Texto submetido para as sessões ordinárias

Título: Banks' billion dollars figures: *Simon Kuznets, the establishment of the US national income and product accounts, and the debate about banking services, 1933-1948*

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Área: 1. Metodologia e História do Pensamento Econômico
Subárea: 1.2. História do Pensamento Econômico

Resumo: O objetivo deste artigo é reconstruir as origens da contabilidade nacional nos Estados Unidos, entre 1933 e 1948, situando-a em seu contexto histórico, isto é, o período da emergência da mensuração econômica oficial sistemática. Tal reconstrução é baseada principalmente no trabalho de Simon Kuznets. Dedica-se atenção especial à mensuração do produto líquido do setor financeiro, do método de Kuznets para lidar com a questão passando pela modificação proposta por Dwight Yntema (e adotada) em 1947. Uma revisão recente, realizada em 2003, é brevemente mencionada. A narrativa sugere que o desenvolvimento histórico dos métodos para contabilizar a atividade dos bancos revela uma tendência a considerar que eles realizam um espectro cada vez maior de atividades geradoras de rendas, ainda que isso se reflita mais na representação dos bancos na contabilidade nacional do que no nível efetivo da renda líquida atribuída ao setor.

Abstract: This paper aims to reconstruct the origins of U.S. national income and product accounts, from 1933 to 1948, placing it in its historical context, that is, the period of emergence of official and systematic economic measurement. Such reconstruction is based mainly on the work of Simon Kuznets. Moreover, special attention is dedicated to the measurement of the net output of the financial sector, from Kuznets' method to deal with the issue to the modification proposed by Dwight Yntema (and adopted) in 1947. A recent revision of this method, undertaken in 2003, is briefly sketched. The narrative suggests that the historical development of the methods to account for banks revealed an increasing tendency to consider a broader spectrum of activities, identified as theirs, as part of the economy's income-creating activities, even if that was reflected more in the representation of banks in national income accounting than in the actual level of net income that is attributed to the banking sector.

BANKS' BILLION DOLLAR FIGURES

Simon Kuznets, the establishment of the U.S. national income and product accounts, and the debate about banking services, 1933-1948

"In recent years national income has been widely used to gauge the performance of the country's economic system. Statesmen and economists, politicians and journalists, reformers and cranks, defenders of group interests and advocates of special policies — in short, nearly every one concerned with the workings of the economy — have at one time or another cited the billion dollar figures to proper or improper ends."

S. Kuznets (1941: xxv)

1. INTRODUCTION

Critiques of the national accounting systems are not entirely new. One variety of them questions the official conventions from the standpoint of classical political economy. The demarcation, implied in the national accounts, of what should be considered production and what should be considered consumption is mostly incompatible with the distinction between productive and unproductive labor, as developed by the classical political economists. If the concepts formulated by Adam Smith, and further refined by Karl Marx, were used to measure the product of capitalist economies, the resulting number would substantially differ from the ones that are currently estimated. Since the late 1980s, there have been some attempts to adapt the national accounts to this tradition, as exemplified in the books by Anwar Shaikh and E. Ahmet Tonak (1994) and by Edward Wolff (1987). The implications of this endeavor to the representation of finance are profound: according to Marx, the activity of financial intermediation is unproductive, consuming (rather than producing) a part of the social surplus value (Foley, 1986: 119-120). In other words, the financial system does not produce value, but actually consumes some of the value that was created in other sectors of a capitalist economy. That does not mean that channeling funds for financial institutions is useless or irrational from the standpoint of the economy as a whole (Foley, 1986: 120-121). It can facilitate the circulation of capital, smoothening the material reproduction of a capitalist society. But it does not add to the total social surplus value produced.

The important point is that different approaches to national accounting have implications far beyond the ideological justification of specific sectors of the economy, implying different understandings of the workings of capitalism. Also building from a classical political economy perspective, Deepankar Basu and Duncan Foley (2011) argue that a different measure of the product of an economy, closer to the one implied in Marx, might present a clearer statistical relation to the level of employment than GDP. The disconnect between GDP and employment, made explicit in the current crisis, may be due to the growing divergence between the former measure and what the authors call measurable value-added (MVA).[1] The fact that the financial sector has outgrown the remaining sectors in most national economies, in the recent decades, led to a growing divergence between GDP and MVA and it is, in fact, the latter which should have a positive relation with the level of employment.[2] More specifically, their econometric estimations seem "to suggest that the growing weight of the services sector, especially the financial sector, is an important part of the explanation for the weakening of the real GDP-employment relationship in the U.S. economy over the last three business cycles." (Basu, Foley, 2011: 28-29)[3]

All that is probably more than enough to justify a reinvestigation of the place of finance in the national accounting systems. The specific focus of this paper is the creation of the national income and product accounts (NIPA), in the United States, during the 1930s and 1940s. After much theoretical debate and controversy, the Department of Commerce published, in 1947, a new version of its national income estimates that for the first time were presented in the NIPA framework. In spite of several revisions and modifications, it is still the base of official estimates.[4] Moreover, I will attempt to analyze the origins of the NIPA framework through the work of one of the main economists involved in that effort: Simon Kuznets.

There are many reasons that make Kuznets' work a suitable vantage point from which to examine this topic. First, he is one of the most important pioneers in the modern attempts to institutionalize economic measurement. Second, his work reveals a rare combination of theoretical depth and statistical detail. He was not only trying to solve the practical problems involved in collecting and aggregating data, but also striving to root the economic measurements in consistent theoretical frameworks. According to him, "during recent decades (…) controversies in the field of income

[1] "The MVA category is composed of the following industries from the AIA [Annual Industry Accounts of the U.S. Bureau

[2] "[B]etween 1980 and 2008, the neoliberal era, the growth rate of real MVA was only 72.91 per cent of the growth rate of real GDP. This implies that the value-transferring (or value-wasting) part of the economy has grown relative to the value-adding part during the neoliberal era." (Basu, Foley, 2011: 11) One of the causes of this divergence (and its consequences to the level of employment) was, according to Basu and Foley, the following: "By the mid-1980s the finance, insurance and real estate (FIRE) sector had overtaken manufacturing as contributing the largest share of GDP; (…) the FIRE sector has increased its share of value added much more steadily than its share of total employment. In fact, the share of employment accounted for by the FIRE sector has stagnated since the mid-1980s, but the share of output contributed by this sector has continued increasing right till the mid-2000s." (Basu, Foley, 2011: 10-11)

[3] See also Foley (2011).

[4] The last comprehensive revision of the NIPA was made in 2003, in order to adapt it to the 1993 United Nations' System of National Accounts (SNA).

measurement have been a direct reflection of controversies in the field of theoretical economics." (Kuznets, 1940: 293) During the period covered by this paper, he engaged in a very abstract controversy with John Hicks about the theoretical problem of valuation of national income and its significance to welfare theory.[5] And, at the same time, he debated with the economists responsible for the 1947 version of the NIPA framework on a much more concrete level.[6] Third, he was deeply involved in the debates surrounding the establishment of the U.S. national accounting system. Not only he was one of the first economists to whom the Department of Commerce required estimates of national income, but also most estimates from this period were either made by him or by two former students of his, Robert Nathan and Milton Gilbert (Carson, 1975: 155-161; Kapuria-Foreman, Perlman, 1995: 1529-1531). Gilbert would turn out to be, in the end, the supervisor of the 1947 version. In addition, Kuznets was the first chairman of the executive committee of the Conference on Research in National Income and Wealth, a network in which the greatest part of the U.S. literature on national accounting was both produced and debated, from the late 1930s until, at least, the 1950s.[7]

This paper is comprised by three parts, besides this introduction. In the first, Kuznets' work on national income accounting will be briefly contextualized, from his first publication on the topic, in 1933, to his comment on the 1947 version of the NIPA framework, which was published in 1948 (Section 1). Then, the way he demarcated economic and non-economic activities – and the differences between this demarcation and the distinction between productive and unproductive labor – will be roughly sketched, in order to introduce the issue of accounting for finance. His method for dealing with that industry will be reconstructed and, subsequently, compared to the one adopted in 1947, which was proposed by Dwight Yntema (1947) (Section 2). In the concluding remarks, it will be worthwhile to note that Kuznets disagreement with the 1947 version of the national income estimates led him to emphasize the political implications of economic measurement and the risks of it being used in a

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[5] See Kuznets (1948a, 1948b) and Hicks (1940, 1948).

[6] See Kuznets (1948c) and Gilbert et al (1948). Kuznets required of his work (and of that of other economists) a difficult balance between analytical and empirical rigor. That is made clear by his reviews of the works of others. According to Vibha Kapuria-Foreman and Mark Perlman (1995: 1540-1541), "[h]is reviews tend to be critical of other peoples' work on the following two grounds: inadequate use of statistical data to support hypotheses, and inadequate use of analysis to go beyond purely empirical results. (…) Overall Kuznets' empirical method demanded a judicious mix of economic analysis and statistical data, each supporting conclusions and hypotheses for the succeeding steps in the inquiry and his reviews censured investigations that omitted either of these two essential elements."

[7] From the standpoint of the history of economic thought, the creation of national accounting systems is particularly interesting because it makes clear the social nature of knowledge and the conflictive character of any theoretical development. Since one accounting framework would become the official one, institutional disputes assume centrality. In this manner, this topic helps one to avoid the common pitfall of attributing specific formulations and concepts to the work of an isolated genius, instead of locating the origin of economic thought in the communication among economists. Focusing in the work of Kuznets, then, is just a delimitation, and a comprehensive analysis of the theoretical development in question would need to include more detailed studies of the works of other economists engaged with national income measurement in the period, including the British economists, like James Meade and Richard Stone, who proved to be very influential.

technocratic way (Section 3). This will tie the narrative to the broader problem posed in this introduction, linking this research with a recent literature that Theodor Porter (2001: 7) described in the following way: "[m]ore recently, historians concerned with measurement and quantification have placed increasing emphasis on the practical, political, administrative, and economic role of numbers."[8]

2. Context of Kuznets' work

Even if attempts to collect data on economic aggregates go back a long time, in the interwar period this certainly grew to a new scale.[9] This development would eventually lead to the consolidation of official national income accounts, which would be widespread in the postwar years.[10] There are several concomitant reasons behind the renewed measurement effort of the 1920s. The increasing centralization and concentration of capital, which manifested itself in sectors such as steel, railroad and the production of automobiles, revealed the possibility of rationalizing production and managing it "scientifically." At the same time, it increased the volatility and disruption caused by market coordination, calling forth state intervention (Pollock, 1941: 202-203). The working class organization in trade unions and political parties, in its turn, achieved new heights, helped by the concentration of workers under the roof of the big corporations. Extension of suffrage in Europe and increasing political participation of labor in the U.S. provided another push for state regulation of the economy.[11] The centrality of the debate between *laissez-faire* and interventionism brought out the precariousness of the available economic statistics to inform concrete discussion in the public realm, while it turned them politically important. The following description about the U.S. case, by Carol Carson (1975: 155), provides an illustration:

> "As the economy sank into the Great Depression in 1930-31, the national income estimates most commonly cited were those prepared by the National Bureau of Economic Research and the National Industrial Conference Board. Except for the preliminary estimates prepared by

[8] As this paper is written, the financial press has been reporting a striking example of the politicization of economic statistics. In the midst of Eurozone debt crisis, Andreas Georgiou, the head of the Greek statistics agency, is facing "an official criminal investigation for allegedly inflating the scale of the country's fiscal crisis and acting against the Greek national interest." (Hope, 2011: 1)

[9] The earlier attempts of measurement were generally related to the formation of nation states, as Kuznets (1940: 292) himself noted: "the continued survival and intensification of organization into national states has been responsible for frequent attempts to estimate national income for various countries, attempts made in spite of obvious difficulties created by lack of comprehensive data and in spite of the wide margin of error in the product of the estimator's labors."

[10] "[I]t was the requirements of war economies, and interwar problems, particularly the Great Depression, that increased massively the collection of data by the state and its agencies. By the 1950s, economists in the Western world had access to a bewildering variety of 'official' data." (Morgan, 2001: 11)

[11] See, on these historical processes, E. Hobsbawm (1989: esp. chaps. 2 and 4, pp. 34-55 and 84-111).

> [Willford] King, the National Bureau's laborious procedure yielded estimates only with a lag of many months. The Conference Board's estimates, although available more quickly, provided only a single total moved forward on the basis of gross values. In 1931, Government and private experts were called to discuss the current economic situation in Congressional hearings; they were unable to provide national income figures for later than 1929. Further, national income estimates had found little use in business cycle analysis and forecasting, for the available estimates were neither current nor provided on a quarterly or monthly basis."

Before governments assumed the task of economic measurement, it was being done by several other organizations. Institutes of business-cycle research were typical in Central Europe during the 1920s, whereas forecasting services started to become widespread in the U.S. Universities also played a role, establishing institutes of quantitative economic research.[12] The sense of urgency for this effort to become coordinated and permanent was widely recognized. John Maynard Keynes (1926/2004: 41) remarked, in 1926, that the cure of "the greatest economic evils of our time" was "to be sought (...) partly in the collection and dissemination on a great scale of data relating to the business situation, including the full publicity, by law if necessary, of all business facts which it is useful to know."

What is important to retain from this process is the fact that national accounting systems were seen in its origins, first and foremost, as instruments of reform. The technocratic aspect that it later developed, and the above-mentioned ideological help that it provides to finance, could have been already latent in the beginning, but were undoubtedly secondary. (Also, as a couple of figures presented below indicate, the share of financial incomes in the national income was much smaller than it would turn out to be, decades later.) Measurement was aimed at politicizing the economic sphere, not at technically neutralizing the debate about the economy. In the words of Mary Morgan (2001: 11): "The progressive movement in America and liberal and welfarist movements in Europe were committed to reforms that often relied on social science research and data, and in the face of these movements, governments increased their collection of economic information."[13] Kuznets' entrance in the scene, through his position in the National Bureau of Economic Research (NBER), has to be understood in this context.

Having arrived in the United States in 1922 (immigrating from Russia, via Turkey), Kuznets, in his early twenties, registered in "Columbia University's adult-education unit, the School of General Studies." (Kapuria-Foreman, Perlman, 1995: 1527) There he studied under Wesley Clair Mitchell, who

[12] See, for instance, the articles by Tobias Rötheli (2007: esp. 481-486) and Walter Friedman (2009).

[13] Porter (2001: 18) has called attention to "(…) the persistently close ties of economic measurement to administration and reform. That tie has, indeed, been itself a source of dynamism and change. Governments have taken on new functions, adopted new procedures of planning and budgeting, and faced publics and courts with changing standards of credibility and objectivity."

offered him a research assistantship at the NBER. Founded in 1920, the NBER was, at the time, a private agency specialized in gathering data that can be considered one of the offsprings of the progressive movement in the U.S. (Fogel, 2000: 3-6). Kuznets attracted Mitchell's attention by translating an essay on Joseph A. Schumpeter's work, which he had written at the University of Kharkov, when he first began studying economics.[14] During the 1920s, Kuznets' work focused on business cycle theory and was clearly influenced by his advisor. Only in the beginning of the 1930s, he shifted to the topic of national accounting, picking up some earlier work that had been done in the NBER (Kapuria-Foreman, Perlman, 1995: 1526-1529).

He started to gain recognition as a specialist on the issue with the article "National Income," which he wrote to the *Encyclopaedia of Social Sciences*, edited by Edwin Seligman (Kuznets, 1933). This 20-page long piece marked the beginning of the formulations on national accounting in the period covered by the present paper:

> "Among those who read the drafts of the *Encyclopaedia of the Social Sciences* article was Paul Webbink, then an Administrative Assistant to Senator Robert Marion LaFollette of Wisconsin. Webbink, much impressed with what Kuznets laid out, drafted a resolution which the U.S. Senate passed in June 1932 which directed the new Secretary of Commerce to provide national income estimates for 1929, 1930 and 1931 through the Bureau of Foreign and Domestic Commerce (BFDC). The new Secretary, Daniel Roper, was unable to find anyone at BFDC to undertake this task and turned (as many had done before) to Wesley Clair Mitchell. Mitchell suggested Kuznets, who had been hired in 1930 as Professor of Statistics at the University of Pennsylvania." (Kapuria-Foreman, Perlman, 1995: 1530)[15]

Even before Franklin Delano Roosevelt's administration and the New Deal, the U.S. government started to organize itself to collect and publish national income estimates. The Great

[14] Not much is know about his education as an economist at the University of Kharkov. Kapuria-Foreman and Perlman (1995: 15626-1527) state that he wrote two second year essays, before the closing of the university due to the Civil War. The paper about Schumpeter was one of them. The other, about the money wages of factory workers in Kharkov, would be published in 1921, in Russian, when he was working at the Division of Statistics of the Central Soviet of Trade Unions (Abramovitz, 1986: 241).

[15] According to Carson (1975: 155-156), the Senate resolution was proposed after negotiations between the assistants of Senator LaFollete and officials of the Department of Commerce, who were also in favor of turning the estimates a government task: "In February, 1932, two groups interested in pursuing information on the national income were brought into contact with each other. On one hand were officials of the Commerce Department's Bureau of Foreign and Domestic Commerce (BFDC) and on the other, what was known as the La Follette group, which included Isador Lubin, an economic adviser to Senator Robert M. La Follette, Jr. A staff memorandum to Bureau Director Frederick M. Feiker refers to a possible Senate request for a study of national income, also referred to as 'buying' or 'purchasing power' surveys. Feiker was concerned about the lack of data on 'purchasing power,' and agreed with the La Follette group that 'new purchasing-power, and standard-of-living surveys are more needed than studies on any other economic subject.' As a result of a May meeting between Lubin and Feiker, 'a resolution will be offered in Congress (Senate) as soon as the present emergency measures are concluded that will call upon some government department to make a study of national income and purchasing power… In its present form it directs that the survey shall be made by the Department of Commerce, although some are in favor of having the work done by the Federal Trade Commission.'"

Depression is clearly the main reason behind this initiative[16]. Through Kuznets' influence, two students of his that he trusted, Robert Nathan and Milton Gilbert, were hired by the Department of Commerce to work in the estimates. The project was carried forward in cooperation with the NBER and Kuznets supervised it closely. Nathan and Gilbert would report bi-weekly to him. (Kapuria-Foreman, Perlman, 1995: 1530-1531) In January 1934, a report with the estimates was submitted to the Senate. After that, Kuznets distanced himself from the issue and the subsequent revisions, extensions and modifications of the estimates were mostly done by Nathan and Gilbert. The major innovations were the publication of a monthly series and a distribution of income by state. Thousands of copies of the first report were sold and the uses to which it was applied were quickly multiplied. Relief agencies, the Social Security Board, the Department of Agriculture and the National Recovery Administration were among the organizations that began defining their policy with the aid of the estimates. Businesses were also, of course, eager to use them for marketing studies. (Carson, 1975: 157-161)

Until the end of the 1930s, Kuznets efforts were channeled to improve the theoretical basis of the national accounting system. With that aim, he helped founding (and chaired the executive committee of) the Conference on Research in National Income and Wealth, a network of economists organized around the NBER who dedicated themselves to debate several problematic issues that the estimates involved. It was not, however, an exclusively research endeavor, but it had a clear aim of generating agreements around certain definitions and methods, leading ultimately to a hegemonic approach. The influence of the Conference can be assessed by the attendance of its meetings, comprising academic institutions, government bureaus and beyond:

> "At its first meeting the Conference included representatives from the Departments of Economics of the following universities: Chicago, Columbia, Harvard, Minnesota, Pennsylvania and Wisconsin; from the Research Divisions of the United States Bureau of Foreign and Domestic Commerce, and the United States Bureau of Agricultural Economics; the Division of Research and Statistics of the United States Treasury; the United States Bureau of Labor Statistics; the Industrial Section of the National Resources Committee; the Central Statistical Board; the Division of Research and Statistics, Board of Governors of the Federal Reserve System; the National Industrial Conference Board; Dun and Bradstreet; and the National Bureau of Economic Research. The Conference was later joined by representatives from the United States Bureau of the Census, the Brookings Institution, the Research Division of the Federal Deposit Insurance Corporation, the American Statistical Association, and the Department of Economics of the University of Cincinnati." (Kuznets et al, 1937: xvii-xviii)[17]

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[16] In a recent account, Rosemary Marcuss and Richard Kane (2007) say that the NIPA were "born of the Great Depression and World War II." See also Christophers (2011: 118-119), on this connection between the historical events of the 1930s and the establishment of official income statistics.

[17] The aims of the Conference were formally stated as follows: "(1) To exchange information among the various organizations and individuals carrying on or planning studies in the field, to prevent overlapping, to establish conditions for

The work of the Conference was reported in several editions of the *Studies in Income and Wealth*, which published articles, along with the discussion about them, by many of the economists who worked in the field. Moreover, according to Kapuria-Foreman and Perlman (1995: 1529), the Conference was "an organization which not only met regularly, but also developed an international dimension."

Then, in the early 1940s, Nathan was transferred to the War Production Board and invited Kuznets to join him in the effort of organizing the great shift of the U.S. economy towards the production of war material (Kapuria-Foreman, Perlman, 1995: 1534-1535; Fogel, 2000: 11-12). When that was over and Kuznets could turn his attention back to national accounting, he realized, to his disappointment, that the Department of Commerce efforts were drifting away from his general approach. Gilbert had assumed the task in the early 1940s and decided to move the U.S. estimates in the direction of the approach to national accounting that was being developed, contemporaneously, in the United Kingdom by James Meade and Richard Stone. This was, in fact, part of an effort of international cooperation that would ultimately lead to the establishment of the United Nations' System of National Accounts, a standard framework of national income accounting that, if widely adopted, would allow more meaningful international comparisons of countries' data. Its origins can be traced back to the so-called tripartite discussions that took place in Washington on September 1944, between Stone (representing the United Kingdom Central Statistical Office), an official from Canada's Bureau of Statistics, and Gilbert, Edward Denison, Yntema and others from the National Income Unit of the U.S. Department of Commerce (Denison, 1947: esp. 3-4).[18]

Roughly, the shift from Kuznets' orientation to the British one meant a change of focus, from an attempt to ground national income accounting in welfare theory, however hesitantly, to the aim of developing an "analytical tool" (the phrase is Carson's, 1975) that could "portray in summary form transactions in the national economy and facilitate analysis of its structure and development." (Denison, 1947: 4) Denison (1947: 4) explicitly says that the approach adopted by them can "be contrasted in

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more intelligent division of work, and to facilitate cooperative activity; (2) To agree upon the most appropriate concepts, terminology and methods of exposition; (3) To work out plans for research, calling attention to the particular segments of the field that demand more primary data or more analytical study; (4) To stimulate cooperative research in the field by initiating and sponsoring cooperative studies, and by using the facilities of the Conference to assist in their prosecution." (Kuznets et al, 1937: xvii) See also Kuznets (1940: 307): "[The Conference on Research in National Income and Wealth] was organized in 1936 for the purpose of planning and stimulating research in the field of income and wealth, and is comprised of students who are directly concerned either with measurement or with the collection of underlying data."

[18] Denison's report on the tripartite discussions describes the agreements and subtly reveals the way Stone's framework made its way into U.S. official statistics. See Denison (1947). On Meade and Stone's approach to income accounting, see Meade and Stone (1941) and Comin (2001). Finally, on the international standardization of national income estimates, see Kendrick (1970: 306-311).

particular to the welfare approach to national income measurement, which seeks to obtain a unique series [instead of a set of accounts], fluctuation in which may be accepted as a measure of changes in economic welfare." The fact that this change of course took place, despite Kuznets' consensus-building effort through the Conference on Research in National Income and Wealth, demands explanation.[19]

In the interpretation of Mark Perlman and Morgan Marietta (2005: 219-224), more general political developments, beyond the academic disputes, changed the immediate goals of the estimates and led to this substitution. Kuznets was mainly interested in long-term aspects that the estimates could reveal and, particularly, in the distribution of income. Almost a quarter of his famous article published in 1933 was exclusively devoted to analyzing different measures of how the income was distributed. That was what pushed him to try to connect measurement with welfare theory. After the 1937-1938 recession, however, this issue lost preeminence and the political debate directed everyone's attention toward the problem of unemployment (Perlman, Marietta, 2005: 220-221). From then on, and especially after the war, national accounts were just another government tool that were used in the effort of macroeconomic management of aggregate demand. The publication of Keynes' *General Theory of Employment, Interest and Money* was a crucial element that fostered this development. And Meade and Stone's framework of national accounting was explicitly an attempt to adapt the estimates in order to make them compatible with Keynes' theory. Gilbert's adoption of the British framework, consolidated in the above-mentioned 1947 version, was simply another manifestation of the widespread Keynesian influence in the U.S. government, during that period.[20]

Interestingly, Gilbert and his colleagues used an article published by John Hicks in 1940 to back some of their decisions, despite the fact that Hicks' article was entirely dedicated to the possibility of relating income aggregates to welfare analysis. In order to prepare his reaction to the 1947 version of the NIPA accounts, Kuznets published, in the February and May 1948 issues of *Economica*, a highly abstract and detailed response to the Hicks' piece. Then, in August of the same year, his disagreement with the new version of the national accounts was published in *The Review of Economics and Statistics*. In this latter article, he mentions Hicks critically twice – "to whose writings the report refers for

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[19] See also Denison (1947: 77-78). The different implications of the two kinds of approaches to measurement become clear when they debate whether government expenditures on armaments should or should not be included in national income estimates. Kuznets (1948c: 156) and Hicks (1940: 116) suggest that these expenditures should be let out. Hicks (1940: 116) says that it is "peculiar (…) to reckon a large production of armaments as a contribution to current economic welfare." Gilbert and his colleagues (Gilbert et al, 1948: 189), in their turn, opt for the inclusion of these expenditures. It should also be noted that, despite Denison's clear remark quoted above, Gilbert's group (including Denison) maintain an ambiguous relation with welfare theory, making reference to welfare changes in some of the arguments related to their 1947 version of the estimates. See, for instance, Gilbert et al (1948: 189).

[20] See also Carson (1975: 168-169). This interaction between Keynes' work and income measurement was analyzed with more detail by Don Patinkin (1976) and, more recently, by Geoff Tily (2009).

theoretical support" (Kuznets, 1948c: 156, fn. 4) – referring to his detailed critique published in *Economica*.[21]

For the purposes of the present paper, two aspects of Kuznets' reaction to the 1947 version of the NIPA framework are especially important. First, the fact that he hints at some disagreement, but mostly silences about one of the most notable modifications brought forth in 1947, that is, the treatment of the financial system. Second, while his earlier work of the 1930s and early 1940s were full of pronouncements about the importance of national accounting and arguments for priorizing its development, among other areas of economic inquiry (see, for instance, 1940: 312-313; 1941: xxv), his 1948 review of the Department of Commerce report includes a more cautious note on the uses of national accounts. Discussing the margins of errors of the estimates, he goes out of his way to emphasize the risk of the figures being misused and puts forth some proposals to avoid this danger. The shift of tone from the early 1930s to the late 1940s could not be clearer. Bearing in mind this contextualization of his work, it is possible to finally turn to a brief exposition of his approach to estimating the income of the financial sector.

3. Accounting for finance, from Kuznets to Yntema (and beyond)

As it is well known, in the beginning of the period in which this paper focuses, that is, in the early 1930s, neoclassical economics had already largely displaced the classical political economy within the discipline. It had not already established the widespread hegemony it currently enjoys, however, being challenged by other schools of thought, like institutionalism (which was especially influential in the U.S.). But the idea that the neoclassical theory of value was superior to the classical labor theory of value, and that the latter was obsolete or wrong were common currency at the time. Thus, the distinction between productive and unproductive labor had been mostly abandoned and something else was needed in order to solve the question of what should be included in and what should be excluded from the national income estimates. In the neoclassical view, "*all* socially necessary activities, other than personal consumption, resulted in a product." (Shaikh, Tonak, 1994: 3) The change from the classical to the neoclassical perspective in income measurement is interpreted by Shaikh and Tonak (1994: 3) as "a retreat from the 'comprehensive consumption' approach of the classicals (who treat many activities as forms of social consumption, not production) to the 'restricted

[21] According to Robert Fogel (2000: 10), Kuznets' debate with Hicks proved his "agility at theory" to others.

consumption' definitions of the neoclassicals (who restrict the definition of social consumption to personal consumption alone)."[22]

Kuznets (1933: 210) partially misreads the formulations of the classical political economists, attributing to them the claim that only the production of material commodities was a productive activity and all else was considered unproductive: "[s]ince wealth was originally conceived in material terms, only that labor was considered 'productive' which resulted in material goods. This definition excluded from productive activity all services and considered incomes from services not as primary but as derived shares."[23] He promptly dismisses this definition, claiming that "this point of view has proved inadequate (…)." (Kuznets, 1933: 210)[24] However, he admitted that the question of what should be counted as part of the national product remained: "[t]he inclusion, exclusion and evaluation of commodities and services that are to be added into a national total offer the widest range of theoretical problems." (Kuznets, 1933: 208) His approach to the issue began with the distinction between economic and non-economic activities, the "main problem" of national income accounting:

> "[T]he main problem lies in the segregation of economic from non-economic activity, since only a rigid line between the two will enable one to include in or exclude from national income such items as commodities produced as a hobby, services of durable goods used in the household or personal services of housewives and other members of the family. But there is no hard and fast rule by which economic activity can be distinguished from social and individual life in general." (Kuznets, 1933: 208)[25]

Following the neoclassical tradition, he puts the market, "through its exchanges of goods for money," at the core of his formulation: "it is natural at first to identify national income with the sum total of money payments flowing to the individuals from the market." (1933: 208) This already

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[22] See also Foley (1986: 118-121; 2011: 7-9).

[23] In fact, Adam Smith treatment of the distinction is confusing and was subject to different interpretations, including one compatible with Kuznets' statement. Marx, in his turn, never adopted this "material" interpretation of the distinction between productive and unproductive labor. See, on that, Foley (1986: 118-120).

[24] See also Kuznets (1940: 292): "The omission in the income estimates in the early 19th century of the value of services not embodied in commodities, or the value of governmental activities, was in large part a reflection of the prevailing economic doctrine that accepted as productive only activities resulting in material goods."

[25] Considering that the rise of feminist economics has brought to the fore the issue of accounting for domestic production, it might be interesting to observe his position on this matter: "there is general agreement among students of the problem as to the exclusion of housewives' services and services of other members of the family, in spite of the very large size of the items involved. It is recognized that these activities are motivated very largely by non-economic considerations and form much more a part of life in general than of professional economic activity proper." (Kuznets, 1933: 209) For an example of the feminist approach to the issue, see the article by Nancy Folbre and Barnet Wagman (1993), in which they analyze the impact, on measures of real product and economic growth, of including domestic production in the estimates, and mention briefly Kuznets' position on the issue.

constitutes a great departure from the classical conception.[26] But he does not stop there and states that this definition is not broad enough. Should "commodities and services to which there is no corresponding flow of money payments from the market to the individual" (1933: 208) be simply disregarded? What about "money payments to which no commodity or service corresponds?" (1933: 208) Much of his work is dedicated to discuss the adequate treatment of several cases that fall in any of these categories or, in addition, that require "adjustment of the money flow to reflect more properly the volume of economic goods involved." (1933: 208) The treatment of the financial system, as will be discussed below, touches on some of these difficult issues.

Kuznets' general attitude in discussing these cases was to avoid crude distinctions and attempt to segregate, within several broad groups, economic and non-economic parts. His treatment of government is a case in point, since he repeatedly defended distinguishing final and intermediate output of government activities (1948a: 7-10; 1948c: 156-157)[27]. At the same time, he strived for solutions that could be practically adopted, given the data available, and that would be consistent with the perceived end-goal of economic activity. That last point deserves some elaboration. Kuznets believed that the theoretical problems involved in national accounting, such as distinguishing economic and non-economic activities or final and intermediate outputs, could only be solved through an assumption about the goal of economic activity. And he generally stated that this goal was "the provision of goods to consumers." This argument was related to his intention, mentioned above, of making national accounting compatible with welfare theory.[28] His debate with Hicks showed several disagreements between them, but made clearly this common ground: both were trying to understand the implications of national income figures from a welfare-theoretic perspective.

Going straight to the specifics of accounting for financial intermediaries might make the details of his approach clearer. In order to distribute the total national income between all the industries of the economy, Kuznets had to resort to a way of determining which income flows were created in each particular industry. For that, he used the idea of "income originating" in an industry, a phrase that was mentioned in his work but that achieved greater prominence in the 1947 framework (see, for instance,

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[26] Shaikh and Tonak (1994: 3-4) state that "within neoclassical economics, all potentially marketable activities are considered to be production activities. The ideological convenience of a definition of production which treats all market activities as productive is obvious."

[27] The treatment of government in the income estimates was one of the main questions debated in this period. See Kuznets (1948a: 6-12; 1948c: 156-157), Hicks (1940: 115-118; 1948: 164-165), Gilbert et al (1948: 184-188), Denison (1947: 9-11 and 72-75), and Fabricant (1947: 55-58).

[28] This point was made by Fogel (2000: 9): "Kuznets transformed the field of national income accounting by bringing to it a far greater precision than had previously been achieved, by rooting it firmly in welfare theory (which distinguishes between private and social values), and by solving numerous problems related to moving from the imperfect sources containing the raw data to the theoretical conception of 'national income.'"

Kuznets, 1941: 70; and Denison, 1947: 19-20). Income originating was the sum of the remuneration of the factors of production employed in the industry in question, that is, the compensation of employees (wages and salaries), entrepreneurial income (net income of unincorporated business), corporate profits (net dividends plus corporate savings), net interest paid, and net rents (Denison, 1947: 19-20; Yntema, 1947: 30-34).

The important thing to consider is the way the so-called property income is accounted for – for the purposes of the present paper, it is sufficient to deal only with property income in the form of dividends and interest. To avoid double counting, dividends and interests paid by the industry are taken net of the dividends and interest received by it. So, if a firm invests some of its money in bonds or shares and receives interest and dividends for it, this total received has to be subtracted from the total of interest it pays on the money it borrows and of dividends it pays to its shareholders. That is because the interest and dividends received are not income originated in the economic activity of this industry, but income that was originated elsewhere and, then, transferred to it. In Kuznets' words (1941: 74), "in establishing net income originating in a given economic unit we must subtract from its gross receipts not only the cost of goods consumed but also the part of the gross receipts that represents compensation for pure ownership." It can be segregated in this way, according to him, payments that are made to the enterprises as producers from payments to the enterprises as owners. Through this method, the sum of wages, salaries, and property income that comprises the income originating in an industry can be restricted to the income that was, in this view, originally created in the economic activity of that industry. As Denison (1947: 20) puts it, "[i]ncome originating in an industry also measures the 'value-added' by it."[29]

Practitioners realized from the beginning that this income-originating approach, when applied to financial intermediaries, led to "anomalous results," to use Yntema's (1947: 24) expression. The problem was that, generally, the amount of interest and dividends received by a bank, for example, was larger than the amount of interest and dividends that it paid. Consequentially, the net property income originating from the bank turned out to be negative. Sometimes, this negative value was even larger than the total compensation paid to the employees of the bank, resulting in a negative value of the total

[29] See also Kuznets (1941: 407-410). It is noteworthy that Kuznets immense carefulness with the preciseness of his definitions requires him to make extensive qualifications on this point, which has no parallel in later approaches. He warned especially that industrial classifications change historically and, most importantly, that all classifications always have many defects, mainly as a consequence of diverse productive activities being carried on in a single firm, making strict segregation difficult. See Kuznets (1941: 72-78). In his article published in 1933 (217), he had suggested that "the general evolution of the industrial system is toward a more intensive division of labor, a greater specialization of functions and hence a closer identity of industrial groupings with types of economic activity," but that there was some counteracting tendencies to that evolution, especially the increasing vertical integration of economic units. See his whole position on the issue on Kuznets (1933: 215-217).

income originating from that firm. In addition, this was not a case restricted to some specific banks, but also occurred in the aggregate banking industry. Thus, if the computation method of income originating in an industry, which was used in other sectors, were applied to finance, one had frequently to conclude that this industry created no net income (Yntema, 1947: 35). This has been recognized widely as something unacceptable and several solutions have been put forward to solve the alleged "banking problem." (Christophers, 2011: 121-126)

Kuznets was no exception. To go around this problem, he assumed that savings banks and insurance companies were, "with respect to some of the income streams passing through them, not much more than an association of individuals in their capacity as investors and ultimate income recipients." (1941: 75) Concretely, this implied an understanding of the financial system as a mere intermediary of transfer payments between individuals. When a bank borrows from an individual, say, a depositor, in order to lend to someone else at a higher interest rate, it is merely intermediating a transaction between the two individuals, it is not engaged in an economic activity. In this view, banks are, as commonly assumed, passive intermediaries between those that earn more than they spend and those that spend more than they earn[30]. Thus, Kuznets simply disregards all interest payments flowing through the banking system. This is clear in several tables that reports his estimates, which, for example, divide income originating in banking in corporate savings, wages, salaries, and dividends, simply omitting interest flows (see, for instance, Kuznets, 1941: 368-369 and 734). The income originating in these banks and insurance companies is, then, "confined to the net value of the services of individuals engaged in them" (Kuznets, 1941: 75), either with their labor or with their property. It can be computed, generally, by adding up the compensation of the employees of the firms to the corporate profits. Allegedly for lack of data, dividends paid, a part of corporate profits, "are assumed to be net." (Kuznets, 1941: 749) The fact that these firms have a positive income originating from it implies that they provide some kind of service different from financial intermediation (since that is assumed away, if lending and borrowing are taken over directly by the individuals), like account keeping. Kuznets is not clear about that. Finally, because of its crucial assumption, this method of estimating the income originating from banks is known as the "association of individuals" method.

[30] This view, despite being very common, disregards the manipulation of the money multiplier by the banks, which actively create credits in certain periods and contract it in others. Clark Warburton (1947: 68) made this point in the debate about Yntema's proposal (which, in this regard, is similar to Kuznets' treatment of the issue): "To treat banks as financial intermediaries is like classifying General Motors or United States Steel as merchants rather than as manufacturing establishments. It implies that bank deposits are something individuals posses and place at the disposal of the banks for lending or investing. This is the reverse of the real situation. Deposits are something banks bring into existence and place at the disposal of individuals and business."

An important consequence of this method is that it requires some assumption to allocate the interest flows that are being directed to individuals and to businesses. Kuznets (1941: 101-102, 407-410) claims that a practical and reasonable solution is to assume that short-term interest flows between enterprises, whereas long-term interest are paid to individuals (either directly or through their associations, like banks). He admits, however, that "[t]hese assumptions undoubtedly do some violence to the actualities, and our estimates of net interest paid to individuals may deviate from true totals." (1941: 409) Earlier, he had qualified them as "rather heroic assumptions." (Kuznets, 1941: 101) The practical importance of them is that interest flows between firms do not get into the national income totals, since they are eliminated in the aggregation. Interest flows to individuals, in their turn, add to national income totals. To make this discussion more concrete it is useful to observe the share that finance represented in his estimates of national income, as depicted in figure 1, below. And, even if it is not really possible to compare the two figures, due to the different method employed, figure 2, which represents the share of finance in GDP from 1947 to 2010 (according to the current estimation method), gives a sense of the historical evolution of the industry.[31]

[FIGURES 1 AND 2]

When Gilbert and his colleagues undertook the modification of the Kuznets' estimates that would lead to the 1947 framework, one of the main changes they proposed – besides the major modification in the presentation method involved in adopting the system of accounts –, dealt precisely with the treatment of financial intermediaries. An indication of that is that the new version of the national income estimates were anticipated at the meeting of the Conference on Research in National Income and Wealth, on November 1945 (around one and a half year before its official publication), in two separate articles, published in 1947 on *Studies in Income and Wealth*. The first of them, the above-mentioned report written by Denison (1947), described the main changes in presentation and merely hinted at some details. The second, larger then the other one, was a paper written by Yntema (1947) that dealt exclusively with the issue of financial intermediaries. According to the author's claim in this text, it was not a formulation made by him alone, but rather "a joint product to which several members of the National Income Unit of the Department of Commerce contributed." (Yntema, 1947: 23)[32]

[31] It is noteworthy that, from 1947 to its peak in 2009, the share of finance, insurance, and real estate in GDP more than doubles. Moreover, disregarding real estate, the growth of finance and insurance combined was much faster.

[32] This treatment was agreed upon on the tripartite Washington meetings and would eventually be incorporated in the United Nations' System of National Accounts (SNA) of 1953, being adopted by most Western countries. However, the method was short lived, having been replaced by a different treatment proposed by the 1968 United Nations' SNA. According to

Yntema (1947: 24) argues that Kuznets' method resulted in some "unsound" totals for interest and dividends and introduced "certain awkward statistical difficulties." As a result, "[r]econsideration on theoretical grounds as well as the development of a better methodology is definitely indicated. The object should be to devise a treatment that puts measurements for financial intermediaries basically on a par with measurements for other industry areas." (1947: 25) Putting them on a par with measurements for other industry areas cannot mean simply reintroducing the interest flows, if "anomalous results" are to be avoided. His alternative is grounded in a different understanding of the financial system's intermediation function. Now the lending and borrowing activities are not done directly by individuals, but are in fact intermediated by banks, which, doing so, are providing a service to their customers. The problem is that this service is provided "seemingly" for free (Yntema, 1947: 25). Instead of explicitly charging for it, banks simply keep to themselves part of the interest received for the investment of the depositor's funds. In Yntema's (1947: 25) words, these transactions "appear to short-cut usual business practices," what makes imputation of income and services "sound and definitely in order."[33]

> "On the income side, a flow of property income over and above actual dividend and interest disbursements should be imputed in order to account for an implicit payment by financial intermediaries to those who supply them with funds. It is perhaps simplest to classify this imputed property income as imputed interest. On the product side, an imputation of services rendered by financial intermediaries is indicated, equal in value to the imputed income paid by intermediaries. In other words, it is assumed that the income imputed to depositors or investors is automatically used by them in purchasing imputed services from financial intermediaries." (Yntema, 1947: 25)

This treatment devised by Yntema (1947: 25-26) is applied to banks, life insurance carriers and other financial enterprises, like investment trusts, holding companies and credit agencies, but here only banks will be discussed in more detail, for lack of space. The first question to be raised concerns the amount to be imputed, that is, the imputed interest and the imputed services, which, as mentioned, have by assumption the same value. Yntema (1947: 36) states that this amount "is taken as interest and dividend receipts minus interest payments." Conveniently, this is chosen precisely to cancel the negative value that property incomes assume in banking, if they are measured as they are in the other industries. As a result, the income originating in the banks turns out to be the same as it where if one used Kuznets' method. If the difference of interest and dividend receipts and interest payments is added

Christophers (2011: 129-130), the U.S. is the only exception, since it did not change its method from 1947 until 2003, when a comprehensive revision of the NIPA was undertaken in order to adapt it to the 1993 United Nations' SNA. The fact that the early method was formulated in the U.S. might have contributed to its exceptional persistence in this country. See also Fixler, Reinsdorf, and Smith (2003) and below.

[33] See also Denison (1947: 15).

to the income originating as imputed interest, it exactly cancels the negative value of net interest plus net dividends paid, leaving only compensation of employees and corporate profits to add to the figure of income originating in the banking system.

At this point, one might legitimately ask: if both methods lead to the same net income of the banking industry, why should we substitute one for the other? The answer is that the way in which imputed interest is allocated between individuals and businesses, in Yntema's method, might lead to different totals of net interest and, most importantly, to different national income totals. This allocation is determined by the distribution of bank deposits, with the qualification that, since the data on deposits in incomplete, "the statistical allocation of imputed income among depositors must involve various assumptions and approximations." (Yntema, 1947: 41). But, he immediately adds: "It is believed that these do not significantly violate facts." The apportionment is roughly done in the following way: i) imputed interest from mutual savings banks are allocated entirely to individuals, "assuming that individuals alone supply them with funds" (Yntema, 1947: 41-42); ii) imputed interest from commercial banks is distributed, first, between government, on the one hand, and individuals, partnerships, and corporations, on the other, following the distribution of demand and time deposits between these two groups, which is regularly reported. Then, the allocation between individuals, partnerships, and corporations is based in "special studies in the field." (Yntema, 1947: 42)

Similarly to what happened with Kuznets' method, only the imputed interest allocated to individuals adds to the national income total, while that allocated to business is eliminated in the aggregation. The final outcome of the two methods is not, however, immediately comparable. This led to some confusion when Yntema's proposal was first debated: Fabricant (1947: 54), for instance, thought that "the change in treatment of financial intermediaries proposed by the Department of Commercer would mean an increase (…) in national income," urging Yntema (1947: 78-79) to clarify that this was not necessarily the case and that, "[o]n an a priori basis, we cannot be sure of the effect; it may be in either direction." (1947: 78) The point is that it depends on the relative size of the amount of interest that is assumed to be paid to individuals (imputed or through the "association of individuals"), in each of the methods. It is impossible to know in advance whether the total long-term interest flows (which Kuznets assumed were directed to the individuals) was larger or smaller than the total imputed interest that the individuals would receive if the bank deposits distributions were taken into account (as in Yntema's method).

In the end, then, the significant change implemented in 1947 amounted to explicitly attributing a service to the financial intermediaries, even if the impact on the resulting totals was undetermined. By imputing interest and service, the Department of Commerce changed the representation of banks from a passive intermediary to firms that actively engage in economic activities and provide services to consumers. These activities were classified in "two basic kinds (…): provision of demand (checking) and savings account services, and activities related to the investment of funds." (Yntema, 1947: 40) Banks were seen, in this way, as providing "facilities for accepting deposits and for servicing accounts," on the one hand, and "as depositor's agents, investing deposit funds in order to obtain interest (plus a small amount of dividend) income," on the other. (Yntema, 1947: 40) If, for Kuznets, banks only implicitly provided service to consumers, with the new method, these services are explicitly recognized and imputed for.

As could be expected, Yntema's proposal proved to be controversial. In the comments to his paper published in *Studies in Income and Wealth*, some economists, besides Clark Warburton (whose criticism was already mentioned), criticized the modification proposed. Some of these critiques pointed to disagreements whether interest on private debt should or should not be included in national income. Solomon Fabricant (1947: 54), for example, considered the new method a "step backward in the practical solution of the problem of distinguishing between net and gross income," suggesting that he understood interest on private debt as generally intermediate, rather than final, output. O. C. Stine, in his turn, states that he understands the income flows passing through banks as transfer payments, instead of as income-generating payments. He says that he would "treat all interest payments as transfer payments. I do not see the logic of not extending the proposed practice for public debt to private debt. It seems absurd to me to impute interest on all bank deposits as proposed." (Stine, 1947: 64-65)[34] Morris Copeland (1947: 62) disagreed with them and defended the new method, arguing that it was "distinctly preferable to those followed in the past," but he feared it might make international comparisons more difficult (1947: 63).

One year later, on August 1948, after the report of the Department of Commerce applying the new method had been published, the *Review of Economic and Statistics* published a special session dedicated to it, in which the debate about the treatment of financial intermediaries resurfaced. Kuznets' review of the report was published in this session and, as mentioned above, it was mostly critical, if conisderate: "It suffices to state that the report greatly enriches our treasury of statistics and that it is destined to become one of the most used, and misused, sources of economic information." (1948c: 151) But he did not discuss Yntema's proposal, simply saying that the "new treatment of income flow from financial intermediaries (…) [could not be] not so easily accepted." (1948c: 160) Michal Kalecki (1948: 196) addressed the issue specifically, in the special session, qualifying Yntema's proposal as "of

[34] Stine refers to the fact that the 1947 framework excluded interest on public debt from the national income. See Denison (1947: 9-11).

doubtful use and even confusing." And he added that the "method of estimating imputed income from deposits" seemed to him "open to serious objections." (1948: 196) In his words:

> "From the fact that, in this way, services which are really rendered are accounted for, it does not follow that they should necessarily be included in income and consumption. From the same point of view, the value of quite a number of other services – for instance, using a public park, etc. – should be included in income and consumption. Apart from the arbitrariness of the estimates in such cases, this procedure involves the inclusion in income and consumption of items which the individual never takes into consideration in his spending decisions." (1948: 196)

Despite the controversy, Yntema's proposal was implemented and proved to be extraordinarily long lasting. As mentioned above, while this method was adopted for short periods in most other countries, in the U.S. it lasted more than half a century, being modified only in 2003, in order to update the treatment of the Department of Commerce to the suggestions of the 1993 United Nations' SNA. This does not mean, however, that disputes about the issue ceased throughout the second half of the twentieth century. In a paper published in 1991, for example, Dennis Fixler and Kimberly Zieschang (1991: 53) state that "the treatment of financial services in national income accounting has been a sometimes controversial subject for over thirty years." Some of these debates are presented, and formally interpreted, in their paper (Fixler, Zieschang, 1991: esp. 55-61).

The major change implemented in the treatment of banks in 2003, in the U.S., was the introduction of imputed services to borrowers, besides those already imputed to depositors. This followed a recommendation made in the 1993 United Nations' SNA. The imputed service amounts to the difference between the average interest rate charged from the borrowers and a reference rate of interest. Parallelly, the imputed service to the depositors was changed to follow the same logic. They received, from then on, and imputed interest that reflected the difference between the average interest rate they earned and the reference rate (Fixler, Reinsdorf, Smith, 2003: esp. 33-35; Moulton, Seskin, 2003: 23-27).[35] Fixler, Marshall Reinsdorf, and George Smith (2003: 33-34) explained the rationale of this modification in the following way:

[35] "For banking, the SNA recommends measuring implicit financial services to depositors using the difference between a risk-free 'reference rate' and the average interest rate paid to depositors, and it recommends measuring implicit services to borrowers using the difference between the average interest rate paid by borrowers and the reference rate. To implement this approach, BEA [Bureau of Economic Analysis] will measure the reference rate by the average rate earned by banks on U.S. Treasury and U.S. agency securities. Measured in this way, the reference rate is consistently above the average rate of interest paid to depositors and consistently below the average rate of interest paid by borrowers." (Fixler, Reinsdorf, Smith, 2003: 33)

> "The view that all the implicit services of banks go to depositors is based on the notion that depositors are the ultimate lenders and that the net interest belongs to them. This view, however, does not adequately account for the implicit services of commercial banks to borrowers in their role as financial intermediaries. In that role, banks transform deposits into earning assets by providing many financial services. In particular, banks provide services related to the provision of credit that overcome problems of asymmetric information and that transfer risk to the bank. Banks devote staff time and other resources both to activities that serve depositors, such as clearing checks, and to activities that serve borrowers, such as making loan-underwriting decisions. Historically, banks were virtually the only source of credit to many households and businesses, and burgeoning needs for credit services were a major impetus for growth of this industry. Accordingly, a measure of bank output should reflect borrower services along with depositor services."

The impact of this change is a reduction of the output of banks (due to taking consideration of the use by banks of their "own funds") and a reduction of GDP. This latter is partly caused by the fact that borrowers are in their greater part businesses and, then, the modification reclassifies a large amount of imputed interest as intermediate, rather than final, output (Fixler, Reinsdorf, Smith, 2003: 36 and 40-41). Roughly, this modification is an attempt to adapt the measurement of financial intermediaries activities to the so-called "user cost of money" framework, that allow grounding it in models of rational decision-making by banks (Fixler, Reinsdorf, Smith, 2003: 35-36; Fixler, Zieschang, 1991: 61-67). Fixler, currently the Chief Statistician at the U.S. Bureau of Economic Analysis, has been defending the use of this framework in the treatment of banks in national income accounting for a long time, at least since the early 1990s, when he worked at the U.S. Bureau of Labor Statistics (see Fixler, Zieschang, 1991). Paradoxically, the new approach seems to broaden the kinds of bank activities that create income, including services to borrowers and not only to depositors, but, at the same time, it reduces the estimates of GDP. However, it might be noteworthy that the decrease of GDP is larger than the decrease in the net output of banks, increasing, thus, their relative share in the national product. (Fixler, Reinsdorf, Smith, 2003: 40-41)

4. Concluding remarks

In his article for the *Encyclopaedia of Social Sciences*, Kuznets argued for the inherently normative character of economic measurement. In his words, "[e]ach investigator's economic philosophy will influence him either to acquiesce tacitly in the valuation within the current economic organization or to attempt some correction for its distorting influence." (Kuznets, 1933: 210) The historical account attempted in this paper had as its aim emphasizing the historical determination of the methods of national income measurement, in general, and of the methods applied to measure the output of financial intermediaries, in particular. It seems reasonable to conclude that a trend can be identified in the changing of methods applied to financial intermediaries, from Kuznets through Yntema to Fixler. Even if the modification did not have great impact in the level of the net income of the financial sector, they were clearly an attempt to make broader the kind of activities undertaken by banks that can be considered income creating. From implicit services, through services to depositors, to services to both depositors and borrowers, the representation of the banking firms unfolded in a particular way that might have helped to legitimate the increasing power of financial capitalist in Western societies. Additionally, the gradual shift could be seen as an attempt to make compatible the measurement of financial firms net income with mainstream economic theory. The preoccupation of grounding the current method in models in which banks are rational decision-makers speaks by itself.

In any case, linking these methods to specific, and changing, views of the workings of a capitalist economy should disavow attempts to legitimate the place finance occupies in contemporary societies by resorting to "objective" assessments of its "productive" contribution. In this as in other areas of economic research, the first step to recover society's democratic control of the economy is to weaken the technocratic dominance that has so deeply entrenched itself. As mentioned above, even if Kuznets had been always aware of the normative character of economic measurement, in the late 1940s, finding himself on the losing side of the controversies, he placed great emphasis on this matter. Creating means to avoid the misuse of national income accounts became one of his preoccupations. In 1948, he made some suggestions in that direction that were entirely ignored by Gilbert and his colleagues. Going back to them now, as the financial system faces renewed opposition in the public sphere, could be a minor but significant contribution to the much larger battle:

> "it would be desirable to (…) experiment with new ways of putting the user in a position of greater awareness concerning the character of the estimates. One way might be to distinguish, for each year, the segments of the various summary totals that are based directly upon nationwide census data; the parts derived from sample information directly relating to the field covered; and the parts estimated by applying extrapolation or other expedients, not to the specific field that the total is intended to cover, but to some related field. Some such summary of the major totals, if feasible, would be extremely useful in showing at a glance the varying degrees of firmness of the underlying foundation. A second avenue of exploration, particularly relevant to estimates for which basic data are not directly available, is to experiment with different bases and methods, indicating the discrepancies in the totals derived by the different procedures and the reasons for the choice of the one used. A third avenue might be to give the margins of errors estimated by the students who participated most actively in the computations and are best informed concerning their character, weaknesses, and strengths.

These suggestions are advanced with hesitation, merely as stimuli to further thinking. What is urged here is more explicit and continuous consideration of margins of errors in economic statistics, particularly of the synthetic type involved in national income estimates. Neither the producers nor users of such estimates are inclined to devote much time to this problem; the former wish to arrive promptly at comprehensive and well articulated totals, the latter are eager to use the estimates to get light upon some question that seems to require urgent answer. The very fact that the estimates are cast in the form of unique series, not of ranges, is itself an invitation to treat them as firm results and tends to discourage questioning whether a total of x billion might not just as well read $x + a$ or $x - a$. Consequently, users' attention should be called to the possibility of error, and experiments should be attempted on the ways in which the margins can be made known. It is not unlikely that, in the very process, means of actually improving the estimates themselves will be found." (Kuznets, 1948c: 178)

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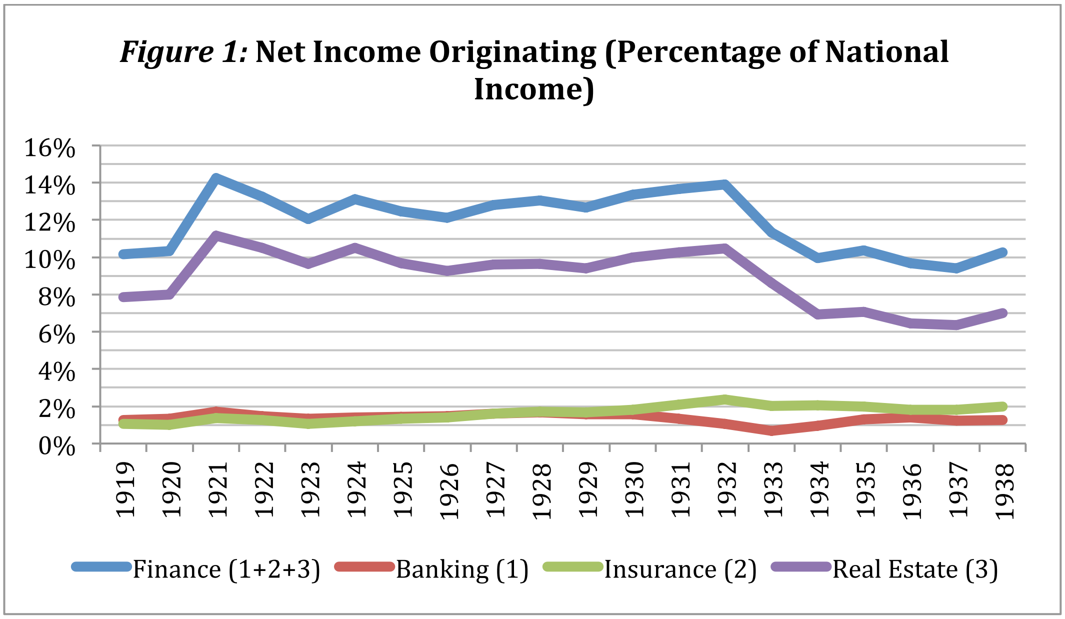
FIGURES

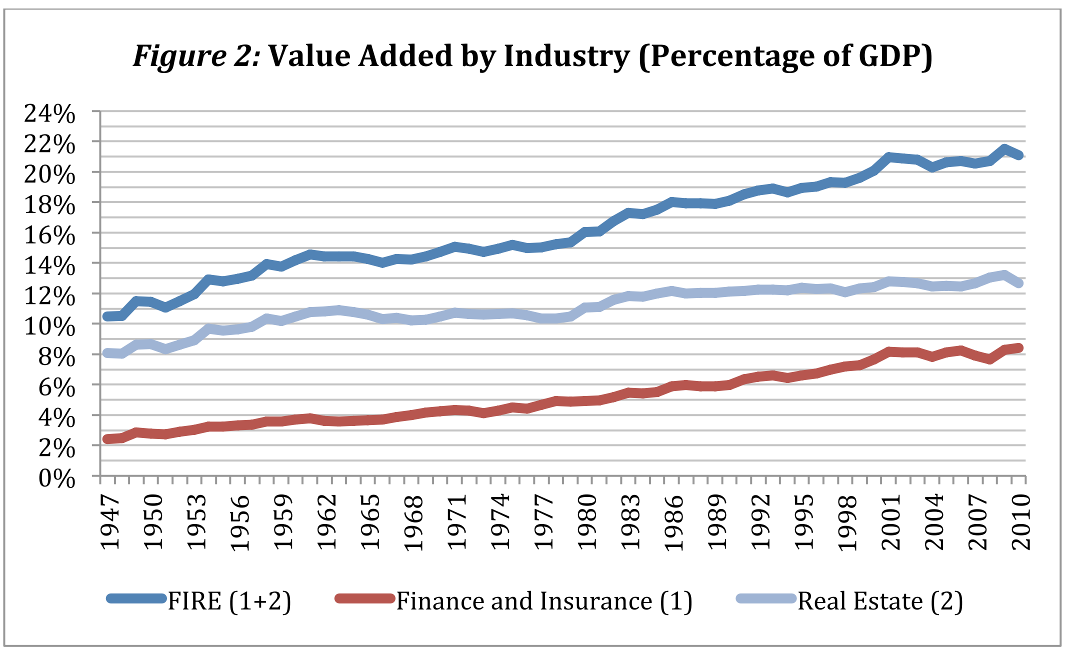


Source: S. Kuznets (1941: 310-311, 368-369)

Banking: *"The banking estimates cover commercial banks and savings banks, Federal Reserve banks, and insolvent banks, other than private. All other banking is included under miscellaneous industries."* (Kuznets, 1941: 738)

Insurance: *"The insurance data cover all insurance companies and agencies."* (Kuznets, 1941: 738)

Real Estate: *"The real estate data cover corporations in the field and individuals' real estate holdings."* (Kuznets, 1941: 738)



Source: Bureau of Economic Analysis (USA)

FIRE: *Finance, insurance, real estate, rental, and leasing*

Finance and Insurance: *Federal Reserve banks, credit intermediation, and related activities; Securities, commodity contracts, and investments; Insurance carriers and related activities; Funds, trusts, and other financial vehicles.*

Real Estate: *Real estate; Rental and leasing services and lessors of intangible assets.*