaries	12.2	32. (17) Accountants	5.4
3. (11) Factory Owners	11.9	33. (24) Pharmacists	5.4
4. (3) Engineers	11.0	34. (53) Large Farm Owners	5.2
5. (23) Authors	10.8	35. (25) Sociologists	5.1
6. (2) Judges	10.3	36. (27) Salesmen	5.0
7. (6) Economists	10.0	37. (12) Dentists	4.8
8. (8) Notary Publics	10.0	38. (26) Retired Military Officers	4.7
9. (4) Physicians	9.9	39. (18) Veterinarians	4.5
10. (7) Lawyers	9.7	40. (29) Banktellers	4.2
11. (36) Sport Professionals	9.6	41. (45) Civil Servants (Retired)[b]	4.1
12. (5) Architects	9.2	42. (44) Teachers	4.0
13. (16) Forwarding Agents	9.1	43. (47) Models	4.0
14. (10) Chemists	8.5	44. (55) Other Occupations	3.5
15. (14) Journalists	8.3	45. (48) Museum Curators	3.4
16. (9) Geologists	7.5	46. (35) Social Workers	3.4
17. (42) Heirs[c]	7.4	47. (39) Nutritionists	3.1
18. (40) Stockholders and Investors	7.3	48. (49) Civil Servants	2.8
19. (21) Brokers	7.2	49. (41) Sailors	2.5
20. (30) Physicists	6.8	50. (50) Longshoremen and Dock Workers	2.4
21. (34) Business Owners	6.7	51. (57) Small Farmers	2.1
22. (33) Artists	6.6	52. (52) Nurses	1.8
23. (15) Analysts	6.5	53. (51) Factory Workers	1.8
24. (20) Psychologists	6.2	54. (46) Military Servicemen (enlisted)	1.6
25. (28) Mathematicians	5.9	55. (56) Seamstresses	1.5
26. (31) Airline Clerks	5.8	56. (43) Chauffeurs	0.9
27. (19) Statisticians	5.7	57. (54) Railroad Workers	0.7
28. (37) Insurance Salesmen	5.7		
29. (13) Agronomists	5.6		
30. (38) Businessmen	5.5		

Source: Centro de Informações e Estudos Fiscais, "Tabulações Preliminares do Imposto de Renda," Brasilia, 1975 (Adaptação)

[a]Os números em parêntesis indicam a posição do grupo na escala de rendimentos brutos declarados. Os números sem parêntesis indicam a classificação das ocupações segundo o recolhiemento do imposto.

[b]Functionarios Públicos Civis.

[c]Not otherwise employed.

TABLE 9

CLASSIFICATION OF OCCUPATIONS ACCORDING TO THE BALANCE BETWEEN INCOME TAX PAID AND GROSS INCOME REPORTED

Tax Balance Categories	Occupations
"Under"-Taxed (Tax Percentage Relatively Low)	Physicians, Lawyers, Dentists, Judges, Architects, Chemists, Geologists, Analysts, Psychologists, Statisticians, Nutritionists, Sailors, Civil Servants, Technicians, Pharmacists, Sociologists, Salesmen, Retired Military Officers, Bank Tellers, Social Workers, Chauffeurs, Agronomists, Accountants, Veterinarians
"Over"-Taxed (Tax Percentage Relatively High)	Artists, Physicists, Mathematicians, Airline Clerks, Businessmen, Forwarding Agents, Retired Civil Servants, Models, Museum Curators, Factory Owners, Business Owners, Insurance Salesmen, Actuaries, Authors, Sports Professionals, Large Farm Owners, Strockbrokers and Investors, Heirs,[a] Other Occupations
Balanced (Tax Percentage Relatively Equivalent)	Bankers, Engineers, Economists, Notary Publics, Journalists, Retired Civil Servants, Longshoremen and Dockworkers, Nurses, Seamstresses, Railroad Workers, Factory Workers, Brokers, Teachers

Source: Centro de Informações E Estudos Fiscais, "Tabulações Preliminares do Imposto de Renda," Brasília, 1975 (Adaptação).

[a]Not otherwise employed.

income and fifth in income tax.

Finally it bears repeating that the data on income taxes reflect only what the contributors are obliged to report. In Brazil the number of persons in the population economically active who are required to present declarations of income is really quite low. The tax payment modifications of 1976 will reduce this group even more and create even more rigorous rates for those who contribute income tax. The purpose of these changes is to improve the distribution of income. Even so it appears questionable that changing the rates will resolve either the inequities indicated above or the problems related to the declaration of gross income in the occupational categories of Group A. In 1973 there were only eleven occupations that received more than Cr$50,000.00 per year. It is hard to imagine that squeezing the reported earnings

TABLE 10

OCCUPATIONS BY MEAN GROSS ANNUAL INCOME

Level of Income (Cr$)	Occupations	Percent of Income Paid in Income Taxes
Over 200,000	Bankers	23
88-95,000	Physicians, Engineers, Judges	9-10
51-76,000	Factory Owners, Lawyers, Chemists, Geologists, Notary Publics, Architects, Economists	7.5-11
29-48,000	Salesmen, Retired Military Personnel, Sociologists, Pharmacists, Authors, Sports Coaches, Psychologists, Brokers, Statisticians, Veterinarians, Forwarding Agents, Analysts, Journalists, Agronomists, Dentists	5-11
17-27,000	Chauffeurs, Sailors, Stockbrokers and Investors, Nutritionists, Businessmen, Insurance Salesmen, Sports Professionals, Social Workers, Business Owners, Artists, Actuaries, Airline Clerks, Physicists, Bank Tellers, Mathematicians	1-12
11-16,000	Retired Civil Servants, Civil Servants, Museum Curators, Models, Military Personnel (enlisted), Teachers	1-4
Under 11,000	Small Farmers, Seamstresses, Railroad Workers, Large Farmers	1-5

Source: Centro de Informações e Estudos Fiscais, "Tabulações Preliminares do Imposto de Renda," Brasília, 1975 (Adaptação).

of this group will provide enough to equalize the income distribution very much. Note, too, that this group is quite heterogeneous. Within it are three well-defined special categories. The first, standing alone, is that of the bankers, with annual incomes of about Cr$207,000.00. They pay a substantial proportion in income tax (almost 25%). The second category—a bit lower—includes physicians, engineers, and judges. They have average incomes between Cr$88,000.00 and Cr$95,000.00 per year, and pay

about 10 percent in income tax. Last are factory owners, chemists, geologists, notary publics, lawyers, economists, and architects with mean incomes between Cr$51,000.00 and Cr$76,000.00 per year. They are taxed, on the average, at less than ten percent of their incomes. Again, higher rates for these occupations may reduce the income of their incumbents, but it cannot provide much new money for redistribution.

Rates like these raise questions of the efficiency of income taxation as a mechanism for the redistribution of income. Yet technical solutions for these distortions are relatively simple. The problem appears to be more political than technical.

The most realistic proposals seem to be those that seek to attack the distribution of income more directly. For example, the IPEA study mentioned above reasserts the potential viability of activating the monies from the Workers' Participation Fund, whose proceeds are estimated to be about 104 billion cruzeiros by 1980. The IPEA recommendation envisions an annual distribution of one to two minimum wages to all of the participants in the fund even though this might cause a loss in the capital base of these funds. The worker could choose whether to receive his wage in cash or to transfer it to amortize debts on his house (IPEA, 1975). Thus a distributive mechanism could be combined with the programs of investments in basic necessities, assuring more stability and a higher quality of life for the enormous contingents of those in the lower socioeconomic strata. Perhaps other more direct redistribution methods might be explained.

Summary and Possible Policy Implications

This article constitutes an attempt to pull together, in as trustworthy a way as possible, the available data on the conditions of employment in Brazilian society, especially regarding distribution of income, occupational and educational stratification, and social mobility.

The rapid economic development experienced by Brazil in the period 1965-1970, accompanied by a dynamization of the labor market, appears to be typical of societies in transition. Even so, chronic problems of employment and underemployment persist. Estimates of the non-agricultural population indicate that the unemployed and underemployed together add up to about 12 percent of the total population economically active in 1968 and about 11 percent in 1972. There was, in fact, an increase in the rates of underemployment during that period, particularly in the less developed regions. This aggravation of the general conditions of employment can be attributed to the lack of new opportunities and to structural unemployment—the mismatch between skills offered and demanded in the labor market. In addition one must consider the circulation of labor. Preliminary analyses show that a rather large portion of the less-skilled workers are affected by frequent layoffs, which makes the worker less secure and decreases his chances to become more productive by shortening the time he has to

learn on the job.

Brazil's opportunities for employment are closely related to the patterns of technological change and consequently to the options for economic policy made during the course of its development. Available indicators unquestionably show that the technologies adapted in Brazil during the fifties are beginning to save labor today.

From the 1970 census, we find that a substantial proportion of the actively employed population (EAP) is classed as "self-employed" (34 percent of the total). This category includes a large number of underemployed workers in the primary and tertiary sectors. Such people have difficulty finding full-time jobs for which their previous work has prepared them and which would utilize more effectively their work potentials, thus providing them with higher levels of income and greater stability of employment.

Census data also show that more than one-third of EAP is made up of workers who have had no formal instruction whatsoever, and whose capacities for effective achievement in work and as citizens are relatively limited. These figures are even more dramatic when they are disaggregated by regions. In the Northeast, those who lack formal instruction make up 80 percent of the labor force in the industrial sector. Policies aimed at providing new jobs in the region must, of course, take into account the economic profitability of investments and the availability of factors. Possibly, efforts might be made to stimulate activities, including industrial, which can utilize poorly trained labor.

The available data on Brazilian social stratification clearly show a pyramidal structure whose base remains extremely wide. About 70 percent of the EAP form a "lower-lower" stratum in which the great majority are in occupations requiring little skill, with occupational incomes averaging less than one minimum wage. (Obviously, the minimum wage law does not apply to everyone.) Data for 1950 and 1970 show this structure to persist over a considerable period of time. Brazil has a long way to go before it becomes a society of "permeable" strata supporting high rates of upward mobility.

Why is vertical mobility so difficult for Brazil? The so-called "vicious circle of poverty" still prevails for the bulk of the population. To be born and raised in the lower strata is extremely disadvantageous. The factors associated with this status are mutually reinforcing and restrict opportunities of employment. This phenomenon becomes especially relevant in view of the scarcity of educational opportunities in Brazil during the decade of the fifties. The effects of this are now being felt in the current labor market. During 1965 to 1970 industry actively sought trainable personnel, attempting to counterbalance the low level of education of the labor force by means of various kinds of training programs.

Today many believe that the educational system could be used to overcome the structural unemployment, indirectly dynamizing the occupational mobility of the labor force. Yet recent efforts to use the public schools to provide occupational education are of

doubtful efficacy. They do not seem to work well as an instrument to effect adjustments between the supply and demand for labor in the market. At present, most of this adjustment takes place in the market itself, with evident advantages in terms of flexibility of employment for the workers. The schools might better devote themselves to qualitative improvement of general instruction.

But the crucial problem of the lower strata of the Brazilian population is not one of reducing underemployment or unemployment. These phenomena really mask problems of low income and a lack of job opportunities. The possibility of generating a stratification system which is more open and permeable depends, of course, on the creation of new jobs, but above all on the creation of jobs that would permit the individual to improve his standard of living. In this sense the question of the distribution of income may be seen primarily as a political problem.

From the technical point of view we have tried only to identify the factors responsible for the concentration of income with the objective of suggesting solutions for the problem. One of the policies that has been rather well accepted is that of increasing opportunities for education. This assumes that education has an important and positive impact on individual income. Even so, the experience of a good many countries that have launched programs of this nature permits one to question the viability of this proposed solution. In the best of outcomes the data indicate that investments in the educational sector could have effects on individual income and on the distribution of income over very long periods of time.

Reform of the tax system is an alternative that has a good many supporters, with the advantage of not presenting very great difficulties from the technical point of view. There is no doubt that Brazil has made a big advance regarding its personal income tax procedures. Yet the percentage of gross income paid by taxpayers is still small in absolute terms. And as we have seen, its burden is not evenly distributed. Data regarding 57 occupational categories in 1974 (the tax base for 1973) show that most occupational groups paid taxes equivalent to less than 10 percent of reported income.

Those who paid income taxes which were relatively low in relationship to reported income included almost all of the liberal professions of high status such as physicians, lawyers, dentists, architects, etc. These not only have high levels of income but also have ways to lighten their tax load, such as investing in real estate. Besides this the absolute number of those in the EAP who are legally required to declare income is relatively small. The modifications proposed for 1976 are intended to equalize the distribution of income, but it is doubtful that more rigorous rates and more stringent regulations will do the job. In sum, the available data cast doubt on the efficacy of tax reforms as mechanisms for redistributing income in Brazil.

Other more direct solutions are being proposed. One recommends distributing the equivalent of one or two minimum monthly wages each year to everyone who is in a Workers' Participation

Fund. The objective would be to combine a redistributive mechanism with a program of investment and provision of basic necessities. This could guarantee greater stability and a higher quality of life for millions of those in the lowest strata of the social structure. Although even this would not reach everyone, it would appear to be an improvement over the present situation.

Conclusion

A recent Brazilian president has said that "Brazil is doing well, but the people are doing badly." Of the economy's growth, there can be no doubt. But as he implies and this review shows, the socioeconomic basis of the quality of life of the Brazilian people seems not to have improved in two decades. Can the reforms of the last decade and a half still yield new benefits? Perhaps it is too early to tell. In any case, new research should now be undertaken on the Brazilian socioeconomic attainment process, both to identify more precisely the changes that occur and to help determine how to effect improvements.

NOTES

[1]These figures may include a bit of double counting. Some people could be working at low productivity and part-time jobs simultaneously. Here we attempt to separate this effect, utilizing only those categories which are the most trustworthy. Similarly there are problems of comparability in the data for different regions of Brazil.

[2]For 1972 and before, "low productivity" is defined as less than one minimum wage for the states of Maranhão, Piaúi, Ceará, Rio Grande Do Norte, Alagoas and Sergipe, and as one-half a minimum wage for all other states. This is to help take account of the differences in the minimum wage between the Northeast and the rest of the country. (In Brazil, the value of the minimum wage floats with the buying power of the *cruzeiro*. So it changes with inflation. "One minimum wage" is the minimum wage that must be paid each month to full-time workers in the occupations covered by the law. In São Paulo, it amounts to about $70-$80 per month at present. It is much lower in the Northeast. Normally those employed in occupations covered by the law also normally obtain one extra "minimum wage" [monthly check] per year—the "13th month.")

[3]It is true that the first group also includes occupations of substantially lower income than the ones we just mentioned above. These are salesmen, brokers, chauffeurs, etc. It appears that such occupations enjoy flexibilities mentioned above, which is quite advantageous given their income situation.

REFERENCES

Almeida, J.
1974 *Industrialização e Emprego no Brasil*, Rio de Janeiro, IPEA.

Andrews, F. M. and Withey, S. B.
1974 "Developing Measures of Perceived Life Quality: Results from Several National Surveys," in *Social Indicators Research* 1:1-26.

Bauer, R. A. (ed.)
1966 *Social Indicators*, Cambridge: M.I.T. Press.

Blau, Peter, and Otis Dudley Duncan
1967 *The American Occupational Structure*. New York: John Wiley and Sons.

Blaug, M.
1973 *La Educación y el Problema del Empleo en Los Países en Desarollo*, Genebra: Organização Internacional do Trabalho.

Calabi, A., Lima, R., Uthoff, A. and Zaghen, P.
1974 "Dual Labor Market in Latin America: An Empirical Test" cited in Lima, R. e Lima, I., "Educação e o Setor Tradicional Urbano Brasileiro," Projeto de Pesquisa, Universidade de Brasília, D.F.

Castro, C. M. and Souza, A.M.
1974 *Mão de Obra Industrial no Brasil: Mobilidade, Treinamento e Productividade*, Rio de Janeiro, IPEA.

CIEF
1975 "Tabulações Preliminares—Imposto de Renda," Brasília, CIEF, Ministerio da Fazenda.

Conselho de Desenvolvimento
1975 Sistema de Indicadores Sociais: Resolução do Conselho.

ECLA
1973 "Economic Survey of Latin America: 1973," Vol. III, Social Change in Latin America in the Early 1970's, Washington: Economic Commission for Latin America.

FIPE
1975 *Estabelecimento de uma Metodologia para o Estudo da Rotatividade na Grande São Paulo*, São Paulo: Fundação Instituto de Pesquisas Econômicas.

Goodman, D. F., *et al.*
1971 "Os Incentivos Financeiros a Industrialização do

Nordeste e a Escolha de Tecnologias" in *Pesquisa e Planejamento Econômico*, 1:2.

Haller, Archibald O., and Kenneth I. Spenner
1975 "Occupational income differentiation in status attainment." Rural Sociological Society, New York Meetings (August).

Havighurst, R. J.
1957 "Educação, Mobilidade Social e Mudança Social em Quatro Sociedades," *Educação e Ciências Sociais*, 2:6.

IPEA
1975 Diagnóstico Social do Brasil, Brasília: Centro Nacional de Recursos Humanos.

Kelley, J.
1973 "Causal chain models for the socioeconomic career." *American Sociological Review* 38 (August):481-493.

Land, K. C.
1971 "Social Indicators," in Smith, R. B. (ed.), *Social Science Methods*, New York: Free Press.

Langoni, C. G.
1973 *Distribuição de Renda e Desenvolvimento Econômico no Brasil*, Rio de Janeiro: Ed. Expressão e Cultura.

Mincer, J.
1974 *Schooling, Experience, and Earnings.* New York: Columbia University Press.

Moore, W. E. and Sheldon, E. B.
1965 "Monitoring Social Change: A Conceptual and Programmatic Statement," American Statistical Association, Proceedings of the Social Statistics Section.

Müller, Walter, and Karl Ulrich Mayer
1973 *Social Stratification and Career Mobility.* The Hague: Moulton.

O'Brien, F. S.
1969 "The Brazilian Population and Labor Force in 1968," Rio de Janeiro, IPEA.

Pastore, J.
1972 "Mercado de Trabalho e Ensino de 2º Grau," in *Simpósio Sobre Planejamento da Educação*, São Paulo: Fundação Carlos Chagas.

Pastore, J. *et al.*
1973 *Profissionais Especializados no Mercado de Trabalho*, São Paulo: Serie IPE/Monografia, Vol. 2.

Pastore, J., and A. O. Haller
1976 Unpublished path analyses of wage differences in specific occupational families.

Pastore, J., A. O. Haller, and H. Gomez B.
1975 "Wage differentials in São Paulo's labor force." *Industrial Relations* 14 (October):345-357.

Ross, R. M. (ed.)
1967 *Social Goals and Indicators for American Society,* The Annals of the American Academy of Political and Social Sciences.

Salm, C.
1969 "Sub-Emprego Urbano," Rio de Janeiro, IPEA.

Sheldon, E. G. and Freeman, G.W.
1970 "Notes on Social Indicators: Premises and Potential," *Policy Sciences* 1:97-111.

Silva, N. V.
1973 *Posição Social das Ocupações,* Rio de Janeiro, Fundação IBGE.

Smelser, N. J.
1963 *The Sociology of Economic Life,* New Jersey, Prentice Hall, Inc.

Stolzenberg, R. M.
1975 "Occupations, Labor Markets and the Processes of Wage Attainment," *American Sociological Review,* 40:645-665.

Thurow, L. C., and Lucas, R. E. B.
1972 *The American Distribution of Income: A Structural Problem,* Washington: Joint Economic Committee.