## A Contribution to the Critique of National Accounting: expanding John Maynard Keynes's criticism of Colin Clark's national income estimates to the present use of GDP

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In 1940, John Maynard Keynes published in *The Economic Journal* a critique to Colin Clark's national income estimates for the UK, which he used for making his estimates together with Erwin Rothbarth in *How to Pay for the War*. Despite different authors have explored Keynes's criticism over Clark's estimates there isn't a consensus on whether his disagreement had a significant impact on modern National Accounting. On the other hand, when Keynes's approach on national income estimates is recognized due to its relevance, his criticism over Clark is not considered to be significant. In other words, Keynes relation with the initial efforts for estimating national income is conventionally treated as a 'contribution' to the internationally standardized system of accounts as consolidated through the United Nations' (UN) *System of National Accounts* (SNA).

However, if we analyze the history of National Accounting and the role played by John Richard Nicholas Stone (Richard Stone), who worked with Keynes (and James Meade) during the Second World War, this idea of a 'contribution' fades away as Stone became more concerned with integrating the system to Wassily Leontief's Input-Output model. Such integration demanded some radical changes on the valuation methods adopted before as also to the definition of income which needed to be redefined. Contemporary works made by Geoff Tily (2009)<sup>1</sup> and Benjamin Mitra-Kahn (2012)<sup>2</sup> have tried to reinterpret the history of the official accounts by placing more emphasis on the impact of Keynes critical view. It is not clear how his criticism have in fact influenced the development of modern National Accounting, which became something extremely different from what Keynes considered to be the purpose and proper use of national income estimates – improving the capability of planning the national budget with the increased government expenditure due to warfare.

With the end of the war, and with Keynes's death in 1946, the development of national income measurement has inclined towards making adjustments for differences in valuation methods (the use of market prices or factor costs – this latter term was later abandoned), though this does not solve the problem. Despite Keynes did not appeal to a price index as a deflator for obtaining 'real' terms, he re-expressed monetary quantities in 'wage-units', a fixed wage-weighted employment index, adopting a relative social standard for real values. Stone, on the other hand, opted for a systematic approach to the relationship among index numbers, developing the system of accounts to the improvement of international comparability. For having estimates of comparable purchasing power between different countries – a concern related with the welfare economics of Arthur C. Pigou – Stone's recommends in his Nobel lecture the methods of comparing currencies pioneered by Clark, which have been gradually introduced in the UN's *International Comparison Project*.

The purpose of this research is to investigate with more depth certain discussions between these authors in letters (mainly Nicholas Kaldor, Rothbarth, Clark and Meade) and some unpublished documents concerning the years of 1939 to 1946, in the case of Keynes

<sup>&</sup>lt;sup>1</sup> TILY, G. John Maynard Keynes and the Development of National Accounts in Britain, 1895–1941. 2009.

<sup>&</sup>lt;sup>2</sup> MITRA-KAHN, B. H. Redefining the Economy: How the 'economy' was invented in 1620, and has been redefined ever since. 2012.

archives, and 1939 to 1968 in Stone's archives. Both archives are located at Cambridge. As Keynes's contrast is elucidated in relation to the purpose of Clark's estimates (influenced by Pigou's welfare economics and Irving Fisher's tests approach on index numbers), we can shed some new insights for interpreting the present limitations on modern National Accounting.

For each author, three main questions will be addressed in searching the archives: i) how the deflation of the national income estimates mattered? ii) what is the relation between the estimates and the national budget, i.e., how government is treated in the acocunts? (this question contrasts the influence of Keynes's multiplier in his estimates with the use of technical coefficients in the reconstruction of the estimates integrated with Leontief's model) iii) the purpose of measuring national income and National Accounting? By asking these three questions in analyzing each author's archives this research aims to clarify the antagonism between Keynes and Stone's different views on National Accounting. The Early-Career fund will be used for covering travel expenses from Rio de Janeiro to London and return (\$1000), London to Cambridge and return (\$60) and the Airbnb for about twelve days in Cambridge (\$440).