# AN INPUT-OUTPUT ANALYSIS OF THE NIGERIAN ECONOMY, 1959-1960, AUGUST 1963

Published @ 2017 Trieste Publishing Pty Ltd

#### ISBN 9780649094189

An input-output analysis of the Nigerian economy, 1959-1960, august 1963 by  $\,$  Nicholas G. Carter

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### **NICHOLAS G. CARTER**

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The author would like to thank Professor J. D. Nyhart and Professor Carroll L. Wilson for their continued support and assistance during both the research and the writing of this paper.

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#### CHAPTER I

#### INTRODUCTION

The discipline of economics, in its unceasing search to approximate reality with theory and formula, has developed a number of highly refined tools in the past few decades. These tools, as they appear, are being used not only in academic speculation about the varieties of economics, but also in the serious business of using the discipline to plan and predict the future turn of economic events of a nation.

In a developed, self-sustaining economy, there are a variety of tools used to produce a more or less clearly defined amount of movernmental intervention in, and manipulation of, business, industry, and agriculture. In some cases we may well wonder if any tools at all have been used in government action (here we must turn to politics, for which as yet there seems to be no set of formulae) but even in such cases decisions are to a certain extent based on the findings and predictions of "economics." However, we must be careful not to confuse economics with reality, as it is possible to say the same thing with two completely different theories and to predict opposite conclusions from the same set of assumptions; yet at no time will one stray beyond the bounds of developed economic theory.

In a developed economy the end-result of governmental intervention, based on economic reasoning, is likely to be benign and minimal. The situation in an under-developed or developing nation is likely to be much more serious. In such a country government is usually the biggest spender and the largest employer, and it is to government that the people look for the impetus of development. Government will supply or direct the flow of the scarce developmental inputs such as capital and manpower, government will also plan in more or less detail the manner in which



development will proceed. Here the role of economics is much more important and as a result, technique and theory must, of necessity, be well tested and proven. There is no room to test out new ideas, each mistake made by faulty use of economic planning tools will waste scarce resources and thus retard development. For this reason planning usually proceeds cautiously from a national income study and a series of capital budgets for the government. Beyond this point we run into another limitation on the use of economic tools, that of data. In the average case it is sparse and not particularly accurate, and is also expensive to collect. For this reason a developing country will spend a lot of its initial energy on the assembly of a decent set of national accounts. In terms of manpower involved, this is definitely the most productive of endeavours in the field of economics. The data required for the more sophisticated tools of analysis is usually beyond the point of diminishing returns and thus is not actively or enthusiastically assembled in the early stages of development planning.

Clark, in his excellent paper on the process of planning in Nigeria, describes in detail the situation which faced the planners of that country, the sources and nature of information, and the actions eventually taken with available resources. Apart from studies in particular sectors or for particular industries, the only nationwide, economy-wide analysis available was the excellent National Income Study of Okigbo. It was upon his figures that planning proceeded. Clark also points out that among the next set of analyses that it will be useful for Nigeria to have for use in planning and prediction, is an

<sup>&</sup>lt;sup>1</sup>Clark, P. B., "Economic Planning for a Country in Transition: Nigeria;" in Planning Economic Development (E. E. Hagen, ed.), Irwin, Homewood, Ill., 1963.

<sup>&</sup>lt;sup>2</sup>Okigbo, P. N. C., <u>Nigerian National Accounts</u>, 1950-1957.

<sup>3</sup>Clark, loc. cit.



input-output study. This in essence is the genesis and the justification of our present study.

Input-output analysis is a relatively new technique, being first developed by Leontief in the 1940's and applied in detail to the United States economy by Evens and Hoffenberg<sup>2</sup> of the B. L. S. Since that time it has been applied to the economics of most developed nations and sparingly to the lesser developed ones. In its simplest form, the analysis is the direct complement of a national income study. Whereas national accounts look only at the value-added component of the economy, the input-output analysis is concerned with the data that the first analysis discards: the various sector transactions that relate to flows of goods and materials without additions of value. Value-added figures enter into an input-output presentation, but only as an external factor. It is essential, however, that national income figures exist for a given economy before an input-output analysis is undertaken. The results of each type of analysis, although complementary, are not similar. Nati nal income accounts indicate how big each sector is, and with prior assumptions as to growth and investment, one can predict what might happen in the future. Input-output analyses indicate, incidentally, how big, and directly, how involved; i.e. such an analysis will show how each sector affects other sectors and what happens when a given area of the economy undergoes change. Because the data involved in such a study have to be far more accurate than those of a national account, most input-output studies achieve only secondary importance in planning and are used to check consistencies of predictions based on National Income and general equilibrium analyses.

<sup>1</sup> Leontief, W., The Structure of the American Economy, 1919-1939, Oxford
Press, 1951, second edition - "the keystone of input-output analysis."

<sup>&</sup>lt;sup>2</sup> Evans, W. D. and M. Hoffenberg, Interindustry Relations Study for 1947, R. E S., May 1952.