The Emancipatory Potential of National Accounting

Evidence from Nigeria's first independent national account

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Introduction

Today the Gross Domestic Product, or GDP, which forms a part of a country's national account, is a staple in our news outlets. GDP counts the size of our economies and people around the world wait, some with much impatience, for the news to tell them whether the number is bigger or smaller. If the figure has gone up, a shoe company owner may decide to open that second line of boots, because the demand will surely follow. A couple, familiar with the GDP metric, might decide to start a family, knowing their job prospects are better. A growing GDP means that there are more things and most likely more jobs in the economy – what some economists would describe as a healthy economy. If the shoemaker does indeed hire more workers and produces more boots, then the economy has changed. Our accounting influences the decisions people make, causing ripple effects, big and small, in our everyday lives. Imagine if the size of the economy had decreased. The shoemaker may have fired workers, rather than hired more. Measuring creates a reality and measuring changes our existing reality.

The history of national accounting and its effects on our economies have predominantly focused on what we call the Global North today. Much attention has been paid to our contemporary way of accounting the economy, GDP, which started in North America in the 1930s and 40s (Vanoli, 2005; Hirschman, 2016). And yet, there is evidence that national accounting started much earlier as an imperial tool to measure the size of the imperial territories often in the what we call the Global South today to figure out how much imperial officials could tax and possible tax revenues (Davie and

McLean, 2017; Newbigin, 2020). The few histories of national accounting that focus on the Global South look at how Europeans counted the economies of the Global South (Speich, 2008; Morgan, 2009). There is much less on how natives of the Global South have counted their own economies. Studying instances of national accounting in the Global South can give us further insight into how and why measuring happens, and how it reflects and shapes our reality (Desrosières, 1998). In so doing, we can break new ground in the history of national accounting by looking at understudied regions with different histories and contexts than the Global North. The history, consequently, becomes global.

In this paper, we study the case of Pius Okigbo (1964-2000), a Nigerian economic advisor to the independent government, who produced Nigeria's first independent national account for years 1950-57. Okigbo's estimate came at a time when national accounting had developed significantly, yet the question remained as to how applicable these methods were to economies in the Global South (Morgan, 2009, p. 10). Okigbo was dissatisfied with a previous national account of Nigeria conducted by two British economists, Alan Prest and Ian Stewart, for years 1950-51, when Nigeria was still a British colony. Okigbo's own estimate was published in 1962, a mere two years after Nigeria gained independence (Okigbo, 1962, p. 285). Okigbo's national accounting has rarely been given much attention in the history of quantification or economics literature.

Our case study exposes the specific socio-economic and political context within which this measurement took place. We show how counting necessarily happened on the local level, making the figures produced specific to a country's context. At the same, however, we find that it also happened on the international level. There are global debates of how an economy should be counted that transcend political boundaries and contextual differences. By bringing Okigbo's estimate into the global discussion around national accounting standards, we challenge the tendency to continuously emphasise how specific and different the Global South is from the Global North.

Shifting the focus to natives, rather than colonisers, offers room to new perspectives on what national accounting did for the Global South. Studies that examine the imperial practises of counting their foreign territories have uncovered how national accounting was yet another tool to govern, control and suppress the populations of the Global South. Our study shows the contrary: natives of the

Global South used national accounting as an emancipatory tool. Okigbo wanted to count the Nigerian economy the way he saw fit, not the way the British had done before. Nigeria could, argued Okigbo, become its own nation on the world stage with a comparable GDP figure. Our investigation unpacks the various impacts of power, imperialism and ideology on national accounting standards.

A Brief History of National Accounting

Before we examine our case study, we shall briefly outline the history of national accounting. In doing so, we hope to shed light on what discursive, political, economic and historical context national accounting came about in Nigeria. We hope it can serve as a starting point for a more focused inquiry into our case study.

It is difficult to find the first national account. Measuring the size of an economy or the wealth of a nation has existed for centuries. Scholars, nevertheless, generally credit William Petty with the first quantitative attempt to measure national wealth in the mid-late 17th Century (Studenski, 1958; Vanoli, 2005; Bos, 2006; Macekura, 2020). Concerned about the crown's ability to secure funding for war, Petty set out to prove mathematically that there was more revenue to be made from taxation, particularly in Ireland. Petty's investigation led to the first known empirical estimation of national income and production. The estimates were later improved upon by Gregory King, which, according to Paul Studenski, was the first truly scientific estimator of national income (Studenski, 1958). King's work, dated 1696, was a comprehensive work, representing the three ways of estimating national income: net production, distribution of income, and expenditure (Bos, 2006, p. 7).

Furthermore, both King and Petty employed comprehensive notions of production and income, i.e. they viewed national wealth as consisting of the value added by the production of goods and services (Bos, 2006). This was a remarkably modern conception of national wealth, considering that Adam Smith's *Wealth of Nations* would not be published until almost a century later, and economic discourse at that time was dominated by the physiocrats and mercantilists, who had far less developed notions of national wealth and income. The physiocrats argued that only the agricultural sector was 'productive' in a true sense. The mercantilists argued that the wealth of nations consisted of its stock of precious minerals, and therefore only the balance of payments really mattered. Petty and King's first estimates were not intended, however, to provide information of general interest, but were rather the result of the authors' particular social and political concerns, often directed at concrete policy issues. The first period of national accounting thus consisted of lone investigators, unaffiliated with any government.

At the turn of the 18th and 19th centuries, there were more general economy wide statistics (Hirschman, 2016). Antoine Laurent Lavoisier investigated the newly implemented property tax at the end of the 18th century, producing several tables of the French population, household consumption, very similar to what we today call the gross national product. Jean-Claude Perrot argues that Lavoisier gave us figures on the French economy before industrialisation (Perrot, 1988). Early 19th century British Parliamentary Papers showed increasing interests in statistics (Cullen, 1975). There was also a growing need for census data to register voters. The landmark Registration for Marriage Act, for instance, was passed in 1836 to register births, deaths and marriages in England and Wales (Cameron, 2007, p. 377). Following on from Lavoisier, Napoleon Bonaparte wanted information on conscription, requisitions, taxes, and wartime management of the economy in the beginning of the 19th century (Porter, 1995, pp. 36–37, 57).

The trend continued, between 1840 and 1880, twenty-four countries established reliable trade figures (Macekura, 2020, p. 15). By the end of the century, political economists and statisticians in France, Germany, and the United Kingdom experimented with rudimentary calculations of national income. These figures were, however, far from standardised, reflecting not only differing notions of what should be included in the national account, but also highly varied methods of estimation.

In the early 20th century, there was a push for "social statistics" (Macekura, 2020, p. 18). With the great social upheaval of industrialisation, as well as strong labour movements and unions, reformers began to apply statistics to investigate poverty and working conditions. Supported by organisations such as the International Labour Organisation, national statistical agencies generated large-scale survey analyses and created the first costs-of-living indices. According to Dan Hirschman (2016), Andre Vanoli (2005) and Frits Bos (2006) the most significant developments in this period were to be observed in the United States. After World War I, the National Bureau of Economic Research (NBER) was founded and started publishing national income studies alongside other private institutions around the world.

By the mid-1930s national accounting began to come into its own as a central tool for states to think about and plan their economies. The literature emphasises the role of the Great Depression as a catalyst for increased interest in statistical macroeconomic research (Tooze, 2001; Vanoli, 2005; Bos, 2006; Macekura, 2020). The pioneering work of Simon Kuznets, building on NBER's work, significantly developed national accounting in this period. In 1934, Kuznets submitted a landmark report to the US Senate, in which he outlined two measures of national income: "National Income Produced," the net value of goods and services produced, and "National Income Paid Out" (Macekura, 2020, p. 26). Additionally, the British economist Colin Clark complemented Kuznets' work in 1937 with estimates for consumer expenditure, saving and investment, as well as income and expenditure of the government and net international payments (Vanoli, 2005, p. 19).

The first quarter of the 20th century also coincided with a broader trend towards mathematisation and formal modelling in economics, as well as significant developments in macroeconomics. John Maynard Keynes cemented the standardisation of national accounting with his *General Theory* published in 1937 (Bos, 2006, p. 12). Keynes created a link between economic theory and national accounting, by using the same macroeconomic identities for both. Wartime planning that followed in the 1940s also created a need for such measurement (Vanoli, 2005; Bos, 2006; Macekura, 2020).

While the initial standardisation and increased use of national accounting occurred in the United States, international standardisation quickly followed. It started within an annex of a technical United Nations (UN) report, the Stone memorandum, that outlined a fully worked out national accounting system. The annex lay the groundwork for the United Nations System of National Accounts (UNSNA) and led to the creation of international guidelines on national accounting in 1951 on the request of the Organisation for European Economic Co-operation (OEEC). The OEEC and UN followed with two other guidelines, in 1952 and 1953 respectively. These are considered as the first generation of international guidelines, and since then, three other generations of guidelines have been implemented: 1968-1970, 1993-1995 and 2008-2010 (Bos, 2006).

To some extent, the current standardised national account is treated much like Yoshihiro Francis Fukuyama characterises Western liberal democracy – as the logical and appropriate conclusion to the historical process, rather than another iteration in a long line of standardised national accounts. Economic competition between Western liberal democracy and communism was re-framed in terms of material output rather than distribution, education or social inclusion. National accounting justified an ideology of growth (Coyle, 2014). GDP growth gained a central position as a 'magic bullet' for development. Modern societies were characterised as "growth societies," where most policies target growth (Schmelzer, 2016, p. 5). The national product, in other words, must grow larger. Some argue, like John R. McNeill, that economic growth was easily the most important idea of the 20th century (McNeill, 2000, p. 236). The practices of national accounting are effectively bound and maintained by the growth paradigm (Schmelzer, 2016, p. 11). The often-blind adoption of the number that is the GDP obscured and obscures the historical contingent socio-economic and political context within which the international standardisation took place.

The reasons we count an economy varies depending on the context, but the validity in doing so is often tied to the idea that national accounts are objective. Ted Porter convincingly uncovers our collective obsession with objectivity and how we perceive numbers as offering us such objectivity. We place a huge amount of trust in numbers to legitimise decisions. If we can count what is, then we do not have to rely on mere judgement, which has been progressively seen as illegitimate (Porter, 1995, p. 7). There is a blind trust in numbers, where "a decision made by the numbers (or by explicit rules of some other sort) has at least the appearance of being fair and impersonal" (Porter, 1995, p. 8). The narrative enables us to ignore that numbers are also subjective and can be manipulated through certain value judgements.

Simultaneously, in the first half of the 20th century, 'the economy' emerged as an abstract concept, defined as a self-contained structure of relations of production, distribution and consumption of goods and services within a particular space. Taken together, these statistical and theoretical innovations were an enormously powerful tool for governments, as they allowed good governance to be framed purely in terms of keeping 'the economy' healthy through GDP growth. The measure was able to suppress political debates around distribution and equality (Schmelzer, 2016, p. 13). The all too familiar saying 'growth is a tide that raises all boats' was given a legitimate and objective number. Distribution and equality were no longer as important.

These conclusions have been made from historicising the Global North. We, like a few others, aim to look at the Global South. The existing studies on the history of national accounting in the Global South, can be broadly split up into the imperial and post-imperial periods. During imperialism, the first national accounts done on the Global South were mostly, but not exclusively, conducted by imperial elites wishing to gain a better understanding of the value and potential yield of their territory.

There is growing literature exploring the links between accounting and imperial processes. Some studies show that the British administration needed to count colonial economies to calculate whether imperialism was profitable (Offer, 1993; Kalpagam, 2014). There was a concern, for example, that the imperial rule over India was a waste of money – a question still posed by economic historians today (Offer, 1993). Indirect rule, where the imperial rulers appointed native elites to run the lower levels of the imperial administration, needed to be self-sufficient for it to cost as little as possible. Accounting practices attempted to calculate how much the imperial territory gave the imperial ruler: in the form of taxes; the return on investment from, for instance, railways; and how much the territory cost, including military spending on acquiring and defending imperial territories and the costs of running the administration in the form of salaries etc. Studies show how accounting became an imperial tool to build an empire, to satisfy the self-sufficiency requirement and rectify charges of stealing and misappropriation (Neu, 1999, 2000b, 2000a; Davie, 2000, 2005a, 2005b, 2007; Annisette and Neu, 2004; Bush and Maltby, 2004; Neu and Graham, 2006; O'Regan, 2010; Davie and McLean, 2017).

Accounting became a part of the toolbox for the indirect rule that Britain exercised over imperial territories (Davie, 2005a). Accounting was a type of surveillance, a tool for control and a way to report information back to the imperial centres. Accounting was an integral part of the civilising mission (Davie and McLean, 2017). The civilising mission legitimised imperial rule *ex ante* by arguing that the imperial rulers would civilise the imperialised natives who were uncivilised. Accounting turned indigenous populations into a governable population (Neu, 1999; Bush and Maltby, 2004). Accounting reinforced, reproduced and perpetuated imperial power structures (Neu, 1999, 2000b; Davie, 2000, 2005b, 2005a, 2007).

Towards the end of imperialism, in and around the 1940s, the question on the universal applicability of national accounting was particularly prevalent when the standardisation of national accounting in the Global North started to take root. National accounting specialists from the Global North focused on whether national accounting practices, perceived as invented in the Global North, applied to the Global South. Indeed, Kuznets and Richard Stone doubted that their standardisation of national accounting conceptualised for the "advanced" economies would apply to all economies (Morgan, 2009, p. 10). Similarly, Austin Robinson wondered in 1941 if Britain's national income estimates could apply universally to "advanced and primitive" economies (quoted in (Macekura, 2020, p. 42). Imperial elites and nationalists leaders also wondered whether "conventional accounting techniques and growth transfer well beyond the industrial world?" (Macekura, 2020, p. 41).

A key experiment in this period that focused on the question of applicability to the Global South was conducted by Phyllis Deane. The economist Deane was hired to conduct an experiment to see if national income accounts could be constructed for two imperial areas in Central Africa and Jamaica. She carried out field visits in 1946-67, releasing an initial interim report in 1948 and a full report in 1953 on the two areas in Central Africa (Deane, 1948, 1953). She was later a member of the advisory committee for the project in the 1950s to produce national income accounts for the Nigerian economy. In the full report on Northern Rhodesia and Nyasaland, Deane explained how inaccurate estimates were for "less developed" and especially "colonial" communities (Deane, 1953, p. 7). The key problems were as follows: "total population figures [were] little more than guesses" for most African colonies (Deane, 1953, p. 7). Neither were there reliable complete figures on the distribution of occupations; a census of the main industry, agriculture; nor a "systematic survey of the volume of internal trade" (Deane, 1953, p. 7). The large proportion of subsistence output, "the production of goods and services for personal or family consumption," could not easily be measured either, and there was a "totally inadequate basis of statistical data" (Deane, 1953, p. 7). There would, Deane stated, always be a "wide margin of error" until the statistics were improved (Deane, 1953, p. 8). Nevertheless, using the qualitative data that existed across various activities in some imperial territories could be organised into a systematic whole based on deductions. And these results could serve a useful purpose.

Like Deane, Morten Jerven has also found a lack of data in the Global South both historically and now. Morten concludes that the lack of data in the African region is as equally problematic as the actual lack of growth in economic activities (Jerven argues that we exaggerate the lack of growth in Africa (Jerven, 2019). In a study on the history of national accounting in Africa, Morten finds that users and producers of these accounts have different goals. Users want something comparable – especially economic historians, like himself. Producers aim to produce a number that reflects the economy at the time, given the available data and definitions at the time (Jerven, 2011).

Following on from the traditions during imperialism, the post-imperial period also saw economists from the Global North counting Global South economies. While scholars like Deane worried about the inapplicability of national accounting practices in the Global South, the estimates produced were considered useful. Clark's work in 1940 shows how national accounts were used in order to compare economies (Clark, 1940). Clark's comparison of all existing states' economic performance, although based on poor empirical evidence, caused a sensation. His conclusion that the world was extremely poor started a social scientific endeavor to measure global economic inequality and differing paths of development (Speich, 2011, p. 7).

Our investigation, in contrast, focuses on the national accounting practices of economists from the Global South. Similarly, one recent study has looked at two Indian economists at the beginning of the 20th century and how imperial natives used and produced different national accounts than the imperial powers. Eleanor Newbigin studied KT Shah and KJ Khambata's computation of national wealth in 1914 -22, which aimed to derive India's taxable income (Newbigin, 2020). She argues that Shah's national accounting produced a different understanding of Indian poverty, concentrating on how the unequal distribution of income caused poverty (Newbigin, 2020).[1] Our study centres on understanding why and how national accounts was produced by Okigbo, a Nigerian native.

Our brief literature review shows two things. National accounting was and is a socio-economic, political and historically contingent phenomenon where its multiple stories depend on why and where it was produced, and by whom. Moreover, then, we need to go beyond looking dominantly at the Global North's national accounting history. With our Nigerian case study, we explore why and how countries in the Global South have used national accounting. The investigation will help to better unpack the various impacts of power, imperialism and ideology on national accounting standards.

Why did Okigbo count?

Okigbo was born in 1924 when Nigeria was ruled by the British. His father, Chief James Okoye Okigbo, was a pioneer Catholic school master whose ancestor, Chief Eze Okigbo, was famous for bringing education to the town of Ojoto, located in the Southern state of Anambra. Okigbo had a tremendous gift for learning and economics, attending several elite Nigerian schools. He started his bureaucratic career in 1948, becoming the first black African Development Officer in Aba in eastern Nigeria. He later became the first African to receive an MA and PhD in Economics from Northwestern University, to which he had been recruited by the new national and university efforts that followed the second world war to attract and support African students. He finished his thesis, "Capital Formation in the Development Economy," in 1956. From 1957 to 1958, he was a lecturer at Oxford University as part of a postdoctoral fellowship. Upon his return to Nigeria in 1958, he launched his career as permanent secretary of planning and economic advisor in the Eastern Nigerian Civil Service at the peak of the independence movement. In 1960, he became the economic advisor to the Prime Minister in the newly formed Federal Government of Nigeria. Okigbo was a member often referred to as the African middle class – a new demographic of African heritage trained in European education, tastes and values (Falola and Heaton, 2008, p. 128).

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[1] Paul Studenski has published two volumes on the history of counting national incomes, but all the African national account estimates are covered in one chapter and the Nigerian case covers only one page (Studenski, 1958, p. 501).

Okigbo both opposed imperialism and was critical of the post-imperial development regimes led by institutions like the International Monetary Fund and the World Bank. Okigbo argued that the abnormal and deformed agricultural and industrial development in imperial territories in West Africa could be traced back to factors directly deriving from imperialism, such as the slave-trade, the forced introduction of a monetary system, and the raw materials interests of foreign monopolies (Okigbo, 1957). Okigbo was also firm in fighting for Nigerian self-subsistence. Okigbo was critical of the strong focus of development schemes on food programs which merely propped up food production rather than investing in manufacturing programs and agricultural inputs. Instead, Nigeria should invest in human capital. Okigbo saw the danger of exacerbating global inequality and insisted that for privatisation to be effective it must be accompanied by a deepening of the domestic production base and investment in the expansion of domestic managerial skills.

In 1962, he published his *Nigerian National Accounts*, a mere two years after Nigeria gained independence. Nigeria needed a new estimate, because, according to Okigbo, the previous estimates done by Europeans were insufficient (Okigbo, 1962, p. 285). Wolgang Stolper, a student of Joseph Schumpeter, worked with Okigbo on Nigeria's first comprehensive development plan in 1962. Stolper often found Okigbo consulting his beloved *National Accounts* (Guyer and Denzer, 2001, p. 16).

Okigbo's estimate fits into a larger, global intellectual debate on national accounting. Okigbo's estimate came at a time when national accounting had developed significantly, yet the question remained as to how applicable these methods were to Global South economies (Morgan, 2009, p. 10). Okigbo effectively disproved the idea that national accounting cannot be applied to the Global South. Moreover, Okigbo, writes Arthur Mbanefo, "meant the end of dependence of African countries on Western foreign economists for advice" (Guyer and Denzer, 2001, p. 4). He proved that the Global South did not need economists from the Global North but could rely on their own economists to do the counting.

What should be counted and how?

Okigbo, as an advisor to the independent Nigerian government along with E. F. Jackson,[2] conducted his own surveys and data collection to build a gross domestic product (and gross national product) of Nigeria for years 1950-57. He estimated output and expenditure on product (Okigbo, 1962, p. 285). For the product, he included agriculture, livestock, fishing, forest products, mining and oil exploration, manufacturing and public utilities, communications, building and civil engineering, ownership of buildings, transport, crafts, missions, government, marketing boards, banking, insurance and the professions, domestic services, miscellaneous services, land development and distribution, residual error, etc. (Okigbo, 1962, pp. 289–290). In the expenditure estimate, he included consumer expenditure, government expenditure on goods and services, gross fixed investment in Nigeria, increase in marketing boards' stocks, net exports of goods and services and net income from abroad (Okigbo, 1962, p. 291).

Okigbo challenged an earlier Nigerian income estimate calculated by Prest and Stewart. Prest and Stewart were appointed by the colonial office in 1950 to produce a national account for Nigeria using data from 1950-51. They, like many scholars counting Global South economies, thought it important to include figures for the informal sector or what they referred to as "intra-household activity" (Okigbo, 1962, p. 294). Prest and Stewart argued that they "must reconsider the basic concepts generally in use in National Income calculations and try to discover the most appropriate forms for a West African economy emerging from primitive forms of economic life" (Prest and Stewart, 1953, p. 6). Nigeria's national account then, as a primitive economy, should, they argued, include the output of drummers, beggars, praisers, housewives and prostitutes. According to Okigbo, however, these figures were difficult to estimate across years because they were subjective. He thus excluded these figures from his estimate. Prest and Stewart had also decided to include transfer payments, such as "purchase of old houses and gifts to beggars," which were generally excluded from national accounts (Okigbo, 1962, p. 296). They observed that these payments were a social necessity and thus should be included in the Nigerian national account. Okigbo's "judgment was that the so-

[2] The estimate was finally published by the government in 1961 under only Okigbo's name.

called ‘social necessity’ [was] no stronger and no more necessary in Nigeria than elsewhere and that the Nigerian economy did not offer any special reason either in 1950 or 1960 for the position taken by Prest” (Okigbo, 1962, p. 296). Nigeria may have been different, but not so different that its informal sector should be included in its national accounts.

Okigbo also disagreed with Prest and Stewart’s definition of capital goods. Prest and Stewart had included bikes and personal cars in their capital figure, which Okigbo argued could be defined as durable consumer goods – and often were in “more mature economies” (Okigbo, 1962, p. 297).

> The usual criteria – capital assets are expected to last more than a year, to yield an income, or to be used for production – can be satisfied by a number of goods conventionally treated as durable consumer goods in the more advanced countries (Okigbo, 1962, p. 297).

Okigbo was most likely referring to the internationally agreed standard set of recommendations on how to compile measures of economic activity, first published in 1947 under the leadership of Stone at the United Nations Statistical Commission. Okigbo would have been using the 1960s report, where “transport equipment” under capital formation “include[d] ships, motor cars, trucks and commercial vehicles, aircrafts, tractors for road haulage, vehicles used for public transport systems, railway and tramway rolling stock, carts and wagons” (Nations, 1960, p. 29). He thus excluded bikes and personal cars. Okigbo was making a general point here about the arbitrariness of how estimators defined different economic activities. What mattered was that one was open about what was decided and that the definitions stayed the same, so comparisons could be made over time and space. In other words, there is a hint in this section that Okigbo’s estimate would be more comparable across countries, than Prest and Stewart’s, because he followed the internationally agreed upon set of standards (Okigbo, 1962, p. 297). Nigeria needed a national account that could be compared with other national economies.

Our analysis shows that Okigbo was engaging with a methodological debate about what constitutes a gross domestic product and a national income. Should we include sectors or activities where figures are so subjective that they say little about the economic reality? Okigbo was adamant that what should be counted needed to be challenged and reformulated in all parts of the world.

Okigbo also contributed to the methodological debate about how to compile national accounts. Large countries like Nigeria with several distinct regions needed aggregate figures that reflected the heterogeneity across areas. Okigbo critiqued how Prest and Stewart had calculated Nigerian agricultural prices. Prest and Stewart had taken retail prices, meaning that prices reflected food in their processed form, even when those products were not sold in that form, because they wanted to cover intra-household services (Okigbo, 1962, p. 295). The also took retail prices in or near the place where the output was consumed. Okigbo preferred to use “producer prices,” because he wanted to construct a time series (rather than a single year estimate) (Okigbo, 1962, p. 295). He also used prices of goods in their natural state, not processed. And due to little data on interregional data, he did not use prices in or near the place where output was consumed. He took, instead, a single ruling price for output in the producing region. Okigbo gave a specific example to explain the mistakes made by Prest and Stewart: they had treated “all firewood as part of the gross domestic product” (Okigbo, 1962, p. 296). Okigbo, however, understood that firewood was simply collected, not bought, in rural areas. Okigbo therefore treated rural firewood as a free good and only measured urban consumption of firewood.

Okigbo also felt the need to disaggregate his national account into political regions which made up the Federation (Okigbo, 1962, pp. 287–8). (Okigbo did, however, have to merge the Lagos Federal territory with Western Nigeria and the Southern Cameroons with Eastern Nigeria “because in many branches of activity it [was] impossible to maintain the division” (Okigbo, 1962, p. 288). For the output estimate, he built up the “national figures in most branches of activity from regional data” (the regional division was much more difficult for the expenditure estimate, because it was hard to identify the extent of interregional trade in food) (Okigbo, 1962, p. 288). Measuring the whole economy was and is infinitely complex, irrespective of how reliable the data may be, which forced and forces observers to count some local areas from which they produce aggregates of the whole economy. As Morgan describes in her analysis of three case studies of national account estimates in colonial and post-colonial Africa, economists recorded “pieces that made up the whole” (Morgan, 2009, p. 52).

While the issues treated thus far could apply to all economies, Okigbo brought forward issues where the Nigerian context had been forgotten in the earlier estimates. Okigbo argued that the

Nigerian national account needed to include peasant investment (Okigbo, 1962, p. 303). A major criticism of the estimates from Prest and Stewart and the International Bank Mission's Report on Nigeria, brought forward by Peter Bauer, was their omission of peasant investment (Bauer, 1955; Okigbo, 1962, p. 303). Bauer considered the omission of capital formation in the agricultural sector as highly problematic. While capital was treated as essential to economic growth, "very important component elements" of "capital and capital formation" in "underdeveloped countries" were "ignored" (Bauer, 1955, p. 410). By neglecting investments in "the establishment, extension, and improvement of agricultural holdings, whether for subsistence or cash crops," he wrote, the Bank's report

> neglects all capital formation in the nonmonetary sector (subsistence of near-subsistence production) in which all investment is direct, and by neglecting capital formation by individual producers of cash crops, it also neglects much investments in the exchange sector (Bauer, 1955, p. 410).

And as this sector made up a large proportion of the Nigerian economy, the figures were misleading (Bauer, 1955, p. 410). Okigbo tried to accommodate the criticism by including "peasant investment" (Okigbo, 1962, p. 303). "Peasant investment [took] the form of new seedlings, clearing and preparing new land, purchase of new farm implements, and inventory accumulation" (Okigbo, 1962, p. 303). In contrast to Okigbo's argument against including beggars and housewives etc., Okigbo argued for including components from the nonmonetary sector (Bauer's term), intrahousehold activities (Okigbo, Prest and Stewart's term) or the informal sector (our term), because the investments in these assets yielded income.

Furthermore, the Nigerian context made access to data difficult. Okigbo struggled to get access to reliable data, despite being able to conduct his own surveys. "It was necessary," described Okigbo, "to travel extensively and frequently to explain our needs to harassed Government officials, who often did not understand the relevance of what they were asked to tabulate, and to persuade and help businessmen to fill our questionnaire forms correctly and punctually" (Okigbo, 1962, p. 286). Due to Nigeria's inexperience with national accounts, data collection was an extensive exercise. Furthermore, "difficulties arose from paucity of records," making Okigbo's agricultural output figures "quite shaky; those of livestock sheer guesses" (Okigbo, 1962, p. 298). There were also no data on inventory changes (Okigbo, 1962, p. 303).

According to Okigbo, the major difficulty with data was the lack of income statistics for Nigeria. The national accounting standard that had emerged in the second quarter of the 20th century was the triple entry bookkeeping. Triple entry bookkeeping included an estimate for net national income, output and expenditure. In the seminal work on *Colonial Social Accounting*, Deane argued that the triple entry book keeping was better for the economies in the Global South, because it eliminated some of the margin of error due to lack of data (Deane, 1953, pp. 8, 9).

> The triple-entry balancing account provide[d] a convenient means of organizing the miscellaneous data. It permit[ted] the effective utilization of every scrap of economic information by providing a considerable number of cross-checks (Deane, 1953, p. 8).

Additionally, as the triple entry standard was an international standard, the Global South economies could be compared with other territories (Deane, 1953, p. 8). Okigbo disagreed. The necessary imputation for the income estimate was simply too large "because of the paucity of data" (Okigbo, 1962, p. 285). There were "serious gaps" in the data for income of large corporations, "data on wage income covered only those in the service of governments and large corporations" and a large "bulk of income from self-employment could not be satisfactorily accounted for" (Okigbo, 1962, p. 285). Okigbo, therefore, only estimated output and expenditure.

Also due to lack of data, Okigbo found that the output and expenditures estimates were interdependent (Okigbo, 1962, pp. 286–7). The national expenditure on product estimate was obtained substantially from output estimates. He relied on his "figures of output valued at retail market prices to obtain expenditure on food" (Okigbo, 1962, p. 287). This meant that he only had one set of tables. The "output tables [were] partially based on expenditure estimates and the expenditure estimates [were] derived for the most part from output tables" (Okigbo, 1962, p. 287). Over time, Okigbo hoped, that more data could be collected so that output and expenditure estimates could be checked against each other.

Considering Okigbo's general concerns and specific alterations needed for the Global South, there remains an important question as to what role did the fact that Okigbo was a Nigerian native affect what he counted. In Deane's well-known work on producing national accounts for what she labelled "village economies" (Deane, 1953, p. 130), she was adamant that producers of national accounts needed to engage with and have close knowledge of the "native background" of the economy, rather than scientific knowledge (Deane, 1953, p. 128). National accounting needed to be adapted to these economies and only close up experience could produce sensible observations and recordings (Morgan, 2009, p. 24). But how close up was her experience? Even though Deane, Prest, Stewart and Stolper, who produced national accounts for Nigeria, conducted field visits in Nigeria, they undoubtedly spent much less time in Nigeria than Okigbo. Generally, this most likely meant that they had fewer local contacts and less local knowledge. In short, did Okigbo have access to more data?

Moreover, did his greater experience of the Nigerian territory make his national account more reliable? Deane, indeed, argued that the difficulties encountered by the early economists attempting to estimate national income in all countries were not so much due to lack of data, but lack of fit (Deane, 1953). Creating reliable measurements models, claimed Deane, meant that the national accounting standards needed to fit the economic life as it was observed, rather than forcibly attempting to fit it into pre-existing criteria. Surely natives must have been, and be more, equipped with relevant knowledge to adapt national accounting standards to their countries.

Conclusion

The focus on natives of the Global South has offered us a new perspective on what national accounting did and can do in these less studied spaces. While earlier studies looking at how national accounting was used as an imperial tool to control large populations in foreign territories, our study zooms in on an economist from one of these territories and uncovers the very opposite. Okigbo used national accounting to better understand the progress of his domestic economy and to better judge his newly independent government's policy interventions. On a higher plane, Okigbo, as the economic advisor to the first independent government of Nigeria in the 20th century, was also placing Nigeria on the map of independent nations that measured their economies. Nigeria could now be reliably compared to the rest of the world. And that equalising effect was and remains powerful in the international space.

Finally, our study shows that national accounting is both local and international. Okigbo has examples of how Nigerian peasant investment should be included in the accounting, but he also disagreed that the informal sector should be counted because Europeans did not (even though they had an informal sector, too) and national accounting was primarily useful because it allowed for comparison across countries. Comparison was not possible, however, if economies were counted differently across borders. The question worth probing here is perhaps where the limits lie. How localised does a national account need to be to be as accurate as possible and how much does a national account need to adhere to international standards to make comparison across nations possible, productive, reliable and accurate?

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