INCOMES PROFILE

An Inaugural Lecture delivered at the University of Ibadan
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by

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I

IT is a distinct honour and great privilege to stand up before this learned assembly and deliver an inaugural lecture from the Faculty of the Social Sciences as part of the 1972–73 inaugural lecture series. I do so with all academic humility. This University community, the world of scholarship outside, as well as succeeding generations of academics in this country will be grateful to you Sir, Mr Vice-Chancellor, for reinvigorating the intellectual life of Ibadan by instituting this new series of inaugural lectures right from the first year of your accepting the mantle of leadership.

To different members of this campus, the Faculty of the Social Sciences connotes different meanings and conjures up different images. Many probably think that both its students and staff alike are restless characters with a high propensity for upsetting the apple cart and causing controversies. Some are worried about the Faculty's growing radical views of Nigerian national life. Yet others feel that we are so irascible and live outside the main stream of the hallowed social gentility and aura of graceful academic withdrawal, that we ought to be made to constitute a separate University commune of our own several miles away from decent men of the silent majority. But I think most people would agree that in our thirteen years of existence as a Faculty, we are already justifying the hope of our founders as a catalyst of disciplined ideas as basis for positive social action. We are young as well as small in relation to many other Faculties of the University, but our academic presence, intellectual enthusiasm, highly integrated administrative structure and our vigorous pursuit of progressive policies have brought us greater attention—if not always better recognition—than our age or size would suggest.

Actually, although the Faculty was formally constituted as a separate administrative entity in the 1960–61 session, some of the disciplines of what is the Faculty today had in fact been present in the University for some years before that event. The Department of Economics itself was started two years earlier than the Faculty, and the first Professor of Economics, Professor Ronald Barback had in fact been appointed still two further years back in 1956. Even before that, economic research had been institutionalized at Ibadan almost a decade earlier than economic teaching, with the establishment in 1950 of the West African Institute of Social and Economic Research under Professor Hamilton Whyte. And right from the inception of the University College in 1948, Geography had been one of the foundation disciplines established in the Division of Humanities. Nevertheless, the systematic development of the Social Sciences as an integrated discipline was a product of the 1960s; and it is more than an historical accident or mere political symbolism that the Faculty was inaugurated on the eve of Nigeria's attainment of political independence. Its growth as well as its growing pains have also paralleled those of the nation as a whole over the last thirteen years. In spite of the dislocating impact of civil war, the Faculty has now grown from a nucleus of one department with a handful of students to four fully-fledged departments which have added no less than one thousand graduates to the nation's stock of high-level manpower. Needless to mention the many socially-relevant research papers and national public policy participation by various Faculty staff.

For these creditable achievements, Mr Vice-Chancellor, I would wish to pay tribute and express our sincere appreciation to those scholars who in various ways have helped lay the strong foundation on which the Faculty is now building. Mention has been made of the pioneering works of Professor Hamilton Whyte on the research side. Professor Ronald Barback later brought together both the research and teaching sides while he was simultaneously serving as Director of the Nigerian Institute of Social and Economic Research, Professor and Head of the Department of Economics and Dean of the Faculty of Economics and Social Studies. Professor Kenneth Dike, the first Vice-Chancellor of Ibadan University, although a historian, started his academic career under the old West African Institute of Social and Economic Research. During the Chair's interregnum, and under generous assistance from the

Rockefeller Foundation, the Department of Economics came under the temporary but stimulating leadership of Professor Morton Baratz from Bryn Mawr College and Professor Diran Bodenhorn from Iowa State University. I would also wish to recall silently the reverred memory of our two past colleagues, Mr William Bispham who was for some time Acting Director of the Nigerian Institute of Social and Economic Research, later senior colleague in the Department, and Professor Obasanmi Olakanpo who started with us but died last year too young and in the peak of his brilliance as the Head of Department in our sister institution of Lagos University. The Economics Department has for long been blessed with good, capable and devoted staff. Apart from contributing significantly to the staffing of other Nigerian academic institutions, three of these institutions are indeed being headed today by three distinguished colleagues from the Department, namely the Nigerian Institute of Social and Economic Research (Professor Adebola Onitiri), Economics Department at the University of Nigeria, Nsukka (Professor Chukwuka Okonjo) and Economics Department at the Ahmadu Bello University (Professor Ranjit Bhambri). On the other hand, the Department's development has also benefitted directly and indirectly from the guidance and support of our preceding generation of Nigerian economists, notably among whom must be mentioned Professor H. A. Oluwasanmi (formerly Head of Agricultural Economics in this University and now Vice-Chancellor of Ife University), Professor Ayo Ogunsheye (formerly Head of Adult Education in this University and now in Private Industry) and the late Chief I. O. Dina (one of the foundation academic staff of this University and distinguished public servant).

Lastly, Mr Vice-Chancellor, you would permit me to pay tribute to a political figure in this country in the person of Chief Obafemi Awolowo. It is uncharacteristic of me to compliment easily practising politicians, and Chief Awolowo himself might be surprised that I am doing so, having had so many points of disagreement with him in a long process of debating social issues. But on this occasion, I would gladly do so as a matter of national historical honour and professional gratitude. Presumably, many people in this country may not know or may have forgotten it.

It is a fact that the bulk of my generation of Nigerian economists in the Universities, in the Civil Service and in Industry owe their higher education to the foresight of Chief Awolowo's government in the Western Region when in 1952, it awarded the first set of an unprecedented level of two hundred scholarships for various University degrees. That act of singular faith in the youth of this nation during those colonial days of administrative experimentation marked a watershed in the historical development of this country's high-level manpower.

It is important to recall this event, not only because it does delayed justice in giving due credit to the quality of political leadership and the readiness at that time on the part of everyone to accept the challenge of national development, but also because it was the dawn of serious economic thinking and economic training in this country. I recall that only a year previous to that historic award of what was then a large number of government scholarships, I enquired by letter from the Registrar of this University (then a University College) whether there were any facilities for the study of Economics and related disciplines. The answer came promptly to say that not only was such a subject not then in existence at Ibadan but that the College was not even contemplating one in its development programme for the foreseeable future. That was in 1951–52. Of course, the Registrar was right, because in the Courses specialization recommended by the Elliot Commission on Higher Education in the Colonies, Achimota College (now University of Ghana at Legon) was expected to run Social Sciences on behalf of English-speaking West Africa. But the pressure to start Economics in Nigeria was on almost as soon as Ibadan opened its doors, and the nationalist ferment of the time gave it further impetus. Even by 1952, the pressure had become so intensified that the Visitation Report that year recommended early consideration for the teaching of some Social Science subjects. I can still recall how elated my Nigerian colleagues and I were at the Hull University in our final undergraduate year when news came to us that a Professor of Economics had at last been appointed for Ibadan to start the subject.

Apart from this emotional affinity to the development of the discipline at Ibadan, I have had the unusual privilege of being able to watch it grow over the last thirteen years; my joining the Department not only coinciding with the new spirit of and hopes from national independence, but also with the creation of a separate Social Sciences Faculty. I also had the unique privilege of being appointed at an early stage, that is by 1966, to the Professorship and Chair of Economics in succession to the two Visiting Professors who had followed the original incumbent of the post. That it has taken so long since then to give this inaugural lecture is due more to the trying times which the nation and this University had been facing for the past seven years, than to any strong reasons internal to the Department or to this humble occupier of the Chair. Indeed, as we shall see in due course, the empirical work that provides the analytical prop for this lecture had been undertaken during the long vacation period of 1967, then the data analysed and the results kept in store just for whenever the occasion becomes propitious. I am indeed gratified that today is such occasion, and that the passage of time has only enhanced the significance of the field exercise in terms of some of the grave economic issues facing this nation today.

II

Before looking at some of the more specific profiles of Nigeria's income and wealth, however, it would be useful as appreciation background to sketch the general nature of problems of the development process in the Tropical African setting, which the academic economist is trying to grapple with, understand and control. In this connection, it is perhaps necessary to emphasize that large parts of the Social Sciences are culture-bound areas of knowledge. This means that whatever analytical expertise we might come back home with, those of us who had been trained abroad and especially so in the very metropolitan country of the colonial masters, literally first have to unlearn many of the institutional and policy dimensions of our training, if we are to see the woods of the Tropical African social scene for the trees. Yet this process of intellectual decolonization is probably the most arduous task for academic self identity in such culture-bound disciplines as Economics.

It is of course true that in spite of national differences in policy application, there remains a fair degree of universality about the general validity of economic principles. Irrespective of who, where and when, all men are economic animals, subject to basic economic laws. From Robinson Crusoe to the entire world as one big economic community, and right from the very dawn of man, Economics has been the centre-piece of material existence. Even the spiritual and aesthetic sides of life are themselves substantially a function of economic organization. The world as we know it today would be a different place without the contributions that Economic Science has made to man's understanding of and control over the natural forces. Sceptics might say that the world would be a better place without economists! But that is a proposition incapable of scientific testing, and would therefore constitute a futile argument. What we can assert positively is that every aspect of man's behaviour and of social conduct has both an economic underpinning as well as potential economic repercussions, even when such a relationship is strenuously denied by those who think that materialist preoccupation is degrading of man's noble values. It was Lord Keynes, the father of modern Macro-economics who had aptly commented that: "The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist".

It is in the context of this all-pervading materialism that Robert Heilebroner described the great economists as worldly philosophers in their seeking to embrace in a philosophical framework, systematic explanation of the most worldly of man's activities, namely his unrelenting drive for wealth. To academic purists, it may not be the most elegant kind of philosophy, considering especially the increasing preoccupation of Economics with positivism and the relegation of normative issues to other disciplines. For the scholar of the African economic scene, however, such dichotomy between the positive and normative dimensions of the discipline is not only unreal but potentially dangerous for policy formation. Fortunately, neither the dividing line nor the preoccupation has gone far with African economists. Also, the professional disservice of such polarization is now beginning to be realized and averted elsewhere, as witnessed in the recent movement of Radical Economics or the New Political Economy that is starting to gather force in Western Europe and North America.

Every school of economic thought is a product of the historical circumstances preceding and prevailing in the social environment in which it evolves. It is also likely to reflect the dominant philosophical outlook of its period, the ethical values, the social morality and the political-administrative institutions that define the structure of contemporary social relations. The first task of the student of the African economy is to discover the historical-social setting within the perspective of world development, as his analytical point of departure. For example, the long process and exploitative nature of colonial experience must be articulated before prescribing realistic measures for economic decolonization and relocation of the engines of social change. Inspiration must be sought from the basic Humanist philosophy of the traditional African society in order to evolve meaningful normative propositions to guide national objectives and development priorities. To grapple with the dynamics of economic growth under conditions of underdevelopment, it must be realized that social and political considerations play far more critical roles. There are even significant differences in resource balance and development potential between Tropical Africa on the one hand and the underdeveloped countries of Asia and Latin America on the other, such that would render invalid a simplistic and direct application of important development theories erected outside this part of the world.

Two implications of this analytical environment are of immediate concern to the student of the African economy. The first is that Economics in our context is inextricably bound up with the other Social Sciences more strongly than elsewhere. To be relevant, the African development economist must simultaneously be a social philosopher, political analyst, sociologist, social psychologist, geographer, statistician, moralist and even possibly a star-gazer! This means that he cannot afford the intellectual comfort of a pure economist in the neo-classical or post-Keynesian sense of the term. In other words, he is forced to go back to the academically interdependent world of the classical economists, and especially to the breadth of vision reflected in the works of John Stuart Mill, David Ricardo and Karl Marx. The second implication is an existing vacuum of knowledge of theoretical models which can be at once relevant to, and realistic for, Tropical African economies. Theories developed outside do not fit our conditions in important cases, and more satisfactory theories for underpinning objective policy decisions have not yet been fully articulated as substitutes. While the economist is often lost without a strong corpus of tested theories, the African economist is under severe pressure to provide well-reasoned answers to persistent social problems. Since the society cannot wait while he patiently fashions out new theories, what is the African economist then to do in this circumstance without losing his scientific objectivity and academic integrity? The tentative answer we have found in Ibadan is that he should move more towards economic design, away from pure development theorizing, and regard his discipline as a delicate blend of Arts and Science.

In its basic methodology, Economics is a Science by its strict process of logical deduction from a set of clearly-defined terms and behavioural assumptions. But, unlike the mechanical sciences, the inherent errors are so wide that its tenets cannot have any high degree of predictability. Given its probabilistic nature and the varieties of form its resulting values can take, economic design is more akin to the biological or life sciences. Here, what counts is the form in which the different elements are put together and the infinite ways in which they can interact. What the economist needs in the African context is just enough scientific and impersonal rules of verification, falsification and affirmation to give him a reasonable degree of confidence in an objective analytical system that can simultaneously explain an historical situation, analyse the present and guide the not-too-distant future. It is perhaps ironic that the economic designer, claiming less scientific property of predictability, should thus be able to take a bolder forward-looking stance by not only describing reality through abstraction, but in fact shaping that reality and engineering social change.

Taking such an approach to the task of understanding and possibly mastering the Nigerian development process, a number of general statements can be reasonably confidently made as basis both for present action programme and further research probes. First, a precondition for more rapid economic growth and healthier group relations is a determined effective decolonization of the domestic economy. This involves a gradual weakening of external trade as the prime mover of development, and its replacement by internally-induced growth points. It involves aggressive indigenization of the ownership, control and management of the nations's productive forces for national self-reliance. It involves the dominance of a well-organized, disciplined and honestly-led public sector that mobilizes all resources for rational planned development. Since indigenization *per se* neither guarantees social control nor establishes a greater sense of social responsibility, the issue of the character, motivation and integrity of the class which controls the state apparatus from time to time becomes crucial. As public ownership itself does not ensure social ownership, the legitimacy of government as reflected in the behaviour of the political-military class and the conduct of the bureaucracy becomes of supreme interest to the economist, if development is to be of the people for the people, and not by the people just for the benefit of a few.

Second, since the qualifications and conditions mentioned above are distinguished by their absence in the observed system of development administration, and since both the legitimate aspirations of the people and the feasible development potential are well ahead of realized national development performance, there is a high degree of economic discontent and growing social alienation. Sometimes the group disaffection is manifested in overt social protest. But in the political constraints of a military regime, the slow and silent anger of a people is perhaps more difficult to appreciate, but cumulatively more ruinous for social stability. Here, the duty of the economist to the nation is not only to analyse and warn, but to design the kind of action programme and create the kind of social attitudes if not of public policies, which will do the job of destroying from inside the existing system of socio-economic alienation.

Third, there are the series of internal contradictions which arise not necessarily from the dynamics of change, but from various defects of national economic organization and management. Ultimately, these avoidable contradictions have a common source in the weak or defective ideological appreciation of the real issues in economic development and social change. They are contradictions in the dialectical sense, because they arise primarily from the particular mode of organizing production relations. Cases after cases in Economic History have shown that where the productive forces of a national economy are propelled by the motivation of maximizing private profit, the dominant business groups seize the apparatus of State to manipulate it to their own advantage and thereby create a process of increasing social stratification. With time, this not only leads to a pattern of income distribution that becomes more skewed, but generates disequiliberating disturbances between consumption and investment such that might undermine a steady growth of the economy. A system of economic decolonization by private industrial capitalism, even of the indegenized variety, is inherently incapable of coping with the necessary social pressures for a full mobilization of national resources for development.

This leads to the fourth and final general statement, namely the inefficacy of planned development. For most of the Tropical African countries, economic planning over the last two decades has been little more than a tale of false hope. The central problem of mass poverty persists alongside with underutilized resources. Empty fertile land is paralleled by the existence of hungry people. Rural decay, urban slums and increasing unemployment are closely associated with higher capital formation. Even the apparent boom conditions which are generated and sustained here and again, do little to promote a greater sense of economic security. Quantitative growth has often been accompanied by qualitative decline of the physical environment, social values, group relations and personal welfare.

What underlines all these considerations is the general existence of structural distortions in the development process. If this is true, then the task of the African economist would begin to crystallize. Distortions are thus to be defined, measured, explained and possibly removed. The conceptual problems involved are unfortunately easier to handle than the empirical task of quantification and prescription. And since in Development Economics, everything depends on everything else, there is the real danger of arguing only in circles, without being able to settle on concrete leverages of economic policy. There are, in principle, several ways of approaching the study of structural distortions. If all the interactions and interdependencies are carefully considered in the analysis, then each alternative approach should eventually lead to more or less similar conclusions. In their different styles and using a variety of sources and methods as may be constrained by the availability of meaningful data, staff research in the Department in recent years has been focussing attention on the different manifestations of persistent and growing distortions in Nigeria's development process. In the next few pages, we present a summary of one such case study which was conducted in 1967 and a follow-up of which is scheduled to start within the next few months.

III

One way of looking at the development process of a national economy is to see it as a series of income thresholds which are to be crossed at given rates, defined both by available natural endowments and the degree of effective social mobilization which the nation can muster and sustain. In the short and medium-runs, the available resources cannot be significantly increased. Therefore, prescriptive measures for accelerating the rate of development must be sought in the way the nation's productive forces are organized. If the people believe in the business-political-military-bureaucratic leadership and perceive their interests as consistent with the interest of that leadership, then for any given level of natural resources, a given set of income thresholds would be crossed in a shorter time than otherwise.

Now, although the development economist tends to see an income threshold in terms of aggregative national accounting (absolute levels, *per capita* values and composition by factor shares), the people themselves both as productive agents and as consumers conceive of the threshold in terms of their personal real incomes. Furthermore, they look at these real incomes not only in absolute terms of what they earn now in relation to the prices they pay for what they purchase, but more importantly in relative terms both in respect of what they earned in the past and what other households are earning currently. A worker may then decide to work more and earn more if he considers his real income not in equilibrium in relation to his earning capacity. Or, he may decide to improve on that potential capacity by going through a learning process to enhance his market value. Or, he may seek to protect his standard of living in relating his current earnings/prices map to his past earnings/prices map. Or, he may join others in agitating for what he considers to be a more equitable, and therefore more socially desirable, distribution of the fruits of national production. Or, he may decide to do all these in varying combinations.

National accounting study provides the economist with a necessary bird's eye-view of the national economy in motion, bringing to a meaningful order the billions of individual economic transactions going on in any given period. But it misses much of value in the behaviour of households as the basic units of economic decision-making. National accounting is also an exercise of great immensity not to be contemplated these days by individual scholars without substantial, institutional and governmental support. Yet, to ask people of this country directly about their personal incomes is not only courting great risks to the mind if not to the limbs of the researcher, the results are also not likely to cover many of the dynamic aspects of structural distortions in which we are interested. One way of resolving this dilemma was to combine such households income enquiry with the data on their holding of durable consumer goods. And this was what we attempted in a major field work during the long vacation of 1967.

There is ample evidence in Economic History that industrialization plays a key role in the process of transformation from conditions of underdevelopment, and that the wide consumption and eventual manufacturing of durable consumer goods represent critical points of structural break in the evolution of an industrial-based economy. For an underdeveloped economy, the relatively high unit price of consumer durables means that only small purchases of them can be made, given the implicit low *per capita* income levels. As the development process gets going, we can then envision the hitherto empty cells of consumer durables filling up in the purchases stream. At certain critical levels, their domestic manufacture becomes economically feasible partly for reasons of import substitution and partly from induced use of domestic natural resources and technological skills.

There are a number of other properties of durable consumer goods that make them of great fascination for economic analysis. Their high degree of indivisibility means that purchases are made more infrequently and more deliberately, the households decision process spreading over quite a fairly long time. Utility in consumer durables is also derived from owning rather than in consuming. The services accruing from the goods are equated with the estimated depreciation over any given period, thus placing expenditure on them on the same plane of analysis as investment expenditure. Indeed, this property can be generalized, to the extent that if the period of analysis is made infinitesimally small, then all commodities become durable, and the concept of stock from which utility flows becomes widely acceptable over the whole field of income and expenditure studies. Since the consumer durables can also be stored and sold, they generate supplementary second-hand markets; and households can thus overcome temporary handicaps in their incomes by disposing of part of their stock of durables to maintain current consumption levels. This is so in varying degrees of market ease for real consumer durables (owner-occupied houses, cars, electrical equipment) as well as for financial assets (government securities, stocks and shares). Semi-durables such as clothing, footwear and accessories, may not however enjoy the same degree of marketability.

It should then be easy to appreciate why a study of the order or sequence in which consumer durables are acquired by representative households is of great importance not only to market research organizations but to students of development analysis and policy design. Close studies of such goods provide a ready link among different segments of economic research: theories of household income-saving-expenditure behaviour, decision-making process with built-in dynamics from time lags, social psychological factors in consumer resistance and sales strategy, depreciation and replacement costs under conditions of technological change, inter-personal and group comparisons of economic welfare, income and price elasticities of demand, probable areas of future industrial investment activity, possibility of complementarity or substitutability of consumer durable purchases, and the probable secular or cyclical trend of the general level of economic activity.

Our 1967 field survey was not designed to answer all these questions, and it is doubtful if any single survey can encompass the entire field of all possible research issues that can flow from a study of consumer durables. Our survey was both more limited in objective and more exploratory in nature. Random sampling of households was not possible, but attempt was made to evolve fairly systematic representation of respondents from different parts of the country, except for the three Eastern States which were excluded on the practical ground of the then ensuing civil war. In all, about 2,000 questionnaires were collected, but after editing, only 1,635 were found worthy of acceptance for further statistical analysis. Even for these admitted responses, we discovered a number of manifest biases in the composition by functional sectors and geographical location. Professor Brunon Gorecki, then a staff colleague in the Department, who contributed decisively to the complex and arduous computerized analysis of the data, did much to correct some of the more serious biases by using loading factors from indices derived from the 1963 Population Census.

The method of analysis adopted itself underscores the point we made earlier about the conceptual similarity between economics and the life sciences. It originated from D. J. Finney's probit analysis as applied to the problems of Biology. The central idea consists of three components, namely a subject, a stimulus and the response. If, for example, an insect is subjected to the stimulus of a given concentration of drug, its response may take the form of death, but such that if it lives the subject is said not to respond to the stimulus. Thus we have here an all-or-nothing response system. As Finney put it, there exists for any subject a certain critical tolerance level of stimulus intensity below which the subject does not respond but above which it does. The objective of research is to discover such thresholds of tolerance.

Probit analysis had been digested and reinterpreted to handle research problems in many other areas outside Biology. J. A. Aitchison and A. C. Brown had, about fifteen years ago, applied the technique to the study of demand for consumer goods, using the lognormal distribution. Empirical studies since then show that some observed data fit the lognormal distribution quite well, thus confirming that reactions of a subject are not simply proportional to the absolute levels of the stimulus but rather to its relative increment. If the method is to be valid for our case, we should expect then that the distribution of tolerance levels in the incidence of ownership of particular durable consumer goods would be a logarithmic function of the level of household incomes. Such an income profile would also give us the demand threshold and the point of development structural break for the particular consumer durable concerned. The sample households are the subject, the stimulus is provided by the degees of household incomes and the response is the resulting observed probability density function of owning a particular durable consumer good. The computational results are summarized in Tables 1 to 12 and Figures 1 to 13.

TABLE 1

Sample Distribution by Area and Occupation

	City	Rural Town	Village	Total	Percentage
Agriculture, Forestry, Fishing	37	66	878	981	60.00
Craft	26	56	124	206	12.61
Trade	31	105	135	271	16.57
Clerical	3	12	6	21	1.28
Administrative, Professional, Technical	4	12	28	44	2.69
Personal Service	8	12	67	87	5.32
Transport	7	9	9	25	1.53
Total	116	272	1247	1635	100.0
Percentage	7.09	16.64	76.27	100.0	

TABLE 2

Sample Distribution by Area and Education

	City	Rural Town	Village	Total	Percentage
Illiterate	48	136	907	1091	66.73
Primary	51	108	268	427	26.12
Secondary	15	25	70	110	6.72
University	2	3	2	7	.43
Total	116	272	1247	1635	100.0

TABLE 3

Sample Distribution by Occupation and Education

	Illiterate	*Primary*	*Secondary*	*University*	*Total*
Agriculture, Forestry, Fishing	821	147	13	–	981
Craft	97	97	12	–	206
Trade	123	132	16	–	271
Clerical	–	6	15	–	21
Administrative, Professional, Technical	5	12	20	7	44
Personal Service	33	21	33	–	87
Transport	12	12	1	–	25
Total	1091	427	110	7	1635

TABLE 4

Distribution of Average Size of Households by Occupation

	No. of People
Agriculture, Forestry, Fishing	8.65
Craft	5.91
Trade	7.31
Clerical	6.14
Administrative, Professional, Technical	6.55
Personal Service	5.23
Transport	8.36
Total	7.81

TABLE 5

Distribution of Average Size of Households by Education

	No. of People
Illiterate	8.43
Primary	6.57
Secondary	6.56
University	6.29
Total	7.81

TABLE 6

Average Age of Heads of Households by Education

	Age (Years)
Illiterate	46.20
Primary	40.27
Secondary	37.86
University	38.14
Total	44.06

TABLE 7

Distribution by Occupation and Source of Income

	Wage earner	Self-employed	Total	Wage Earner Ratio
Agriculture, Forestry, Fishing	27	954	981	2.75
Craft	23	183	206	11.17
Trade	16	255	271	5.90
Clerical	20	1	21	95.24
Administrative, Professional, Technical	37	7	44	84.09
Personal Service	13	74	87	14.94
Transport	4	21	25	16.00
Total	140	1495	1635	8.56

TABLE 8

Distribution by Education and Source of Income

	Wage earner	Self employed	Total	Wage Earner Ratio
Illiterate	21	1070	1091	1.96
Primary	41	386	427	9.60
Secondary	71	39	110	64.55
University	7	–	7	100.00
Total	140	1495	1635	8.56

TABLE 9

Distribution of Average Income by Occupation

	Income (N£)
Agriculture, Forestry, Fishing	127.89
Craft	126.96
Trade	241.73
Clerical	340.71
Administrative, Professional, Technical	468.66
Personal Service	233.56
Transport	767.84
Total	174.01

TABLE 10

Distribution of Average Income by Education

	Income (N£)
Illiterate	129.51
Primary	219.57
Secondary	351.37
University	1543.39
Total	174.01

TABLE 11

Income Distribution

Class Intervals (N£)	FREQUENCY Illiterate	Primary	Secondary	University	Observed Totals	Expected Values
0– 50	262	40	–	–	302	207
50– 100	437	191	–	–	628	714
100– 150	168	65	19	–	252	223
150– 200	77	40	29	–	146	128
200– 250	41	23	10	–	74	88
250– 300	35	12	15	–	62	60
300– 350	28	10	2	–	40	44
350– 400	14	4	4	–	22	32
400– 450	1	3	2	–	6	24
450– 500	2	14	4	–	20	19
500– 600	2	5	14	1	22	27
600– 700	17	3	2	–	22	17
700– 800	–	3	2	1	6	12
800– 900	1	1	2	–	4	9
900–1000	2	1	–	1	4	6
1000–1250	2	1	3	1	7	10
1250–1500	1	2	–	1	4	5
1500–1750	–	–	–	–	–	3
1750–2000	1	2	1	1	5	2
2000–3000	–	6	1	1	8	2
3000–4000	–	1	–	–	1	3
Total	1,091	427	110	7	1,635	
Percentage	66.73	26.12	6.72	.43		

TABLE 12

Comparison of Total and High Incomes Structure

	Illiterate	*Primary*	*Secondary*	*University*	*Total*
Percentage of total incomes Range N£0–4000	66.73	26.12	6.72	.43	100
Percentage of high incomes Range N£1000–4000	16	48	20	16	100

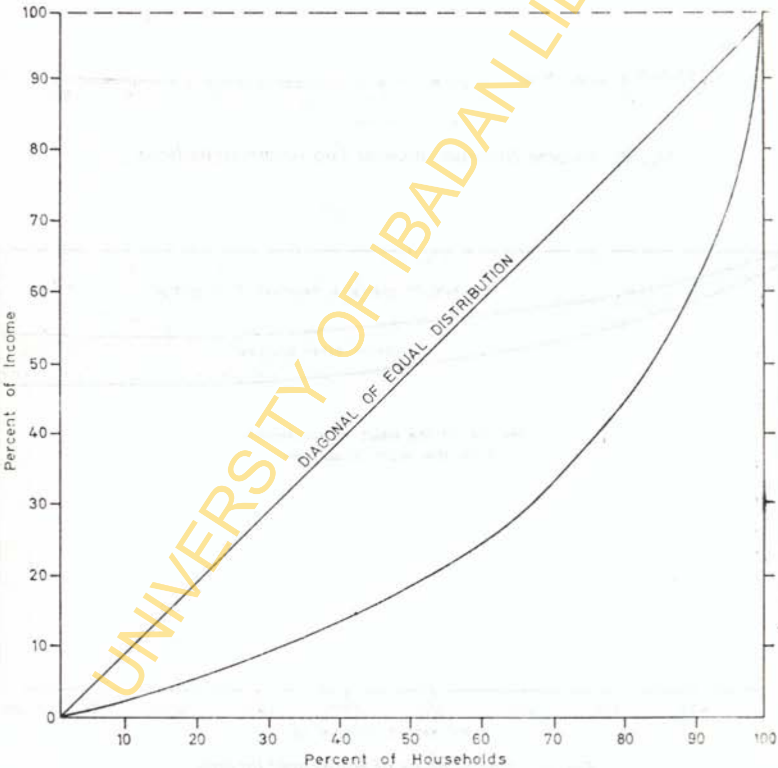

Fig. 1. Lorentz Curve of Income Distribution.
Lorentz index, L = · 5806

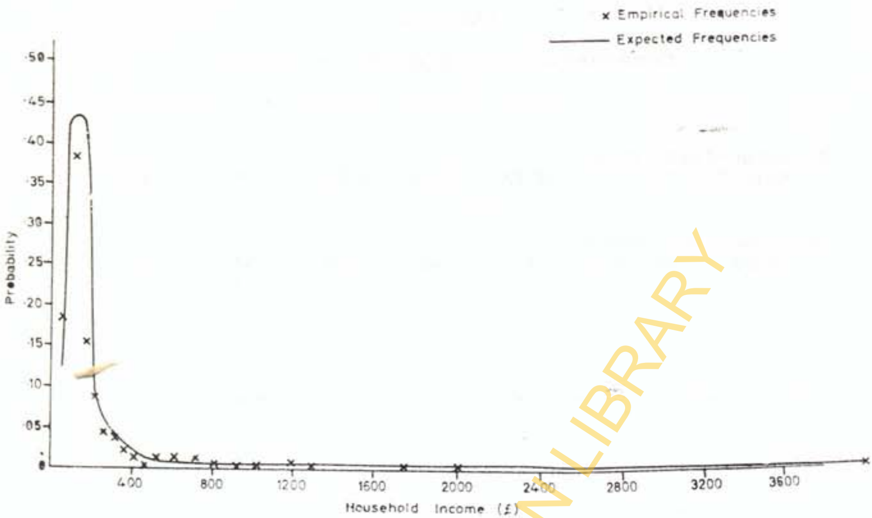

Fig. 2. Income Distribution under Log-normal Hypothesis

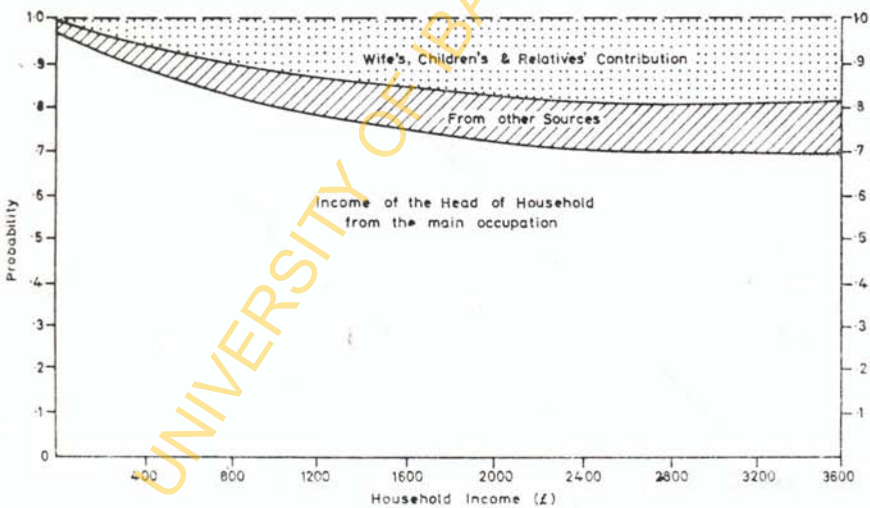

Fig. 3. Components of Household Income

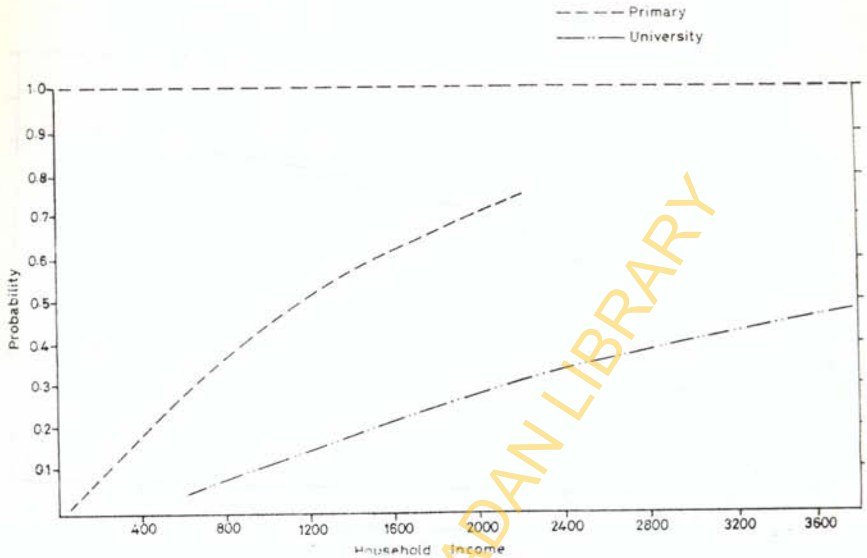

Fig. 4. Net Worth

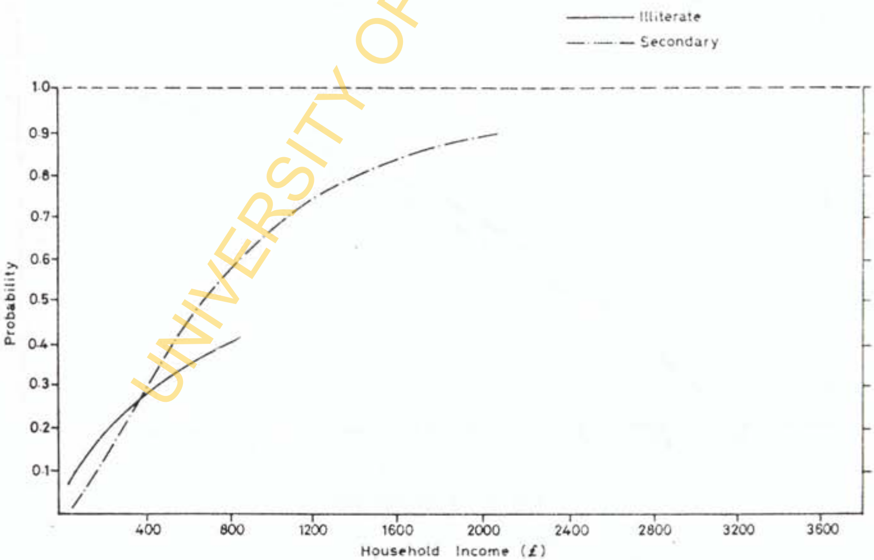

Fig. 5. Major Consumer Durables

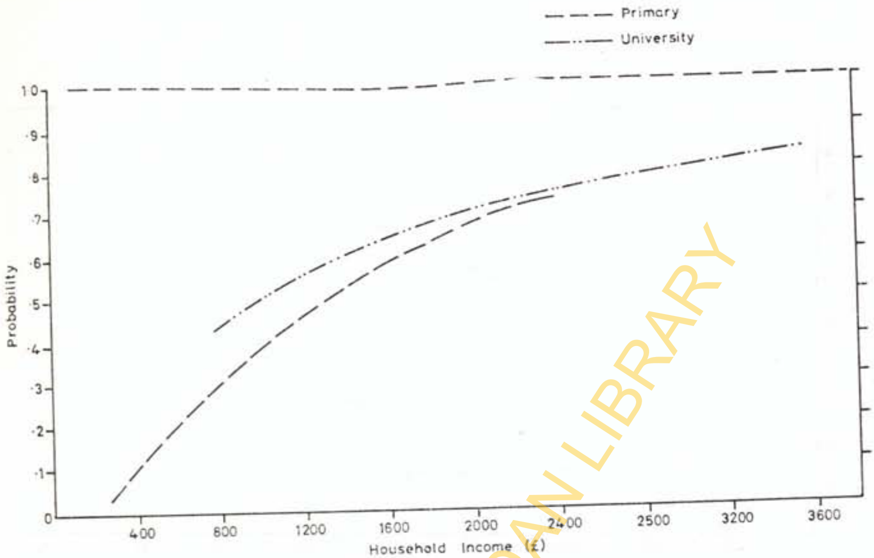

Fig. 6. Refrigerator

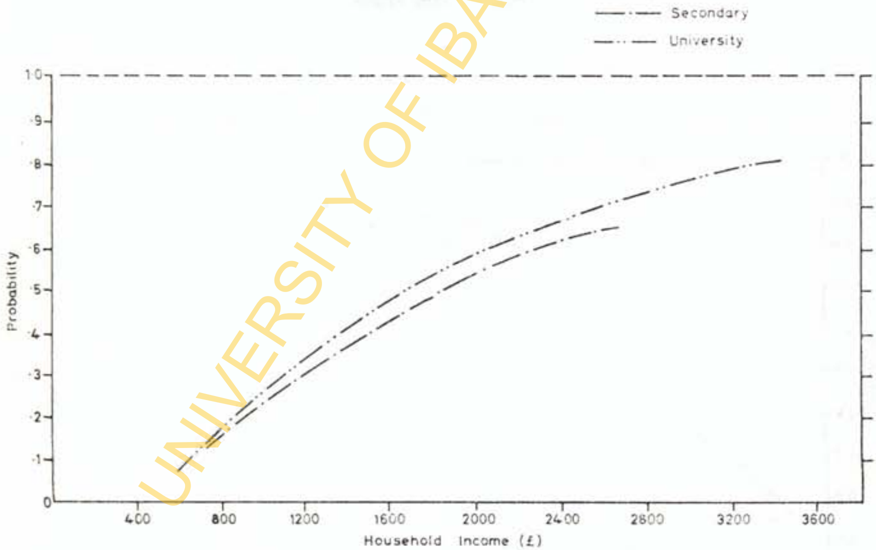

Fig. 7. Television Set

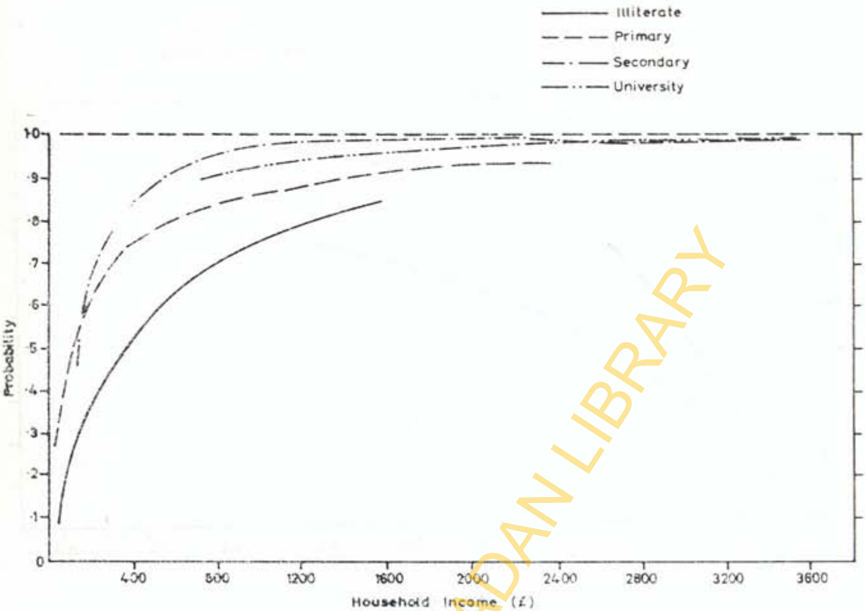

Fig. 8. Radio

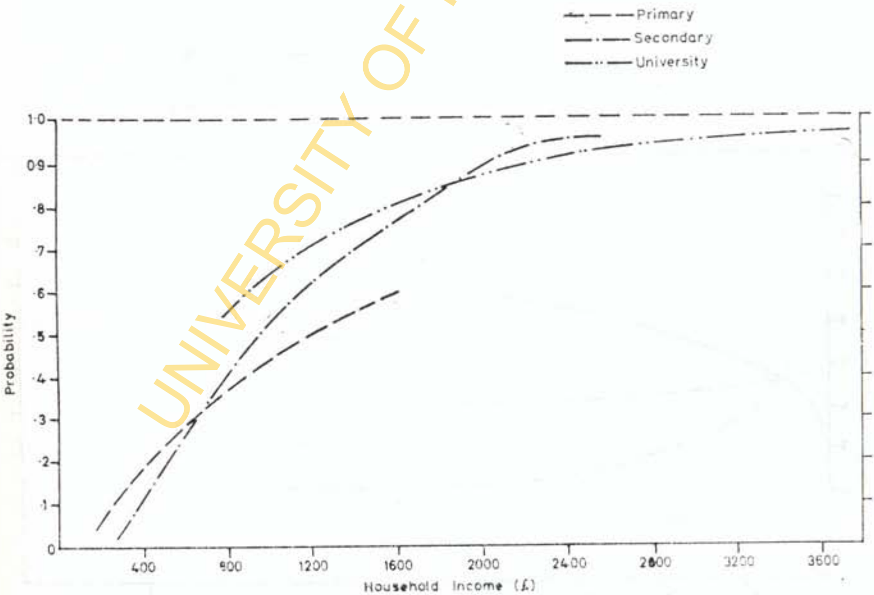

Fig. 9. Car

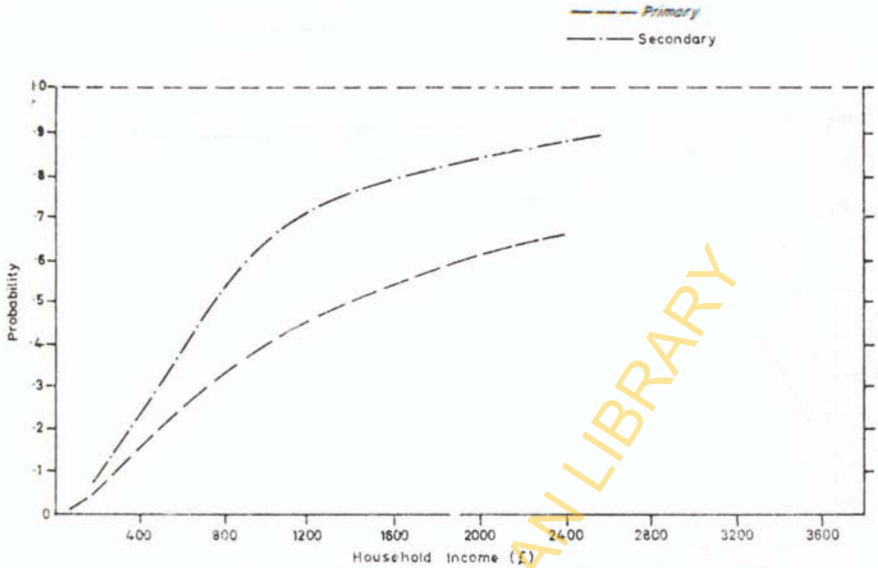

Fig. 10. Motorcycle

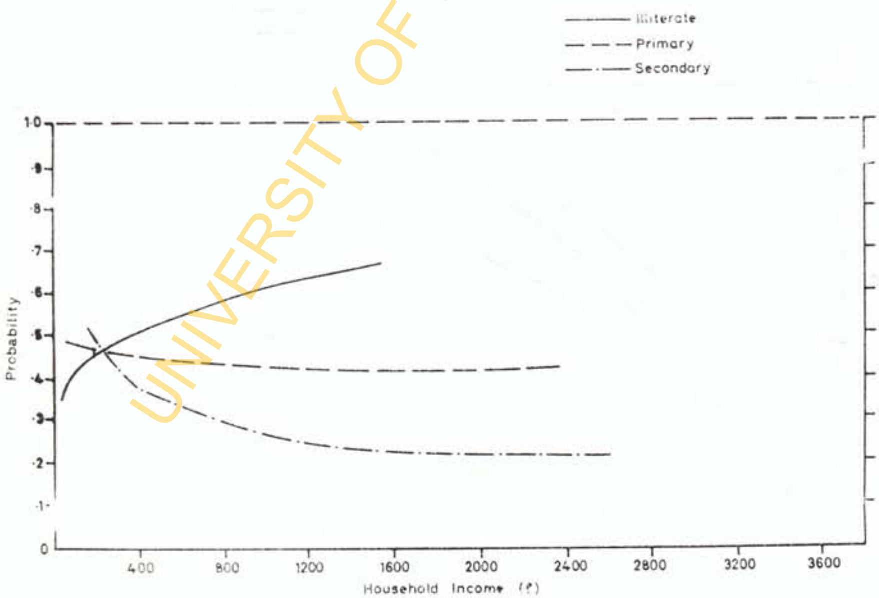

Fig. 11. Bicycle

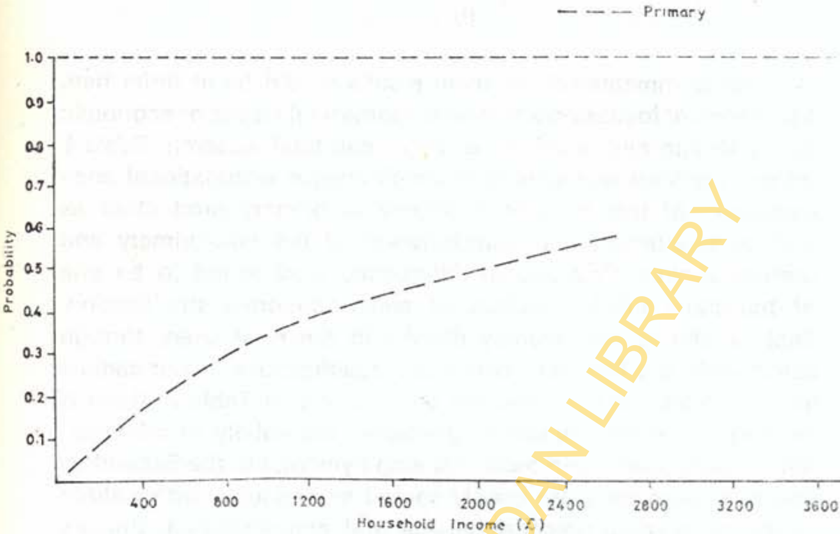

Fig. 12. Furniture

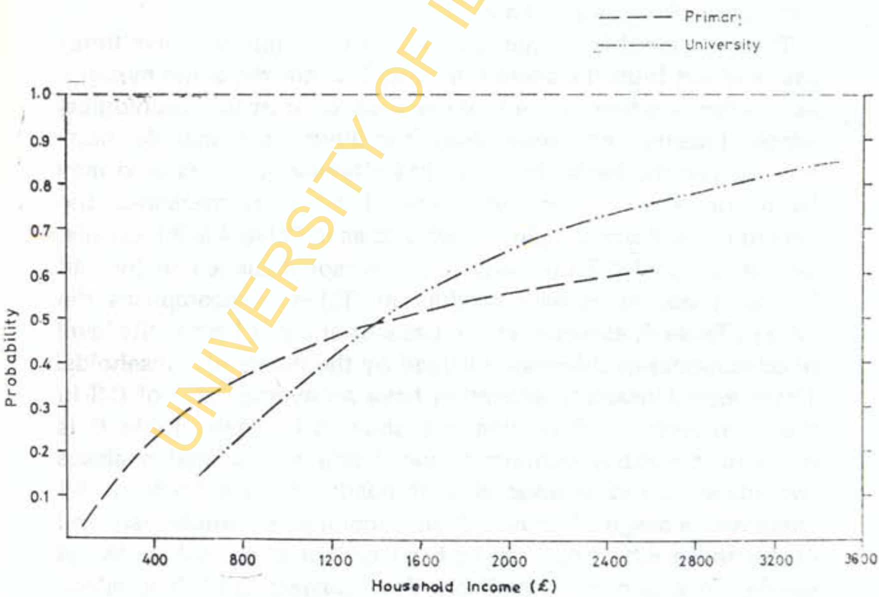

Fig. 13. Kitchen Equipment

IV

A few comments on the main results would be in order here as a means of focussing attention on some vital issues of economic policy design and problems of economic field research. Table 1 brings out from our sample the well-known occupational concentration of the Nigerian economy in primary production as well as the urban-rural concentration of the non-primary and primary sectors. Educational differences were found to be one of the most reliable indices of socio-economic stratification. Table 2 shows the illiteracy density in the rural areas, though surprisingly the few with University qualifications in our sample exhibit no particular urban-rural bias. Clearly in Table 3, there is no doubt that the University graduates are solidly in administrative, professional and technical employment; but the Secondary school leavers are more evenly spread among jobs, with a slight tendency towards personal service and administration. Primary school leavers are divided mainly between trade and primary production, and illiterates are unquestionably concentrated in agriculture, forestry and fishing.

The household is defined as a group of people who live together and eat from the same pot. It is thus not the same measure as the family either in the biological sense or in the sociological sense, because not only does the household include non-members of the family but it excludes family members who may be eating, sleeping or living elsewhere. Thus measured, the average size of our sample households as in Table 4 is 7.8 people, with a range of 5.2 for those in the personal service sector and 8.7 for those in primary production. Table 5 recomposes the data in Table 4, except that the basis of analysis here is the level of educational qualification claimed by the heads of households. Those with University education have an average size of 6.3 in their households while Illiterates show 8.4. Again Table 6 is revealing for many economic, social and educational analyses by indicating the average age of heads of households as 44 years with a range of about 38 for Secondary school leavers and 46 for those who have not had the benefit of schooling. Wage employment, according to Table 7 is heaviest in clerical, administrative, professional and technical jobs and least in agriculture, forestry and fishing. Similarly, only 2 per cent of Illiterates are in any form of wage employment while, according to Table 8, all those with University education in our sample households are in wage employment, none of them being self-employed. Perhaps by the time we conduct our follow-up field study later in the year, we shall find some positive responses of self-employment from those heads of households with University training. The recent posture of Government to the Universities may, for example, well spur some academics to find alternative outlets for their scholastic inclination, protect their families and probably also ironically better enable them to promote the national interest.

The remaining tables deal with the distribution of income among households. From Table 9, we see that the average level of household income was £174, with a range of about £127 from crafts and primary production to £768 from transportation. These are well above what the national income figures would suggest. Surprisingly, incomes from the transport are significantly higher than incomes from administrative, professional and technical occupations. In Table 10, the representative household with an Illiterate head earned about £130, whereas its counterpart headed by a University graduate earned £1,543, or twelve times as much. When further allowance is made for the larger size of the former household, then the *per capita* consumption level in the Illiterate household is even more substantially less than in the latter. This income inequality is demonstrated in Figure 1 in the usual form of Lorentz Curve and shows a Lorentz Index of 0.5806. Alternatively, the picture of inequality is also dramatically illustrated under the lognormal hypothesis in Figure 2, showing a distribution function clearly skewed to the left. As long as there are differences in earning capacities of households, there can never of course be anything like absolute income equality among households. The real point of analytical interest to the economist is the degree of existing inequality, how rationally it is explained, and how it is changing with time. There are reasons to suspect that since our survey, the degree of income inequality may have indeed been rising in the Nigerian economy.

The relative household incomes measured and presented are of course aggregative in nature and their sociological interpretation should not be stretched too far. They say, for example, nothing of taxation and other obligatory contributions that should be netted off to get relative levels of household disposable incomes. Figure 3 also provides a little explanation for the observed differences in the aggregate household incomes. On the average, about 95 per cent of our sample household income comes from the main occupational source of the head of household, another 3 per cent comes from other sources which he also generates and only 2 per cent consists of supplementary incomes added by his wife or wives, children and relatives. But of greater interest is the way in which the latter two components of households' incomes increase their relative shares as we move from low-income to high-income households. For example, the share of income from non-main occupational source by the head increases from 3 per cent to 12 per cent and that of supplementary income by the rest of the household from 2 per cent to 18 per cent. It may well be, however, that part of the explanation comes from errors of estimation, at least to the extent that given the cultural constraints of traditional Nigerian households, more information about supplementary incomes, especially of wives, is likely to be forthcoming from the higher-income professional urban classes than from the low-income illiterate rural families.

Table 11 sets out in greater detail the structure of income inequality within each stratum of educational attainment. It shows that although those with higher education tend in general to have disproportionately larger incomes, the degree of inequality is no less within each educational cohort itself. In other words, there are skewed income distribution profiles as among Illiterates or Primary school leavers themselves as there are between the two on the one hand and the University graduates on the other. This point of considerable analytical interest is brought out more dramatically in Table 12, where the proportion of households headed by Primary school leavers jumps from 26 per cent if we consider the entire income range in the survey to 48 per cent if we restrict our analysis to the higher income range of between £1,000 and £4,000. This means that if our sample were representative of the country's households, almost half of the people with high incomes are those with only primary education, and 16 per cent of high-income households are headed by Illiterates. If we link this to Table 9 on the occupational structure of household income levels, it would appear that the Transport industry (particularly road transportation) has been a highly rewarding occupation and is dominated by households with little or no formal education.

Beyond these conclusions, multiple regression analyses (whose computations are not included in this paper) were undertaken to estimate the factors which determine both the distribution of income and the structure of ownership of consumer durables. The exercise identified educational attainment, occupational category, size of household, urban-rural location and sex of the head of household as the probable critical explanatory factors. The computations reveal the relative significance of a variety of socio-economic variables as influencing households income, net worth and ownership of major consumer durables. It was discovered that education, occupation, spatial location and family size are positively correlated with income, but that sex is negatively correlated with it. Within education, university, secondary and primary schooling exert that order of importance on incomes. For occupation, transport, professional skills, trading, personal service, clerical work, crafts and agriculture have that decreasing explanatory power on income. Other things being equal, the expected income of households located in the city is about six times greater than that of households in the village.

The lognormal distribution of the households' net worth, combined major consumer durables and each of the main type of consumer assets is set out serially in Figures 4 to 13. Their probability density functions have been estimated in relation to the level of educational attainment as the most stable variable to achieve the convergence in this type of analysis. This has been further supplemented by multiple regression analysis to bring out the structural determinants of the ownership of consumption wealth. Here again, university education, professional occupation and city location appear as the three most important variables that positively determine net worth. But curiously enough, clerical work and transport occupation are negatively correlated with net worth, while the effect of total yearly income is statistically insignificant at the 5 per cent level. The ownership of the major consumer durables is the most difficult to explain systematically. It would appear in general that its most important determinants as a group are personal service employment, professional occupation and level of education, in that order. Clerical work, sex, transport occupation, city location and annual income are however negatively correlated with it.

It is surprising that the profile of net worth in Figure 4 in respect of Primary school leavers lies above that of the University graduates, reflecting perhaps the high income levels of the Transport sector dominated by the former and probably also large error terms associated with the small number of the latter group in the sample universe. For the combined major consumer durables in Figure 5, the Secondary school leavers' profile is above that of the Primary school leavers from the £400 household income level onwards, but not before. Refrigerators are, as shown in Figure 6, essentially middle-class goods and their purchases may also be related to the spatial location of households in terms of availability of electricity in the cities and towns. Its probability of ownership rises faster though, income group for income group, than that of television sets shown in Figure 7. And it is remarkable that refrigerators feature in the ownership stock of Primary school leavers but not television sets, whereas television sets feature in the ownership stock of Secondary school leavers but not refrigerators. The profiles for radios in Figure 8 are indeed very dramatic. Not only is the gradient of increase very sharp even for the Illiterates, but it quickly assumes asymptotic property for every group that has any education at all. This is important not only for income distribution and social information system, but also for the early entry of radio assembly and components manufacture in the stream of domestic production. The well-known propensity of Nigerians to buy cars comes out in Figure 9; and while almost all high-income University graduates own cars, the rate of increase in the probability of ownership is strongest for households headed by

Secondary school leavers. Motor cycles are low middle-class goods, especially for the Secondary school leavers as depicted in Figure 10. The case of bicycle ownership reflected in Figure 11 is a very intriguing one. The profile is negatively related to income rise for the educated classes, the Illiterates being the only group whose ownership probability increases with income, but even then not at any extraordinary rate. It is not unlikely, however, that our sample is heavily biased generally towards high-income households. Disappointingly, lognormal distribution for furniture behave well only in respect of data from Primary-school households as shown in Figure 12; and the base is probably too slender to render much meaningful interpretation. All households of course have kitchen equipment of one type or another, but the rate at which University graduate households tend to have them from the middle income level onwards is very high, as demonstrated in Figure 13.

All these interpretations should be put in their proper analytical perspective, because of the many technical problems of the tests as well as estimation errors from the field data themselves. These weaknesses are reflected, for example, in the rather low but significant multiple correlation coefficient of 0.51, implying that we have been able to explain only 26 per cent of total variation in household incomes. There exists a large set of residual factors of 74 per cent outside our explanatory variables. The multiple correlation coefficient is only slightly better for the measure of net worth at 0.53. For the ownership of major durable goods in general (radio, radiogram, bicycle, motor cycle, car, tape recorder, television and refrigerator), the corresponding coefficient is 0.42, and it is as low as 0.35 for kitchen equipment and 0.32 for furniture. Such poor explanatory power of the variables we have initially identified as probably impinging on the ownership of major durable goods could arise from some inter-correlation in the data used as well as from difficulties in the attribution of money values to the stock of durable goods. The qualitative nature of some of the explanatory variables, problems of aggregation of income and wealth, quality changes associated with various vintages of the same goods, and externalities in the prices of goods and inputs are also likely to affect the accuracy of the tests.

In spite of these qualifications, however, there is a tolerable quantitative basis for proposing certain generalized hypotheses. For example, our results underline the crucial importance and interrelationship of education and occupation for the distribution of income and wealth. There is also a definite pattern of urban-rural polarization revealed in the determination of households income and net worth. The socio-economic characteristics of the household such as family size, age, life cycle and educational attainment are themselves not unrelated indirectly to income, and part of the effect attributed to such variables may in fact be due to income variation. Nor should the fact that we have been able to explain only 26 per cent of the complex story be a factor for despondency. On the contrary, it should be a reason for a mild self-congratulation. Similar studies carried out elsewhere, especially in the United States with much better data and much larger number of significant relationships, show that in many instances, not more than 10 per cent of the variation in the households ownership of consumer durables was explained by the long list of factors. The buying decisions by households of durable consumer goods continue to intrigue economists, as it is especially becoming clearer that these decisions are themselves the outcome of a complex interplay of different motivations, status dimensions, intensities of desire and susceptibilities to pressurized sale devices. And here again, we can sense the interconnection between Economics and the other Social Sciences.

V

We have examined some characteristic of income distribution in Nigeria by looking at some aspects of expenditure by sample households. The study of households is of course the centre piece of economic analysis; and it seems to us appropriate that the formal inauguration of the discipline in this University should focus on the nation's households. The name Economics itself derives from the Greek word *Oikonomik* which connotes the management of households. Indeed, to Aristotle, the household or *Oikos* exists for the production, storage, exchange and consumption of man's natural wants as a minimum basis for the good life. And even though modern Macro-economics has shifted attention to the management and development of the total national economy, the household still represents the ultimate objective of man's participation in national economic activities in terms of the impact of the development process on his family's welfare.

With the deep affection and loyalty which the Nigerian feels for and to his family, few explanations are needed to justify our attention to the impact of national development on the households. And because the stock of durable consumer goods held by households represents a fair measure of the relative welfare of different households, our analysis of the income thresholds of these goods provide a simultaneous entry point to the problems of production and distribution. Moreover, if as it is now claimed, two of the five strands of our national objectives are the creation of a just and egalitarian society and the establishment of a nation of bright and full opportunities for all citizens, then the Nigerian economist has a special responsibility to study more closely the changing patterns of households' income and wealth. The time is past when economists treated distribution as a passive partner of production. With the new social consciousness and changing power relations, it is becoming increasingly clear that the way the current national cake is shared among the participating elements may be decisive not only in how big the next round of national cake would be, but in whether it could even be baked at all.

Because of the highly-charged political and sociological implications of income distribution, it is a subject about which passions can be easily aroused and opinions are easy substitutes for facts, especially when the facts are not readily ascertainable. In bringing reason and objectivity to bear on both the social debates and the policy options, the economist's starting point is the systematic collection and analysis of the changing facts in as scientific a manner as possible. The mere accumulation of facts without a skeletal frame of economic theory, economic design or economic ideology, would however only amount to raw empiricism and a sheer waste of effort as the negation of proper scientific enquiry. To be true to his professional calling and yet be socially relevant in his research pursuits, the economist in the Nigerian type of social situation must stretch his interests and skills to encompass in every subject of his enquiry the three interrelated fields of economic theory, economic measurement and economic policy.

As long as the problem of underdevelopment persists and there is social discontent with any existing profile of income distribution, the job of the economist can never be done. Links with the outside world and the continuous advancement of Science and Technology ensure that the consumers in any given national economy will be perpetually exposed to new products, new processes, new prices, new desires and new standards of what is just and equitable. Such forces impinge directly on economic behaviour, but are unfortunately outside the control of the economist. This is one area in which the Biological Sciences, especially Medicine, are very much in advance of the Social Sciences. With due respect, Mr Vice-Chancellor, I believe that medical practitioners cannot only diagnose but substantially and increasingly cure distortions in man's health, although they would probably still argue that prevention is always better than cure. With the economic practitioners on the other hand, not only are their diagnosis only by proxy and far removed from the actual moment of disease, they have little means of trying to cure the patient. The bulk of modern Economics is in the realm of positivism, which is geared more to prediction than to prescription. Meaningful economic prescriptions can only be made operational when accompanied by corresponding and simultaneous measures contributed from other disciplines.

What then can we say, on the basis of our analysis, about the probable cause of economic events in Nigeria in the next few years, not as we necessarily wish them to happen in a normative sense but as they are likely to happen in spite of our better wishes? First, with the continued defective appreciation of the real issues of development on the part of national policy makers and with the deceptive aura of petroleum boom that covers up a multitude of economic sins, we can say that the development distortions would get worse before they get better. Second, the resulting economic alienation of potentially politically powerful groups combined with rising general social discontent will exert a countervailing force by the very logic of the national objectives which have been enunciated. Third, since the business-political-military-bureaucratic leadership would try to suppress or repress such countervailing force, then open economic confrontation by an assortment of class interests united, even if temporarily, against the entrenched establishment is a distinct possibility. All these combined simultaneously with the intense problem of decolonization, would create an intriguing atmosphere of almost continuous social crisis in an economy that would otherwise reflect all the conventional indices of unprecedented boom and secular growth of national income.

Given these probable consequences of the present national economic landscape, given the weak prescriptive power of the economist's tool of analysis, and given the fact of experience that the economist's counselling is more likely to be heeded in times of difficulties than in periods of unrelenting prosperity, what should the economist do? He should continue to collect his data for systematic analysis such that he can monitor as accurately as possible national economic performance. Here, a new set of Social Accounts for Nigeria is an urgent necessity. He should warn about the ephemeral nature of an apparently endless boom rooted on the slender base of one major externally-traded natural resource. He should understand the real nature of the social crisis which has been temporarily submerged and would resurface as soon as the superficialities of national affluence disappear. He should start pointing up an alternative path of development policy in readiness of post-crisis reconstruction.

It is in the light of these that we of the Ibadan Economics School have been advocating for a massive concentration on the restructuring of social policies as basis for the nation's forthcoming 1975–80 Third Development Plan. Apart from bolder and more progressive measures in the fields of education and health, determined effort should be made to operationalize the concept of local public sector leadership as leverage for a more effective mobilization of local resources. Income redistribution should not just be conceived in terms of progressive taxation and public revenue sharing among the nation's component governments, it should be manifested in the massive intervention on the expenditure side on the part of public-sector contributions to households in respect of their quest for more functionally-relevant education programmes. Our survey has, after all, brought out the crucial interdependence among educational attainment, occupational concentration and the distribution of households' income and wealth.

An Economics School of a University in an underdeveloped country has no choice but to be radical, if the nation is to achieve rapid development simultaneously with healthy social relations. For Nigeria as one of the few countries of Tropical Africa that have both the resources and the potential for rapid and real development, an Economics School must not simply be technically competent but also deeply socially involved. But it should not be a social conscience that derives only from powerful ideological rhetorics which mean little in operational terms and rather impede clear understanding of the real critical issues. Because the economist in such a setting sees more readily the avoidable distortions of development process and suffers the agony of living almost helplessly with that knowledge, he cannot but be critical of what he may regard as the social insensitivity and administrative ineffectiveness of those who manage the State apparatus. Viewed in proper perspective, such criticisms, even when expressed in strong or strange language, are borne more of affection for the nation and aimed at improvement of its performance.

Patriotism and scholarship tend to produce men who live by faith in reason, hope in persuasion and strength in compromise. These are virtues essential to the functioning of the democratic process. And a University is and should be the most democratic of institutions with open minds and liberal values. Through those values, the Ibadan Economics School is prepared to stand by and fight to preserve the great ideals on which this great community was built. Our loyalty is to the scholastic pursuit of truth and to defend that truth against all obscurantist forces. Governments come and go; but the nation consisting of millions of households as the basic unit of social organization remains. We shall, Mr Vice-Chancellor, always bend our scholastic efforts to promote this nation's integrity and social purpose, seeking inspiration from the Humanist philosophy of our forefathers.