

The Metropolitan Areas of the United States

A Brief Survey of Research in Urban Economics

A G Khan

THAT a large share of the world's income is concentrated in the United States is common knowledge, but it is somewhat startling to learn that almost a sixth of the world's income (outside the Soviet bloc) is enjoyed by 3 per cent of the world's population living *in and around* the dozen largest cities of America. Not only does the evolution of such a pattern of human settlement command a wide interest but the problems arising from these heavy concentrations of people and riches have attracted the attention of the students of various disciplines. Here, we shall briefly review the recent effort of economists to grapple with the "Metropolitan problem" of the country.

A metropolis may be regarded as a concentration of the non-agricultural population performing a wide variety of functions and still maintaining intensive economic contact. Even though there is a large agreement on the main elements of such a definition, different studies recommend different territorial limits for defining a metropolis. The geographic boundaries of the "standard metropolitan areas" were first defined in 1949 by the Office of Statistical Standards of the U S Bureau of the Budget and first applied by the U S Bureau of the Census in 1950. The purpose was to replace four different sets of definitions then in use for various statistical series. Without this standardization it was impossible to relate the data on population, industrial employment and production, labour force, etc since each one covered a different territory for the area in question. These objectives were further emphasized in the new concept of "standard metropolitan statistical areas" adopted for the recent censuses. (Executive Office of the President, Bureau of the Budget, *Standard Metropolitan Statistical Areas*, Washington, 1959.)

CRITERIA OF A METROPOLIS

Small communities are believed to have vied with one another for recognition as a "metropolis" and it was necessary to lay down the criteria of such a title in precise terms.

Basically, three sets of criteria have been used in identifying these areas. They are: (1) population, criteria, (2) criteria of metropolitan character, and (3) criteria of integration. Thus each standard metropolitan statistical area will contain at least one city of 50,000 inhabitants or more. (This criterion may be met by two or more cities of such minimum population within twenty miles of each other). In addition the area will include¹ the county of such a central city and adjacent counties that are found to be metropolitan in character and economically and socially integrated with the county of the central city.

There are more than 3,000 counties in the country and the metropolitan character of a county is determined by its attributes as a place of work or as a home for a concentration of non-agricultural workers, no less than 75 per cent of the labour force. The criteria of integration are somewhat difficult to establish. Because of different locations of homes and jobs the contiguous counties will be primarily places of residence or employment. To find the extent of integration other types of information are also used, like telephone calls, newspaper circulation, retail stores, transport facilities. The Bureau of the Budget has thus been currently able to identify 192 metropolitan areas. These account for two-thirds of the nation's population and three-fourths of its manufacturing employees. (In New England, the city and town are more important than the county, and data are compiled locally for such minor divisions. Therefore, towns and cities are the units used in defining standard metropolitan statistical areas.)

NOT HOMOGENOUS

These metropolitan areas are far from being homogenous: they differ greatly both in size and in composition. New York and its environs have been described as "one-tenth of a nation" and the dozen largest areas account for a third of the nation's population. The specialization patterns of their industry also shows wide differences. While De-

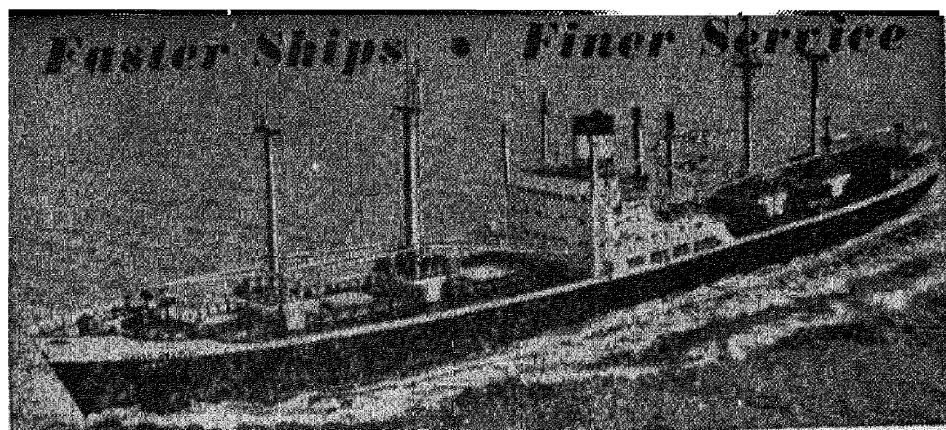
froit is famous for its automobile industry, New York specializes in apparel. Pittsburgh is dominated by steel, San Francisco by petroleum and coal products and Akron by the rubber industry.

Moreover the spatial distribution of the metropolitan areas is not uniform at all. Primary concentration of these areas is found in the Northeast part of the country with secondary concentrations on the West Coast and in the deep South. In fact the extensive urban growth of the country is making it increasingly difficult to identify individual areas. Even now one may speak of the "metropolitan belts" like areas extending from Boston to Washington, D C or the Pittsburgh-Youngstown-Canton-Akron-Cleveland steel belt or the Chicago-Milwaukee-complex or the Los Angeles-San Diego strip.

METROPOLITAN PROBLEMS

Such highly developed segments of a developed economy are not free from problems. By 1975 the population of these areas is expected to grow by 71 per cent relative to 1950, which is about 60 million more people. Such a project poses a host of problems associated with conditions of living as well as opportunities for work. These were effectively described in a series of articles in the *Fortune* Magazine not so long ago. The authors raise many and interesting issues centering on the growing dissatisfaction with life in and around the big cities.

These are the problems of the exodus to the suburbs, rightly designated as suburbanization or the "urban sprawl" which requires planned housing. And so long as the central city still enjoys the concentration of jobs, including executive offices of "the down-town", the problems of transport remain to be solved. Mass transit is giving way to travel by automobiles which require highway and parking space. In the suburbs adequate schools and recreation facilities are required if juvenile crime and delinquency are to be contained within the city limits. The flight to "suburbia" can only be afforded by the rich' and



Our fleet of twenty modern freighters offers fast,
regular and dependable service between

INDIA—U. K. & the CONTINENT • INDIA/EAST PAKISTAN—SOUTH AMERICA

INDIA—BLACK SEA & EASTERN MEDITERRANEAN PORTS

Also around INDIAN COAST

INDIA STEAMSHIP CO., LTD.

"INDIA STEAMSHIP HOUSE", 21, OLD COURT HOUSE STREET, CALCUTTA-1

Managing Agents: — LIONEL EDWARDS (PRIVATE) LTD.

WORKING RESULTS

STATEMENT OF ACCOUNTS AS ON 31. 12. 1959

P.N.B. 65th YEAR

LIABILITIES

(i) Paid up Capital	Rs. 1,25,00,000
(ii) Reserve Fund and other Reserves	Rs. 1,47,50,000
(iii) Deposits	Rs. 1,41,15,86,429
(iv) Other Liabilities (including contra items such as Bills for Collection and Acceptances, endorsements and other obligations).	Rs. 35,67,35,832
	Total :-

Rs. 1,79,55,72,261

ASSETS

(i) Cash and Balances with Bankers	Rs. 13,32,95,217
(ii) Investments :	
(a) Investment in G. P. Notes, Municipal Loans, Shares and Debentures guaranteed by the Central and State Governments	Rs. 64,94,09,326
(b) Other investments	Rs. 1,32,84,273
(iii) Loans and Advances	Rs. 66,26,93,599
(iv) Other assets (including contra items such as Bills Receivable being Bills for Collection and Constituents liabilities for acceptance, endorsement and other obligations).	Rs. 72,51,04,094
	Rs. 27,44,79,351
	Total :-

Rs. 1,79,55,72,261

THE PUNJAB NATIONAL BANK LTD.

Established 1895

Head Office: New Delhi

the middle-class so that "grey areas" arise around the city core. These slums, euphemistically described as marginal dwellings, are the abode of ethnic minorities or the very poor, who pose serious problems of rehabilitation. Add to this the fact that multitudes of local governments are neither large enough, nor at times serious enough, to cope with these problems.

Finally, there is ill- broader problem of the location (if economic activities. General tendencies are at work for greater and greater dispersion of manufacturing industry throughout the country and the increased attractiveness of the suburbs is pulling the industry out of the central city. The continuing westward and outward movements of jobs will be followed by similar movements of people, which requires realistic quantitative appraisal of these prospects and definite proposals to meet them.

ORGANIZATION OF RESEARCH

Research in this area has been largely confined to demographers, sociologists, city-planners and geographers; it has escaped the attention of the economists. The neglect of systematic economic analysis of the metropolis and the forces underlying its evolution must be partly attributed to the serious statistical gap in the field. Government agencies have hitherto shied away from any systematic regional economic studies probably for political reasons. After the statistical standardization of the metropolitan areas, federal agencies like the Bureau of the Census and the Bureau of Labour Statistics have been in a position to provide comprehensive data for these areas.

A very important step towards meeting the requirements of metropolitan analysis was taken when the Ford Foundation initiated its Urban and Regional programme in 1955. Since then it has made grants and appropriations of almost \$9 million to universities, other institutions and civic bodies to come to grips with the problems of a rapidly rising urban base, of the economy. Many interesting studies have already been completed and many more are in progress. Perhaps the most ambitious effort has been the \$600,000 study of the tri-state New York Metropolitan Region directed by Raymond Vernon of the Harvard University and financed largely by

the Ford Foundation and the Rockefeller Brothers Fund. A similar study of the Pittsburgh Region has recently been initiated and is scheduled for completion by June 1962. It is being directed by Edgar M Hoover and the costs of \$100,000 are being financed jointly by the Ford Foundation and the Regional Industrial Development Corporation. In addition the Foundation has made available a great deal of money to several universities for case studies of metropolitan areas. The projects mentioned here are only a few of the full-scale metropolitan economic studies.

A few years ago the Regional Science Association was founded with a view to fostering "exchange of ideas and promoting studies focusing on the region and utilizing tools, methods, and theoretical frameworks specifically designed for regional analysis." The Association has its office at the Wharton School, University of Pennsylvania. It has so far published five annual volumes of *Papers and Proceedings*, Since last year the *Journal of Regional Science* has also been started. These publications have frequently carried interesting papers discussing the work in metropolitan economies.

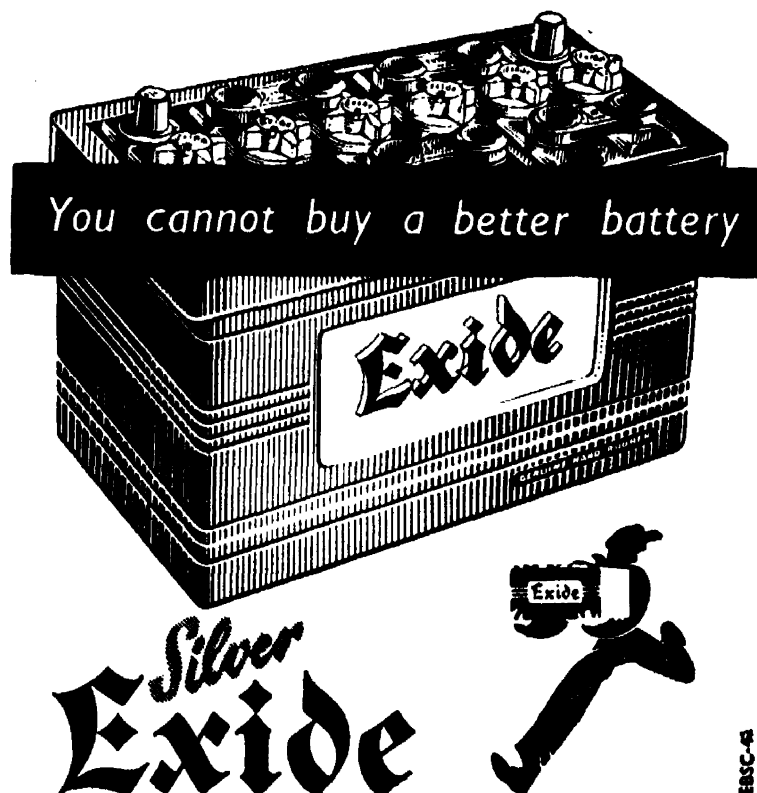
STRUCTURE AND CHANGE

Before this sketchy survey of urban economic research is concluded,

it will be worthwhile to comment on some of the approaches to the study of the metropolis. Three main classifications may be readily distinguished:

1. Economic base studies,
2. Development of systematic economic accounts,
3. Inter-regional and intra-regional distribution of economic units.

The concept of "economic base" and the classification of industries into "basic" and "non-basic" has been borrowed by the economists from city-planners. It is used for determining the criterion of promoting industries and also "for making projections of future population and employment. *Basic* is identified with "export" activities of an area and *non basic* with those activities which have a "domestic market". In its bare essentials the procedure for making projections is first to calculate employment in each basic industry and then estimate the ratio of basic to non-basic employment. Then the ratio of population to employment is estimated. Thus, with projected trend of basic employment, it is possible to derive future *total* employment and population. The extent to which an activity is basic is determined by its "location quotient" $e_i/e_t - E_i/E_t$ where e is local employment; E is national employ-



merit; *i* is employment in an industry; *t* is total employment."

One example of the economic application of this crude approach is found in a study of *Metropolitan Chicago* published last year. The authors, with the help of location quotients, were able to make an approximate estimate that 20 per cent of total employment in Chicago was "export" based and heavily concentrated in durable goods. Assuming that the overall growth of the area depends on its "basic industries" the authors evaluate the prospects of Chicago's growth in terms of the national growth of these industries.

The second important area of research has been the measurement and interpretation of economic accounts. Two important fields in which progress is being made are the income accounts and the input-output studies. Volume 21 of the Conference on Research in Income and Wealth of the National Bureau of Economic Research is devoted to the problems of compiling and analyzing information on regional income. The contribution of Loren A Thompson considers some experiments in estimating Virginia County income from limited availability of current data. In official statistics regional income information is not provided beyond that for the states. However, several metropolitan studies have undertaken the task of providing consistent personal income figures. The most comprehensive input-output matrix constructed for a metropolitan area is the St Louis table by Warner Hirsch. Transactions among the twenty-nine sectors have been established from input-output data collected from each firm for the year 1955.

EVALUATION OF LOCATIONAL FORCES

Finally, mention must be made, of the comprehensive studies like that of the New York Metropolitan Region which evaluate the basic locational forces. The authors of the Study are able to predict a slower growth rate of manufacturing in the Region relative to the nation with the problem of obsolescence of the city core. Many of the problems mentioned earlier have been discussed with a high degree of quantitative precision and ingenuity.

The purpose of the foregoing cursory account was to summarize the main lines of research effort in the United States in the field of metropolitan economics. Most of the


problems arising from these urban agglomerations are also true of many other countries, developed and under-developed, even though these problems take different forms in

different places. Economists have neglected to study sub-national categories as individual entities and there is need for greater interest in the field.



Over 10 years ago, the TISCO Research and Control Laboratory at Jamshedpur, illustrated above, was Shalimar Tar waterproofed and is, today, still waterproof.

Proof enough that  bituminous proofing is the best.

Throughout India, crores of rupees worth of Government property, industrial establishments and private homes are protected from dampness of ceilings, walls and floors, from acid and alkali action by Shalimar Tar  bituminous based protective materials.

Manufactured in India, applied and guaranteed by



SHALIMAR TAR PRODUCTS (1935) LTD.

Calcutta • Delhi • Bombay • Lucknow • Chandigarh

Agents :

The Bombay Company Private Limited, Madras - I
R. C. Abrol & Company (Private) Limited, New Delhi - I

STP-45