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Dipartimento Innovazione e Società,
Via Salaria 113,
00198 Roma
Telefono: 06 4991 8372 - 06 84241159
Fax: 06 840800
E-mail: dies@uniroma1.it

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a neglected approach to the analysis of consumption

Attilio Trezzini

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www.aracneeditrice.it
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The economics of consumption as a social phenomenon: a neglected approach to the analysis of consumption

Attilio Trezzini*

ABSTRACT

The paper deals with the early history of a theoretical approach in which consumption is regarded as an essentially social phenomenon and the most important reasons prompting consumption expenditure as connected with the fact that consuming certain goods allows individuals to be identified with specific social groups. Accordingly, it is generally argued that standards of living and consumption expenditure tend to be irreversible and to increase along with the process of growth.

In a first phase, covering the 1920ies and 1930ies, some little-known American women economists used in theoretical, empirical and historical analyses these theoretical principles on consumption originally put forward by T. Veblen.

In a second phase the same principles were used by well-known economists in the debate of the 1940ies on the empirical results about marginal and average propensities to save. The approach, then, saw some crucial changes that opened up the way to its substantial abandonment.

INTRODUCTION**

In the complex and heterogeneous corpus of theoretical and empirical literature on consumption expenditure, it is possible to identify an approach that has been present since the very early phases of this analysis. On this view, con-

* Università degli studi di Roma 3.

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sumption is regarded as an essentially social phenomenon and the most important reasons prompting consumption expenditure as connected not with the intrinsic properties of the goods but with the fact that consuming certain goods allows individuals to be identified and to identify themselves with specific social groups.

Accordingly, it is generally argued that consumption expenditure tends – to a certain degree – to be *irreversible*. This means that it decreases less in the course of a trade cycle when income decreases than it increases when income increases, and that, through this cyclical behaviour, the standard of living and consumption expenditure tend to increase along with the process of growth and accumulation.

While this explanation of consumption determinants has never become dominant, it has influenced the development of the analysis as a whole and never completely disappeared. Although a connection is frequently apparent if not declared, the contributions that share these principles are seldom recognised as constituting a distinct theoretical approach.

The first part of this paper is devoted to the origins of this approach, which can be traced back to the first decades of the 20th century, when some American economists developed theoretical and empirical analyses of consumption expenditure along these lines.

The approach attained its greatest popularity during the 1940s, when it was used in Keynesian macroeconomic analyses. Its origins were not, however, clearly identified at the time. The second part of the paper focuses on this second phase in the history of the approach, which, it is argued, saw some crucial changes that opened up the way to the substantial abandonment of the approach in favour of the Life Cycle and Permanent Income hypotheses.

1. The First Phase: The Emergence of the Approach

The economic analysis of consumption originated in the studies on family budgets developed since the 18th century in Britain and then from the 19th century on in the rest of Europe and in the US. The original purposes of these numerous works, both in Europe and in the US, were to study the living conditions of the poor and later to investigate and generalise Engel's Law[1].

[1] See Stigler, 1954.

The *empirical* analysis of consumption rapidly became an extremely rich field of research, especially in the US[2], where theoretical works on consumption were, however, also published from the end of the 19th century on[3].

The influence of Thorstein Veblen's vast and heterogeneous production was certainly stronger in the lively American cultural environment of the early 20th century than was explicitly declared. The initial formulation of the key principles constituting the approach examined here can be found in his major work.

1.1. Thorstein Veblen and Conspicuous Consumption

Published in 1899, *The Theory of the Leisure Class* is a complex and original book in which it is possible to find the origins of different research programmes that are still alive and under lively development. Our present interest is, however, confined to the ideas and theoretical principles to be found there regarding the determination of consumption expenditure.

Veblen argues that the possession of wealth is the primary source of individual distinction and honour in societies based on the existence of private

[2] The extension of this field of analysis and the importance attached to it in US academic and research institutions are shown by the fact that a committee of the Social Science Research Council was set up in 1931 under the leadership of Wesley C. Mitchell to gather and review of all the work on family budgets. This was a continuation of the efforts initiated by the U.S. Bureau of Home Economics in response to a request from the First Pan Pacific Women's Conference, held in Honolulu in 1928. The committee's work led to a Department of Agriculture publication (see Williams and Zimmerman, 1935) examining, analysing and summarising over 1,500 family-budget studies carried out between 1875 and 1935 all over the word. The number of works is surprisingly high, especially in view of the development of statistical techniques of data gathering and processing.

[3] J. Dorfman [1959] draws attention to some works produced in the United States from the end of the 19th century on that endeavoured to use the concept of marginal utility in analysing consumption, e.g. Simon N. Patter's *The Consumption of Wealth* (1889) and George P. Watkin's *Welfare as an Economic Quantity* (1914-5). Details are also given on later works that tried to give an empirical foundation to the analysis of consumption, including W.C. Waite's *Economics of Consumption* (1928, University of Minnesota) and Paul Nystrom's *Economic Principles of Consumption* (1929). Elizabeth E. Hoyt's *The Consumption of Wealth* (1928, Iowa State College) uses cultural anthropology for a theory of choice and criticises the use of marginal utility as too abstract for the study of consumption. Dorfman's work is unquestionably a cornerstone for any analysis of the American contributions in economics and has certainly proved essential for the present analysis.

property and social classes:

> With the growth of the settled industry […], the possession of wealth gains in relative importance and effectiveness as a customary basis of repute and esteem. […] property now becomes the most easily recognised evidence of a reputable degree of success as distinguished from heroic or signal achievement [Veblen, 1899: 28-29].

All individuals are involved in a continuous process of comparison with others in order to attribute «relative degrees of complacency» to others and to themselves, and this «invidious comparison» determines not only their esteem for others but also their own *self-respect*:

> A certain standard of wealth [...] is a necessary condition of reputability, and anything in excess of this normal amount is meritorious. Those members of the community who fall short of this, somewhat indefinite, normal degree of prowess or of property suffer in the esteem of their fellow-men; and consequently they suffer also in their own esteem, since the usual basis of self-respect is the respect accorded by one's neighbours [Veblen, 1899: 30].

The importance of wealth in modern societies would seem to lead individuals to work hard and to save in order to accumulate wealth. Veblen represents these tendencies through the notion of the «instinct of workmanship», which «disposes men to look with favour upon productive efficiency and whatever is of humane use» [Veblen, 1899: 93].

Social competition leads, however, to practically opposite forms of behaviour. Productive work and thrift clash with the tendency to display one's level of wealth and social standing because «In order to gain and hold the esteem it is not sufficient merely to posses wealth or power. The wealth or power must be put in evidence, for esteem is awarded only on evidence» [Veblen, 1899: 36].

Consumption expenditure lies at the heart of this process in modern industrial societies. Pecuniary standards are displayed essentially through the consumption of visibly superfluous goods constituting *conspicuous consumption*.

In societies where, for many reasons, the contacts between individuals are fleeting and superficial, conspicuous consumption is the most efficient way of displaying social standing and status:

> The means of communication and the mobility of the population now expose the individual to the observation of many persons who have no other means of judging of his reputability than the display of goods (and perhaps of breeding) which he is able to make while he is under their direct observation [Veblen, 1899: 86].

At almost any level of the social scale, any individual household tends to observe some canons of respectability appropriate to its class. Failure to do so could entail the loss both of *social reputation* and of *self-respect*.

> The accepted standard of expenditure in the community or in the class to which a person belongs largely determines what his standard of living will be [Veblen, 1899: 111].

The crucial importance that individuals attribute to the display of their social status means that when their level of income falls, they seek to maintain the level of consumption to which they and their families are accustomed. This can be described as the *irreversibility* of consumption expenditure. Conversely, when their income increases, individuals readily tend to increase their consumption by purchasing conspicuous goods that represent status previously inaccessible to them. The behaviour of consumption is thus asymmetrical with respect to changes in income:

> The standard is flexible; and especially it is indefinitely extensible, if only time is allowed for habituation to any increase in pecuniary ability and for acquiring facility in the new and larger scale of expenditure that follows such an increase. It is much more difficult to recede from a scale of expenditure once adopted than it is to extend the accustomed scale in response to an accession of wealth [Veblen, 1899: 102].

Something that greatly increases the incentive to expand consumption is actual or apparent social mobility. Especially in communities «where class distinctions are somewhat vague», Veblen argues, all individuals tend to emulate the consumption habits of the immediately superior class in order to gain higher degrees of social reputation and self-respect:

> But while retrogression is difficult, a fresh advance in conspicuous expenditure is relatively easy; indeed, it takes almost as a matter of course. [...] This suggests that the standard of expenditure which commonly guides our efforts is not the average, ordinary expenditure already achieved; it is an idea of consumption which lies just beyond our reach, or to reach which requires some strain. The motive is emulation - the stimulus of an invidious comparison which prompts us to outdo those with whom we are in habit of classing ourselves [Veblen, 1899: 103].

If the new level of affluence is sufficiently lasting, goods that were once luxuries stop being conspicuous and superfluous for the individuals and come to form part of their acquired standard of living. This mechanism generates a continuous increase in the average standard of living and consumption expenditure in line with the process of growth and accumulation.

These principles regarding the determination of consumption necessarily imply some corresponding principles regarding the determination of saving. In Veblen's analysis, however, the latter is left in the background and almost never directly addressed.

Veblen argues that if the tendency to increase consumption in order to display social standing were not offset to a considerable extent «by other features of human nature, alien to conspicuous consumption, any saving should be logically impossible, however the level of income might be» [Veblen, 1899: 91]. He uses the term *instinct of workmanship* for the complex of these «other features of human nature» and employs the concept to explain why, despite the tendency toward conspicuous consumption, part of the individual's income is saved in order to accumulate and increase wealth[4].

The relationship between the determinants of consumption expenditure and those of savings is not, however, developed any further and thus remains ambiguous. The relation between consumption and saving is a point that was to play a crucial role in the development of the approach at a later stage.

1.2. A Valuable but Little-Known Contribution: Hazel Kyrk's *Theory of Consumption*

While *The Theory of the Leisure Class* obtained little success and little attention from professional economists, it is generally agreed that Veblen's ideas had quite a strong impact on American economists in the following years. As regards Veblen's view of the determinants of consumption, particular significance attaches to the theoretical work by Hazel Kyrk5, whose *Theory of Consumption* [1923] presents the fundamental ideas of his analysis of consumption

[4] The "instinct of workmanship" concept is also used by Veblen to explain why even the most superfluous consumer good generally appears to have some utility in satisfying a need. «The instinct of workmanship […] asserts itself even under very adverse circumstances. So that however wasteful a given expenditure may be in reality, it must at least have some colourable excuse in the way of an ostensible purpose» [Veblen, 1899: 93].

[5] Born in 1886, Hazel Kyrk studied at Chicago University after Veblen had lost his position there. She graduated in 1910 and delivered her Ph.D. dissertation in 1920. It was then published in 1923. Kyrk's dissertation won the Hart Schaffner and Marx Prize and was prepared for publication under the supervision of J. Maurice Clark. She worked for the Federal Government and at the Food Research Institute at Stanford University, also taking part in important empirical research on standards of living. Together with Margaret Reid, H. Kyrk is considered one of founders of so-called "Home Economics".

and develops some of its implications. Kyrk argues that individuals tend to determine their consumption expenditure through reference to standards of living that are generally associated with some particular group or social class:

All individuals as consumers have standards of living which they attempt to realise by market processes, and which are manifested in their concrete, material manner of living. This is the starting point for the analysis of consumption, this fact that consumers are guided, consciously or unconsciously, by standards which give continuity and uniformity to their activities [Kyrk, 1923: 172].

These standards are socially determined and individuals tend to consume accordingly because – as Veblen states – they thus tend to gain both the esteem of their neighbours and self-esteem. Failing to keep up with a social standard of consumption involves feelings of inadequacy and inferiority, which is severely detrimental to self-esteem[6]:

«the first point to be noted about our standards of living, that they are not something which each individual has evolved for himself and which vary from individual to individual. They are not individual, but group or mass phenomena [Kyrk, 1923: 177]. Inability to satisfy these ends, to maintain the standard which one holds, causes a feeling of insufficiency and of privation [Kyrk, 1923: 176][7].

The idea that the social importance of consumption determines rigidity of

[6] «These symbols of prestige and place are his armor against sneers, snubs, and disapproval, as well as a device which wins for him approval and admiration. They are the means by which he preserves his self-respect and wins the respect or envy of others. […] They enable the individual to identify himself with a group, they satisfy his pride of place; they symbolise "I am better (or different) than thou" to the next below, and, "I am treading on your heels" to the next above. But through them, moreover, the group establishes its unity and solidarity, shows its existence and vitality, and relative place in the social structure» [Kyrk, 1923: 222-223].

[7] In addition to the actual standard of living, Kyrk distinguishes two other ideas. The first is the "manner of living", which can be identified with the actual expenditure of a consumer unit and can actually differ from the actual standard when individuals fail to attain their ends or when they manage to try out non-essentials: «We may say that the manner of living is not the standard; it is something which reveals or throws light upon the standard. By the study of the objective mode of living of a group we may arrive at fair conclusions as to the standards by which it is *organizing it consumption*» [Kyrk, 1923: 174]. The second is the "ideal standard". «This [actual] standard of living is not an ideal standard, or one's concept of the best imaginable in the way of material living. [...] With most people it takes the form of the mode of life of a recognized superior group, that is, a group to be imitated» [Kyrk, 1923: 175].

consumption expenditure with respect to decreases in income clearly emerges also in Kyrk's analysis:

The strength of standards of living over the individual is well shown in the resistance that he offers to a threatened lowering of his consumption below the standard. Only under the pressure of the strongest motives, and with the greatest reluctance, is there a voluntary abandonment and withdrawal to a lower level [Kyrk, 1923: 181].

Standards of consumption tend to evolve over time due to a mechanism based on emulation of the behaviour of superior classes:

The standards themselves are *dynamic*. That is, there are forces within them impelling to change, to an expansion of the mode of living above the minimum requirements, to experimentation with non-essentials. This dynamic quality of our standards means a constant tendency for the individual to depart from the standard in the direction which to him is upward [Kyrk, 1923: 184 (emphasis added)].

When income increases, individuals readily indulge in the consumption of goods considered luxuries and, as such, symbols of a superior class. As a result of this experimentation, new goods come more or less rapidly to form part of the individual's standard of living[8].

Kyrk then pinpoints the primary element making it possible to break down external barriers and limitations and widen the individual's range of choice. This is essentially the *surplus* generated over and above the amount required by

[8] According to Kyrk one of the most important element driving the dynamics of the standard of living is the contradiction between the desire of individuals to identify with a group while distinguishing themselves from others: «On the one hand, man shows himself suggestible and imitative, with a desire for uniformity, and to be like the others; on the other, he appears showing a strong tendency to take a lead, to assert himself, and to be different from his fellows. […] A study of standards of living as they are, accordingly, emphasizes the conforming, imitative tendencies shown in habit and custom, while a study of standards of living in process, a dynamic view, emphasizes the forces within man which lead to experimentation and change» [Kyrk, 1923: 244-245].

Particular significance also attaches to the Kyrk's observations on the way in which industrial organisation affects the dynamics of consumption standards: «consumer's position of formal freedom of choice under the present industrial organization, and the pressure which is constantly brought to bear upon him by competing market agencies. [...] the whole market organisation of the day suggests and encourages experimentation. How can the modern consumer stand firmly by his old standards and values with all the pressure, the persuasion, the insidious device to cause him to yield to the temptation of the new, the different, the untried?» [Kyrk, 1923: 248-249].

old habits of consumption and concepts of need. Such surpluses are generally determined either by an increase in disposable income or by a cheapening of the goods constituting necessities due to technological innovation.

In the presence of a surplus, any individual household tends to imitate the consumption of the superior class and experiment with luxury goods that slowly become necessities.

When surpluses arise in the highest classes, individuals tend to experiment with new goods made available by technological product innovation. Technological innovation thus plays a key role in the evolution of standards of living by making available new goods that start off as luxuries for the richest classes and then become necessities for them and luxuries for the classes next in line. The continuation of this process leads to an increase in the consumption of the new good.

Technological innovation also makes it possible to cheapen existing goods, which generates surpluses by reducing the prices of necessities and makes luxuries more accessible for the lower classes. In this sense, «Invention is the mother of necessity» [Kyrk, 1923: 209].

Kyrk thus provides a detained examination of the hypothesis on consumption advanced in Veblen's theory. The *determination of saving* is a point on which considerable progress is achieved with respect to Veblen's analysis.

Taking the social significance of consumption expenditure into consideration means regarding it as *irreversible* and *asymmetric* in the sense that it tends to decrease less when income decreases than it increases when income increases. If consumption expenditure is to behave in this way, however, saving must be more elastic with respect to decreases in income than to increases. The volume of saving – or part of it – thus tends to be determined as residual of income after consumption standards have been satisfied. This asymmetry of saving must be seen as a manifestation of its *residual nature*. Saving appears to be residual of income at both the household and the aggregate level once a socially and historically determined level of consumption has been achieved.

This view of saving is clearly identifiable in Kyrk's analysis. In the first place, she argues that what determines consumption expenditure simultaneously determines the amount of savings:

> To save is simply not to spend for immediate consumption, and deductions concerning the rate and volume of saving may be drawn as corollaries from the principles which govern expenditures for consumption [Kyrk, 1923: 271].

She then identifies three distinct categories of savings, which she analyses separately:

first there is saving in order to acquire consumers' goods which call for relatively heavy expenditure. [...] these are savings from the individual standpoint and while they are being accumulated they serve as capital [Kyrk, 1923: 271].

Kyrk develops no further analysis of this type of saving but simply makes the following assertion:

The first type of saving mentioned, that for the purpose of future consumers' goods, needs no discussion. The individual's conduct in seeking these future ends is no different from that involved in carrying out many other interests and purposes. These values arise and acquire a place in the individual's scheme of life by the same process as do other values [Kyrk, 1923: 272].

As regards the elasticity of this kind of saving with respect to income, it is plausible to assume that it is more elastic with respect to decreases in income than consumption. As expenditure on durable consumer goods tends to be postponed and delayed during recessions, so does the saving intended to finance it.

A second category of saving is the money put aside by households in order to provide for the future, which is to be regarded as part of the standard of living itself. Providing for the future could be deemed essential to self-respect and to retaining the respect of others:

A minimum saving may be regarded as a necessity and may be a greater necessity than certain expenditures [Kyrk, 1923: 272].

Provision for an uncertain future is certainly considered a luxury at low levels of income. Individuals start saving once a minimum level of affluence has been attained. Like any other component of the standard of living, the existence and size of the portion of income saved for this purpose is determined by social status as well as cultural and religious factors.

There undoubtedly are those to whom provision for the future is in the realm of things hoped for, but not attained until a surplus is forthcoming. Saving to such group is what may be called a luxury of first order. If a surplus arises, the interest in saving will come to the front and claim at least part of it. [...] It may be considered necessary to save for burial expenses, or to provide a fund for time of unemployment or sickness. But to accumulate for the education of children, or to provide for old age, or retirement from business, may be regarded as a mark of real affluence, and only to be indulged in if economic pressure for the other purposes decreases. Saving of this latter character evidently compose a part of individually saved capital – a rather uncertain, fluctuating supply, subject to changes of fortune and to competition of other uses of the surplus. Probably the major portion of small savings fall in this category; they represent first a surplus and, secondly, its deliberate allocation to desirable future uses [Kyrk, 1923: 273].

It can be argued that the part of these "precautionary" savings regarded as an essential component of a standard of living would present more or less the same elasticity with respect to income as the expenditure on consumer goods constituting the standard of living.

The remaining part of precautionary savings appears, however, to be regarded as highly elastic to income during recessions. It is in fact plausible to argue that precautionary savings which are not part of the standard of living – such as precautionary savings *tout court* for the lower classes or savings for the «education of children, or to provide for old age, or retirement from business» for the higher classes – would tend to disappear completely during recessions. Conversely, the elasticity with respect to income presented by the latter kind of precautionary savings during periods of expansion will be similar to that of consumption. The whole amount of precautionary savings would thus ultimately present an elasticity to income opposite to that of consumption.

Finally, Kyrk examines a third type of saving that can clearly be seen as residual and, as such, regarded as the origin of an elasticity of aggregate saving with respect to income that is higher during recessions than during expansions.

It «is what has been called automatic or costless savings. It is unplanned saving with no particular purpose in view, saving which takes place when surplus is so large that individual reaches his practical spending limit upon both essential and luxuries before it is used up. The remainder of the income will be automatically saved» [Kyrk, 1923: 272].

This kind of saving is by definition residual of income after a certain level of consumption has been achieved. It is thus the component of saving that decreases more when income decreases than it increases when income increases. Kyrk argues that this kind of saving becomes more relevant the more unequal the distribution of income[9].

Aggregate saving is thus made up of different parts. Some of them clearly display a residual nature and asymmetric behaviour. The whole amount of sav-

[9] She tends to argue – following Hobson – that in the case of extremely uneven distribution, consumption would increase too slowly and a crisis of under-consumption would be possible.

ing would therefore present *inverse asymmetric* behaviour with respect to that of consumption.

1.3. The Social Significance of Consumption in the Applied Analyses by J. B. Peixotto

The approach to the analysis of consumption expenditure based on the assumption of the social importance of consumption was widely utilised in applied analyses. Some empirical works bear witness to the influence of the approach before the blossoming of applied analyses on consumption fostered by the publication of *The General Theory*. Other works appearing immediately after this publication endeavoured to introduce the basic ideas of the approach into the empirical estimation of a Keynesian consumption function.

Among the other applied works, J.B. Peixotto[10] of the University of California wrote two family-budget studies that are particularly relevant to our analysis.

Getting and Spending the Professional Standard of Living [1927] studies the incomes and consumption patterns of a sample of 96 families of University of California faculty members. Peixotto assumes that the patterns of consumption are homogeneous within occupational, social and income groups, and demonstrates that the disappointment felt by academics as regards their incomes is essentially due to the fact that while they are culturally and socially homogeneous to the professional class, their incomes are markedly lower than those of the other members of that class. Academics and their families thus tend to assume a standard of «decent living conditions» that is constantly higher than they can

[10] J.B. Peixotto (1864-1941) was born in New York into a Sephardic Jewish family. She managed to study at University of California only after a private education due to the opposition of her rich and prominent family to a university education for a young woman. She did, however, finally receive both a degree and a Ph.D from the University of California (1894 and 1900) after a period spent at the Sorbonne studying the history of French Socialism. She was the second woman to be awarded a doctoral degree by the University of California and later, in 1918, become the first woman to be appointed Full Professor in any field at Berkley. There she taught History of Socialism and then Social Economics, developing a specialisation course in that field. She founded the Berkley Commission of Public Charity and served on the California State Board of Charities, on the Council of National Defense during World War I, and later on the Consumers' Advisory Board of the National Recovery Administration. She became Vice-President of the American Economics Association in 1928. She remained at California University until she retired in 1935.

afford.

Peixotto explicitly states that her analyses «verify Veblen's Theory of the relation between earning capacity and spending» [Peixotto, 1927: 120].

How the workers spend a living wage [1929] develops an analogous study of the family budgets of 82 families of typographers in San Francisco. These were «among the best-paid workers in the city» and tended to spend their income in accordance with the consumption pattern of the superior classes i.e. «business and professional men». She argues that the higher income of these workers tends to make them assume the consumption standard of a superior class.

1.4. E. Waterman Gilboy and the Role of the Social Significance of Consumption in the Industrial Revolution

Elisabeth Waterman Gilboy pursued different lines of research, most of them empirical and connected with the analysis of consumption expenditure[11]. In her well-known work of 1932 on economic history, she uses the approach based on the social relevance of consumption to explain the role of demand in the British Industrial Revolution.

Gilboy argues that the Industrial Revolution presupposes a concomitant development and extension of consumption. Some conditions are necessary if a mechanism leading to a rise in the real income of people as a whole is to function:

a) an increase in the incomes of lower classes allowing them to introduce "luxuries" slowly into their standard of living;
b) sufficient class mobility;
c) the introduction of new commodities;
d) the development of new wants.

The introduction of new goods allows individuals with some surplus in-

[11] Born in 1903, E. Gilboy graduated in economics and sociology at Barnard College (Columbia University) in 1924 and took her Ph.D. at Wellsley College, Harvard, in 1929 with research into wages in eighteenth-century England. She then worked at Harvard until the 1960s. She was Secretary of the Committee on Research in the Social Sciences at Harvard, worked for the Office of Strategic Services in Washington during World War II, and was then employed as a consultant by the US Bureau of Labor Statistics from 1960-1964. She held the post of associate director of the Harvard Economic Research Project from 1950 and became Acting Director in 1964-65. Known as the Leontief Project, this was essentially devoted to the development of input-output analysis.

come to try out new luxury goods and then incorporate these new goods into their standard of living. New goods tend to become part of the standard of living not only of the affluent classes but also, little by little, of all the other classes. If the incomes of the lower classes increase, new needs tend to extend to the whole of society through pecuniary emulation and social competition.

Social mobility is, however, another necessary feature of society. This mobility offers the individual the illusion of rising to a higher class and displaying this change through *conspicuous consumption*, while what is really happening is simply an increase in the standards of living of the whole class and the economy as a whole. In describing this process, Gilboy explicitly mentions Kyrk's work as a theoretical cornerstone of her hypotheses. She also argues that the changes in standards of consumption generated by social competition induce workers to accept severe labour discipline, quoting Kyrk directly: «For the sake of gains as consumers, individuals consent to more hazardous and less interesting work as workers» [Kyrk, 1923: 65 (quoted in Gilboy, 1932: 630)].

After stating these theoretical premises, Gilboy draws supporting evidence from 18th century British history. She stresses the presence of increased wages and the introduction of goods previously regarded as luxuries into the workers' standard of living. As examples she lists tea, wheat bread and sugar, but also increases in expenditure on meat, cotton and silk clothing, and recreation.

She also argues for the existence – or at least the appearance – of social mobility. She lists a considerable number of 18th century social and political pamphlets referring to and complaining about the increased consumption of luxuries by the lower classes and the disappearance of any class distinction. Finally, she maintains that the process of industrial development in the United States was particularly quick and intense because all the factors that generated the industrial revolution in Britain were present in the US in an extreme form:

> lack of class distinctions, mobility between the indistinct class groups which did grow up; and for its general restlessness and striving for material comfort. America, in fact, exhibited in an intensified form the conditions out of which the Industrial Revolution grew in England [Gilboy, 1932: 638].

2. The Second Phase of the Approach: The Contributions of the 1940s

2.1 Keynesian Macroeconomics and the Empirical Puzzle of the 1940s

The publication of Keynes's *General Theory* marked a fundamental change in the analysis of consumption. Both theoretical analyses and empirical estimates came to be centred on *aggregate* consumption, i.e. on consumption expenditure as a macroeconomic magnitude. The analyses also came to focus on a *function* of consumption i.e. a formal mathematical relation between aggregate consumption and its main determinants.

Keynes's primary task in *The General Theory* was to state the principle of effective demand; the element of consumption determination essential to this was what Keynes described as *the fundamental psychological law*:

men are disposed [...] to increase their consumption as their income increases, but not by as much as the increase in their income [Keynes, 1936: 96].

The essential point was thus the simple assumption that consumption is an increasing function of current income with a marginal propensity to consume lower than unity. In *The General Theory*, this point was the simplified result of an analysis of the determinants of consumption expenditure made up of heterogeneous principles. Among these it is possible to trace an echo of the ideas constituting the approach of the social significance of consumption:

The subjective factors [...] include those psychological characteristics of human nature and those social practices and institutions which, though not unalterable, are unlikely to undergo a material change over a short period of time except in abnormal or revolutionary circumstances [Keynes, 1936: 91].

Moreover, arguing that the marginal propensity to consume is lower than unity, Keynes writes:

This is especially the case of the so-called cyclical fluctuations of employment during which habits, as distinct from more permanent psychological propensities, are not given time enough to adapt themselves to changed objective circumstances. For a man's habitual standard of life usually has the first claim on his income, and he is apt to save the difference which discovers itself between his actual income and the expense of his habitual standard; or, if he does adjust his expenditure to changes in his income, he will over short periods do so imperfectly [Keynes, 1936: 97][12].

[12] The same echo is to be found in other earlier works by Keynes. Keynes [1930] uses a Veblen's classification of needs in "absolute" and "relative" and writes: «needs which are absolute in the sense that we feel them whatever the situation of our fellow human beings may be, and those which are relative in the sense that we feel them only if their satisfaction lifts us above, makes us feel superior to, our fellows. Needs of the second class, those which satisfy the desire for superior-

These passages refer both to the relevance of *habits* in determining consumption and to the residual nature of savings, two constituent principles of the approach based on the social significance of consumption. The relevance of these elements is, however, explicitly limited to short-period fluctuations during which the adjustment of expenditure to changes in income in accordance with «more permanent psychological propensities» can only take place imperfectly. These *propensities* seem to be interpreted as the expression of the more traditional principles used by Keynes in studying consumption expenditure.

As reconstructed by Thomas [1989], many of the statisticians and economists who had previously developed empirical analyses of consumption based on family budgets were drawn into the theoretical debate during the years following the publication of *The General Theory* and worked to estimate aggregate consumption functions. A considerable number of these analyses display links with the tradition of family-budget studies and a sociological approach. These empirical works were in fact frequently developed taking into account differences in social groups and the effects of changing income distribution. Thomas states that these studies were «both much richer in terms of insights into consumers' behaviour it produced, and superior econometrically to much of the work that followed» [Thomas, 1989: 145].

Aggregate data in a form suitable for estimating macroeconomic consumption functions has been readily available to economists since the mid-1940s, when the U.S. Department of Commerce published annual data on national income and aggregate consumption for the period 1923-1940. This availability prompted many economists to undertake econometric estimates of aggregate consumption functions. The number of empirical analyses on consumption rocketed and, according to Thomas [1989: 145], «the standard of the econometric work declined».

As is known, Keynes's analysis of consumption was represented in the theoretical and empirical debate of the 1940s by the so-called "Keynesian Consumption Function". Real consumption expenditure was assumed as a stable function of real income, the marginal propensity to consume was considered a positive fraction, and the average propensity to save (the proportion of consumption in income) was assumed to be greater than the marginal propensity.

ity, may indeed be insatiable; for the higher the general level, the higher still they are» [Keynes, 1930: 326]

The final assumption was that as income rises, the proportion of it that is consumed falls.

We are not concerned here with considering whether this assumption correctly represented Keynes' analysis, even though, as Cook [2000] argues, it clearly appears to be an oversimplification, and its success was probably due to the apparently sound econometric results given by estimates based on this assumption at the beginning of the 1940s.

The theoretical debate soon came to focus, however, on what appeared to be a contradiction of the empirical results. Many empirical works estimated consumption functions in which the marginal and average propensities to consume were different[13], thus proving the validity of the "Keynesian Consumption Function" and of the assumption of an inverse relation between the level of income and the proportion of income consumed. Kuznets [1942] instead published a work based on time series for long periods that seemed to show a tendency of the same two variables to coincide. This means that the proportion of consumption in income appears to have remained constant while aggregate income increased over the period covered by Kuznets's data.

This contradiction was generally interpreted as due to the fact that the average propensity to consume decreases when income increases over a short period of time but remains constant on average over longer periods of time.

The principle of the social significance of consumption expenditure was widely used during that theoretical debate on consumption in both purely empirical and more theoretical works by well-known economists such as P. Samuelson [1943], F. Modigliani [1949] and above all J. Duesenberry [1948; 1949].

The works considered in the preceding sections are not explicitly quoted in these later works. Nor is the existence of a specific theoretical approach to the analysis of consumption based on its social relevance clearly acknowledged. It is only in Duesenberry's book that we find a short and critical reference to Veblen's analysis (see n. 23). Most of these authors do, however, refer to the principles constituting the approach as generally known or sufficiently accepted, especially those engaged in empirical analyses.

The way in which these ideas were used in the debate marked, however, a radical change in the primary features of the approach. Given the importance of

[13] The most quoted of these works was certainly the one by Ezekiel [1942]

the change, this can be regarded as a second distinct phase of the approach to the analysis of consumption based on its social significance. At the same time, the change undergone by the approach in this second phase also generated a contradiction that led to its complete abandonment over the next few years.

2.2. Samuelson: A Initial Macroeconomic Analysis Using the Approach

Samuelson endeavoured in 1943 to forecast the levels of production for the years after the end of the war. He argued that the *saving-consumption-income pattern* was crucial to any forecast and that the empirical puzzle emerging with Kuznets's work had to be solved.

The empirical literature unanimously suggests that consumption expenditure is an increasing function of income, that savings are zero below a certain level of income, and that both consumption and saving increase as soon as income rises above this critical threshold[14]. Samuelson argues that it is necessary to make some «secular and cyclical alterations» to this simple pattern of the consumption-income relation.

The *secular alterations* regard the fact that:

> As real income increases over time, commodities that were once luxuries become necessities. Today modest incomes can buy more than a King's fortune could command in former times. And yet such incomes are often not large enough to finance 'absolutely necessary' purchases, so that their possessors cannot break even, much less save on balance [Samuelson, 1943: 33].

As regards the *cyclical alterations*, Samuelson argues that

> some time is required to become adjusted to increased levels of income so that in the short run consumption increases less with increased income than it does in the long run, saving taking up the slack. Moreover, when income drops, consumption is maintained at the expense of savings. […] the short-run marginal propensity to consume is less than the long-run marginal propensity to consume. Diametrically opposed to this is the hypothesis that an increase in income will immediately cause families to make durable-goods purchase in excess of the increase in income, either through use of installment credit or out of previously accumulated wealth. […] a positive rate of change of income would induce consumption expenditure over and above what would be forth-

[14] Samuelson considers the monumental work by Faith M. Williams and Carle C. Zimmerman [1935] as suggesting this unanimous result of the literature. See n. 2.

coming at the same level of income steadily maintained [Samuelson, 1943: 34].

Samuelson does not explicitly discuss the asymmetric behaviour of consumption implying a higher marginal propensity to consume in expansions than in recessions. He does, however, combine the *secular and cyclical* features of his analysis of consumption in a significant graphic representation.

In Figure 1, which is a reproduction of that we find in Samuelson's paper, lines AA and A'A' are consumption functions relative to given periods in which income is essentially given, the period of A'A' being later than that of AA. The ascending spiral represents the actual path of expansion of consumption. Marginal propensity to consume is higher during expansions than recessions.

The *secular* growth of standards of consumption takes place through a cyclical process characterised by a marginal propensity to consume that is lower (even negative) during recessions than expansions[15]. Kuznets's result is then explained by arguing that during the whole period of his data (1879-1938):

our enlarged scale of wants was causing an upward shift in the consumption function at about the same rate as improvements in our production potential, yielding a stable relation between percentage consumed out of national incomes corresponding to *full-employment* income [Samuelson, 1943: 33 (emphasis added)].

The long-run relationship between consumption and income can be represented by the dotted line of Figure 1, along which income is assumed «for simplicity to correspond to full employment». Roughly the same percentage of total income is also consumed along this line. This constancy would represent Kuznets's results.

Great importance attaches to Samuelson's analysis as an initial attempt to consider the macroeconomic effects of the social significance of consumption expenditure[16].

[15] The particular form of the Samuelson's consumption function implies that consumption even continues to increase in absolute terms during the initial periods of each recession, thus giving rise to a negative value of the marginal propensity to consume.

[16] Samuelson's contribution seems in some respects to be a Keynesian theoretical formalisation of Gilboy's historical analysis of the role of consumption expansion in the process of economic growth.

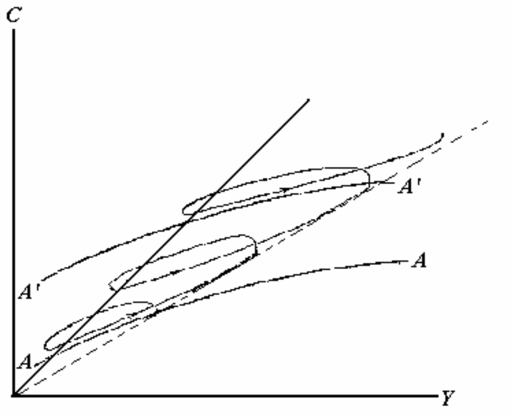

Figure 1 – The graphical representation of Samuelson's analysis

During the period of Kuznets's data – Samuelson argues – *consumption requirements* have increased fast enough to keep up with economy's productive potential, thus generating a constant proportion of income consumed. This does not, however, imply the existence of any automatic mechanism ensuring that this phenomenon always tends to take place. The upward shifts of the consumption schedule could be insufficient to absorb full-employment output and specific policies might be necessary to guarantee the proper expansion of consumption and of aggregate demand.

While Samuelson appears in some passages to grant consumption expansion and aggregate demand a determining role in the process of growth, his overall position displays substantial ambiguity. He uses 'potential output', 'full-employment output' or 'long-run income' as if they were perfectly synonymous and, even when considering the possibility of insufficient growth of post-war consumption, treats potential output as determined independently of the actual increase in consumption and aggregate demand[17].

Another ambiguity can be seen in the analysis of saving. The determinants

[17] The possible role of consumption expansion in the growth process has recently been studied by P. Garegnani and A. Trezzini [2005] and by A. Trezzini [2005]. As argued there, the first condition required for emergence of this possible effect is rejection of the idea of a long-period tendency of the economy toward long-period full utilisation of productive resources. The second related condition is correct understanding of the fact that this rejection necessarily entails a high *elasticity* of *long-period* – as well as short-period – outputs in response to changes in aggregate demand.

of the constant long-run propensity to save are discussed in very general terms and the idea that part of saving is to be regarded as a *residual* of income after consumption has been determined is simply mentioned among other circumstances possibly affecting saving:

At high levels of income corresponding to full employment billions of dollars will be saved every year. These sums are saved each year because people have income *in excess of their consumption needs*, because of a desire for personal security, because of automatic institutional arrangements, and for a thousand other reasons. It is irrelevant whether the process is deliberate or unconscious, whether prudence and thrift are involved or greed or lust, whether or not there is pain and abstinence. The desire to accumulate is a social fact, to be taken as such [Samuelson, 1943: 36 (emphasis added)].

This statement of the residual nature of saving is, however, accompanied by a different view. In the passages quoted above, Samuelson implicitly assumes the existence of a long-run desired relation/proportion between income and consumption. During cyclical fluctuations, this proportion tends to differ from the value it assumes in the long run because «some time is required to become adjusted» to increased levels of income.

As we shall see, these two ambiguities are closely connected. In the contributions of the following years, it becomes clear that they stem from reference – more explicit than in Samuelson's analysis – to principles deriving from the traditional marginalist theories.

2.3. The Econometric Analyses of the 1940s

Large-scale debate developed between economists and econometricians in 1945 and 1946 on economic forecasts for the post-war period. The 1945 volume of *Econometrica* was entirely devoted to these forecasts and the 1946 volume of the *Review of Economic Statistics* focused on the different estimates of the consumption function, which appeared crucial in determining different forecasts.

Smithies [1945] proposes an estimate of a consumption function at constant prices for the period 1929-40, in which he tries to explain Kuznets's result of long-run constancy of the average propensity to consume by introducing a «trend factor» which increases continuously in time[18].

[18] Consumption expenditure is the sum of a constant component, a component proportional to current income, and a third component proportional to the difference between the current year and 1922:

W.S. Woytinsky [1946] and E.G. Bennion [1946] assert the need to take *cyclical changes* in the consumption function into account. They both estimate different consumption functions for the different phases of the business cycle. One function is estimated using data for the years of expansion and another using data of recession years.

Cyclical changes in marginal propensities to save and secular movements of the consumption function are assumed in these works as ways of improving the estimate. While they are not particularly deep, the theoretical justifications of these assumptions do appear to rely on the social significance of consumption[19].

2.4. The Early Modigliani

F. Modigliani entered the empirical debate on the consumption function in 1949 with an analysis that does not contain the principles that were to constitute his *Life Cycle Hypothesis.*

Modigliani's paper of 1949 assumes the primary features distinguishing the approach based on the social significance of consumption expenditure, namely the *irreversibility of consumption habits* giving rise to *asymmetric behaviour* of consumption during cyclical fluctuation and continuous growth of consumption standards:

> A marked fall in income below an accustomed level, such as occurs during cycles, creates a strong pressure on acquired consumption habits. This pressure tends to be met by partly maintaining consumption at the expense of saving. That is, savings tend to bear the brunt of cyclical change in income, falling proportionately more than consumption and income as income declines [Modigliani, 1949: 386][20].

$$C_t = \alpha + \beta Y_t + \gamma (t - 1922).$$

[19] Smithies [1945: 6] introduces the «trend factor» in his consumption function as follows: «Rising living standard have increased minimum costs of living. For instance, if refrigerators become necessaries for families who previously regarded them as luxuries, the proportion of income consumed tend to increase». Bennion [1946] maintains that during the cycles there are changes in income distributions between classes with different propensities to save, which generates changes in the marginal propensity to save. Woytinsky simply assumes as a plausible assumption that «the rate of savings declined rapidly with deteriorating business conditions and rose with improvements» [Woytinsky, 1946: 2].

[20] Modigliani also indicates two other factors determining the asymmetric behaviour of consumption during the different phases of the business cycle. In his view, there is evidence that the distribution of income tends to become less unequal as income contracts, and more unequal when it

These assumption are formalised by means of a «consumption function» in which aggregate consumption at time **t**, C_t, is the sum of a component proportional to real income of the year **t**, Y_t, minus a component proportional to the absolute difference between current real income and the highest level of real income realised in any year preceding **t**, Y^0_t.:

$$C_t = \alpha Y_t - \beta (Y_t - Y^0_t) \qquad [A]$$

During recessions, when current income is lower than the highest level realised in a preceding (peak) year, the peak level of consumption still affects the decisions of consumers. The component of consumption proportional to current income – αY_t – is *increased* by a component proportional to the difference between current income and the highest level reached in the past. During expansions, when current income becomes higher than the highest level previously reached, the component of consumption proportional to current income is *reduced* by an amount proportional to the difference between current income and the maximum level of income previously attained. Peak after peak, the component of aggregate consumption representing the acquired standard of consumption slowly increases. Modigliani's function thus also represents the *secular* growth of consumption standards.

Criticising the econometric works of previous years, Modigliani argues that:

(a) the apparent long-run stability of the saving-income ratio in the course of the gradual secular expansion of income is not due to chance, but rather to structural property of the system, a consistent phenomenon that can be extrapolated; (b) the tendency for saving to fluctuate together with and proportionately more than income, which according to the available evidence has been very pronounced in the interwar decades, is a cy-

recovers. Profits (and agricultural incomes) tend to fluctuate proportionately more than other incomes during the cycles. Earners of profit (and agricultural income) have on the whole a greater than average propensity to save. «We have, therefore, grounds for expecting that a cyclical fall in income will tend to be accompanied by a redistribution of income from groups having a greater propensity to save to groups with a smaller propensity to save, while a cyclical rise in income will have a positive effect» [Modigliani, 1949: 386]. Finally, Modigliani also regards the reduction of the total amount of wage income changes as due more to changes in employment than to changes in the incomes of the employed. Because the unemployed necessarily maintain at least part of their consumption, aggregate consumption will thus tend to decrease less when aggregate income decreases than it increases when income recovers. In his exposition of these principles, Modigliani recalls Duesenberry's analysis with reference to a paper delivered at a meeting of the Econometric Society in Atlantic City in 1947.

clical phenomenon [Modigliani, 1949: 378].

Both the short-run variability and the long-run constancy of the proportion of consumption in income are explained here by assuming that the economy grows in the long run at a «rate of normal secular growth» and that this «normal secular rate [is] determined by the rate of technological progress» [Modigliani, 1949: 388], thus corresponding to conditions of full employment. By transforming function [A], Modigliani expresses the proportion of consumption in income as:

$C_t/Y_t = \alpha - \beta[(Yt - Y0t)/Yt]$ [B]

where the term $[(Yt - Y0t)/Yt]$ is called *cyclical income index*.

In the study of long-run tendencies, this *cyclical income index* must be replaced with the *normal secular rate* of growth. Relation [B] thus determines a *normal secular level* of the consumption-income ratio and saving-income ratio, i.e. a long-run level of the average propensity to save.

During expansions, the *cyclical income index* tends to be higher than the *normal secular level*. The average propensity to consume and average propensity to save are thus respectively lower and higher than their secular levels. Conversely, the average propensity to save is lower than its long-run level during phases of cycle in which the *cyclical income index* is negative, i.e. income is lower than the highest level of income attained in any previous, or the rate of growth is negative or lower than its *secular level*[21].

The theoretical context in which Modigliani employs the assumptions deriving from the analyses based on the social relevance of consumption is clearly characterised by the assumption of the long-run tendency to conditions of full employment. In this context, we also find the concepts of a *secular rate of growth* and *secular level of the average propensity to save*. Both these *secular* levels are determined *independently* of the cyclical behaviour of income and aggregate consumption (saving).

[21] Using g_c for the actual rate of growth of income, g^* for its secular or normal level, S/Y for the current average propensity to save, $(S/Y)^*$ for its long-run level, C/Y for actual average propensity to consume, and $(C/Y)^*$ for its long run level, we can write as follows:

when $g_c > g^* \rightarrow S/Y > (S/Y)^*$ and $C/Y < (C/Y)^*$, while

when $g_c < g^* \rightarrow S/Y < (S/Y)^*$ and $C/Y > (C/Y)^*$.

2.5. Duesenberry: The Social Relevance of Consumption in a Traditional Theoretical Framework

The theorisation and empirical investigation of the ideas constituting the approach based the social relevance of consumption to be found in Duesenberry's analysis are certainly the best known among economists.

Examination of this analysis affords an understanding of the very nature of the transformation that the approach underwent during the 1940s, starting with the analyses of Samuelson and Modigliani. Unlike the economists of the first phase, those who studied aggregate consumption in the 1940s had a theoretical background based on the traditional marginalist theories. The assumption of a long-run tendency to full employment of resources and a long-run value of the propensity to save is thus the result of reference – which they took to be inevitable – to the principles of the traditional marginalist theories. In actual fact, Duesenberry developed a synthesis of the principles deriving from the analysis of the social relevance of consumption expenditure and the traditional marginalist approach to the analysis of consumption[22]. In this transformation, however, a contradiction arose that later prompted the abandonment of the approach.

2.5.1. The Social Relevance of Consumption

Duesenberry [1949: 19] states that «A real understanding of the problem of consumer behavior must begin with a full recognition of the social character of consumption patterns». Individuals determine their consumption expenditure through reference to different standards of living that are *socially* ranked. Supe-

[22] As regards the attitude towards the theoretical development of the economists of the first phase and the relationship of their key principles with traditional marginalist theory, it appears highly significant that Duesenberry quotes none of them except Veblen. Moreover, the only passage in which he recalls Veblen's analysis, namely the introduction, reads as follows: «The interdependence of preference systems has been recognized since the early days of economics. […] Writers like Knight and Veblen were engaged in criticism of the neo-classical economics. Veblen attacked analytical economics and tried to substitute for it a historical approach. For the most part his work bears on questions different from those dealt with in analytical economics and, whatever its other merits, throws little light on problems of resource allocation and employment. […] Both Veblen and Knight made real contributions to our understanding of consumer behavior problems. […] The negative character of their comments on "orthodox" demand theory explains, in large measure, their lack of influence on it. Most people would rather have a bad theory than no theory at all» [Duesenberry, 1949: 14-15].

rior patterns of consumption usually imply higher expenditure[23].

In developed societies, although classes or castes do not *formally* exist, many different levels of social status can be readily identified. Attaining a particular status involves maintaining the behaviour typical of the members of that class. Level of income is generally the key criterion involved in the recognition of an individual's success and right to a given status. An individual's level of consumption is considered a yardstick of income and status and hence ultimately of success:

> high standards of consumption become established as criteria for high status. Once this has occurred, it becomes difficult for anyone to attain a high status position unless he can maintain a high consumption standard, regardless of any other qualifications he may have [Duesenberry, 1949: 30].

The existence of social status thus means that every individual tends to associate with other individuals at more or less the same level. However, «social status rankings in our society form a continuous series every individual associates with some people of higher or lower status than his own» [Duesenberry, 1949: 30]. The absence of any strong barrier preventing individuals of different status from associating thus increases the frequency with which individuals can make *invidious comparisons.* Each unfavourable comparison triggers an impulse to purchase goods and eliminate the source of it.

A rising standard of living is such a widely shared *goal* in our society that it becomes «incorporated in the ego-ideal». A certain degree of success in achieving such social goals becomes essential to self-esteem, which is one of the fundamental stimuli prompting individual action.

In a society characterised by a high degree of social mobility, increasing income means a rise in social position. Increasing consumption thus seems to be a way of improving social standing in either real or apparent terms.

2.5.2. The Long-Run Value of the Saving Ratio

These ideas are clearly the same as those found in Veblen and the other authors considered in the first phase of the approach. Duesenberry uses them as a

[23] «these different types of goods, or, in the broader sense, ways of doing things, are regarded as superior or inferior to one another; […] there is a generally agreed-upon scale of ranks for the goods which can be used for any specific purpose» [Duesenberry, 1949: 22].

basis to assert a continuous tendency of individuals to increase consumption. This tendency clashes, however, with the tendency to save.

Duesenberry maintains that each individual balances these two opposing forces in a process of «rational inter temporal choice between present and future consumption». Individuals determine their consumption expenditure for present and future periods through a process of maximising their utility functions subject to the restraints imposed by actual and expected income, interest rates and assets.

The social relevance of consumption expenditure is thus used in a traditional marginalist framework. With respect to this traditional approach to analysis of the consumer, Duesenberry only points out that «the choice between present and future consumption will be indirectly affected by the interdependence of desires for current consumption» [Duesenberry, 1949: 33].

The utility of the individual i depends not only on the level of his consumption C_{ij} at each date, j, but also on the other people's levels of consumption. Duesenberry tries to take this interdependence into account by dividing the level of consumption of the individual i by $R_j = \Sigma\alpha_{ij}C_j$, which is a weighted average of the consumption expenditure of other individuals. The weights are high for individuals of nearly the same status and decrease together with social proximity.

Duesenberry describes a system of r equations for each individual representing the constrained maximisation of utility and determining consumption and saving in the current period and at any future date. He then examines the solution of this system and infers the properties of the aggregate consumption and saving functions directly from this individual analysis.

The analysis of individual behaviour leads Duesenberry to his first fundamental conclusion about aggregate consumption expenditure:

(1) The aggregate saving ratio is independent of the absolute level of aggregate income [Duesenberry, 1949: 45].

Individual consumers determine their consumption expenditure not on the basis of their absolute level of income but on the basis of their relative position in terms of income distribution. Their welfare is determined by the level of their consumption with respect to those of their associates of higher or lower rank. Their consumption expenditure is thus determined on the basis of their relative position in terms of income distribution.

Each class or social group will tend to display a specific proportion of consumption in income. On the aggregate, the proportion of consumption in income will result as a weighted average of the different class-specific proportions. And as long as there is no radical change in distribution, aggregate consumption tends to be proportional to income and thus to generate a constant average propensity to consume. This magnitude is seen as a long-run 'equilibrium' value determined by the process of individuals' choices between saving and consumption.

This ratio is affected in principle by other circumstances:

(2) The aggregate saving ratio is dependent on (a) interest rates, (b) the relation between current and expected future incomes, (c) the distribution of income, (d) the age distribution of the population, (e) the rate of growth of income [Duesenberry, 1949: 45].

According to Duesenberry, however, most of these circumstances had a negligible influence on the actual determination of saving during the period studied by Kuznets. Some of them, such as interest rates and «expectations and preference parameters», generally tend to have a low degree of influence on savings. Others, such as the age composition of the population and income distribution, are extremely relevant in determining the saving ratio. Duesenberry argues on the basis of an empirical analysis, however, that during the whole period studied by Kuznets, changes in these variables had opposite effects on the saving ratio that cancelled one another out so as to produce a constant saving ratio. The small changes shown by the saving ratio in Kuznets's data are to be interpreted as due to those factors.

2.5.3. The Cyclical Behaviour of Consumption: Irreversibility and Asymmetry

Duesenberry also uses the social relevance of consumption expenditure to assert the existence of a cyclical behaviour of consumption expenditure that is different from but consistent with the long-run constancy of the average propensity to save.

Individual consumers determine their consumption expenditure on the basis of their relative positions in terms of income distribution. When their income increases, they may also assume a change in their relative position, which may lead them to increase saving more than proportionally. But if what is really taking place is an increase in aggregate income that leaves income distribution substantially unaffected, the increase in consumption will be generalised and the relevant magnitudes – i.e. the relative positions in terms of income distribution and the relative levels of consumption – will prove to be unaffected. This will lead to a final increase in consumption proportional to the rise in income.

Duesenberry bases this behaviour on two fundamental principles of the social relevance of consumption approach, namely the *irreversibility* and the resulting *asymmetry* of consumption expenditure:

The fundamental psychological postulate underling our argument is that it is harder for a family to reduce its expenditure from high level than to a family to refrain from making high expenditures in the first place

and

the significant result of this argument is not the conclusion that deficits will occur when income falls below previously attained level, but the more general proposition that families are willing to sacrifice saving in order to protect their living standard [Duesenberry, 1949: 85].

2.5.4. The Relative Income Hypothesis: The Cyclical and Long-Run Behaviour of Aggregate Consumption

Duesenberry formalises his assumptions by means of what is generally known as the Relative Income Hypothesis. The level of consumption expenditure is determined by the level of current income and by the ratio between the level of current income and the highest income level previously attained. Savings at time t, S_t, are determined in accordance with the following function

$$S_t = f\,(y_t, y_t/y_0)$$

where **yt** is income at time **t** and **y0** the highest income attained previous to the year **t**. Duesenberry's paper of 1948 represents the way in which saving changes with income by means of a derivative of the saving function:

$$\frac{dS_t}{dY_t} = \frac{df}{dY_t} + \frac{df}{d(\frac{Y_t}{Y_o})} \cdot \frac{d(\frac{Y_t}{Y_o})}{dY_t}$$

He states that:

If we plot out the long-period relation of saving and income considering only periods of approximately full employment, the term $\frac{dY_t}{Y_o} / dY_t$ will be 0 so that $\frac{dS_t}{dY_t} = \frac{df}{dY_t}$ [Duesenberry, 1948: 75].

A *constant* long-run rate of growth corresponding to full-employment conditions is thus assumed and a '*saving ratio*' – i.e. a proportion of saving in income – is assumed to correspond to these long-run conditions. This *long-run value* of the saving ratio is the result of the inter-temporal allocation of income between consumption and saving, which is affected by the relative position of the individual families in income distribution. Given income distribution, i.e. the class composition of society, the long-run average propensities to consume thus tend to be constant with respect to increases in income and also to coincide with the marginal propensity to consume. Kuznets's empirical results are in line with this theoretical statement.

Duesenberry argues that during cyclical fluctuations the ratio «$\frac{dY_t}{Y_o} / dY_t$ will have a positive value» The marginal propensity to save is thus *higher* than its long-run value and different from the average propensity to save, as assumed in the "Keynesian consumption function" and tested in empirical studies based on short series of data.

It appears clear from the above that the long-run values of the average (and marginal) propensity to save (or to consume) are determined independently of the values that these variables assume during cyclical fluctuation. Cyclical values are regarded as deviations due to mistaken interpretations of changes in income.

These features are illustrated very significantly in the graphical representation that Duesenberry develops of his Relative Income Hypothesis when summing up his primary results in the last chapter of the book of 1949:

The irreversibility of income-consumption relations produces a sort of "ratchet effect". This is illustrated in Figure 4.

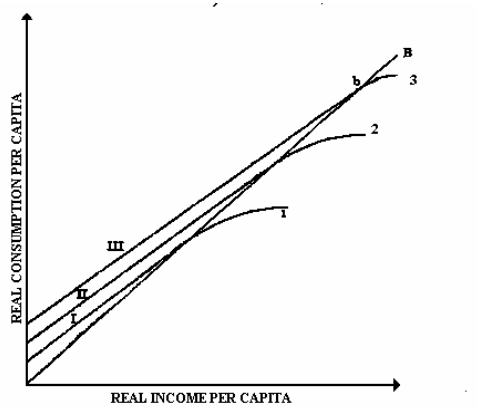

Figure 4

The line OB is a long-run consumption function shown with a slope of .9[24]. The curves I, II and III are the short-run functions […] The curves marked 1, 2, 3, show the values of consumption in periods when Yt/Y0 is substantially above 1. The variations in consumption through a typical business cycle may be described with the aid of the diagram in the following way: supposed that full-employment is reached at a certain time with income and consumption at a certain time with income and consumption at the point a. Full-employment is approximately maintained for some year and during this time income and consumption rise approximately proportionately to the point b. When this income is reached a decline in investment occurs so that income is reduced. Consumption now decline but instead of declining proportionately consumption at any income is found at the point corresponding to that income on the curve III. Consumption and income at first fall, then when recovery sets in they advance again. If the recovery is a gradual one, consumption advances along the curve III until the point b is reached once more. After this consumption continues to advance but along the curve OB again until another depression starts. If, however, the recovery is very rapid then when income passes the level corresponding to b, consumption will increase but along one of the curves 1,2, 3 depending on the speed of the increase in income. Income cannot continue, however, to rise at very rapid rate, for as soon as full employment is reached *only increases in productivity* will raise income. Eventually, then, a full adjustment to the new living standard will take place and consumption may once more be found by using the line OB [Duesenberry, 1949: 115 (emphasis added)].

As in the analyses of Modigliani and Samuelson, we find that a long-period value of the proportion S/Y is associated with a long-run constant rate of growth. In Duesenberry's analysis, however, this long-run value of the proportion of saving in income is theoretically explained as a desired magnitude produced by a process of inter-temporal maximisation of individual utility.

It is also assumed that the long-run rate of growth associated with this value of the proportion of saving to income is the one indicating full-employment.

Attention must also be drawn to a further feature of Duesenberry's analysis, namely the fact that the social significance of consumption and its implications play no significant role in the long-run growth of the economy. The economy is assumed to tend toward the full employment of productive resources and long-run growth of income is determined, in conditions of full employ-

[24] Duesenberry assumes a value of 0.9 for this slope, which is equal to the value emerging from Kuznets's long-run analysis.

ment, only by the increases in productivity of all the factors.

Duesenberry's analysis thus introduced the primary elements of the approach to the analysis of consumption based on the social significance of consumption expenditure in a traditional marginalist framework of utility maximisation.

3. Conclusions

In the literature considered we have found the assumption that consumption is to be regarded as an essentially social phenomenon; the primary reasons for consumption expenditure are not connected with the intrinsic properties of the goods involved but with the fact that consuming certain goods enables individuals to identify and be identified with specific social groups.

It is thus generally argued that consumption expenditure tends to be irreversible, to a certain degree. This means that it decreases less in the course of a trade cycle when income decreases than it increases when income increases and that, through this cyclical behaviour, the standard of living and consumption expenditure tend to increase along with the process of growth and accumulation.

Addressed in terms of the marginal propensity to consume and the proportion of consumption in income, this behaviour of aggregate consumption should mean that the marginal propensity to consume tends to be higher during expansions than during recessions. The proportion of consumption in income thus obviously tends to increase when income decreases and to decrease when income increases.

If consumption is to behave in this way, however, it is necessary for saving to be more elastic with respect to decreases in income than to increases. In point of fact, the whole conception of consumption determination implies that the volume of saving tends to be determined as a residual of income after the standard of consumption has been satisfied. And the residual nature of saving could certainly be used to argue for the existence of a marginal propensity to save that is higher in recessions than expansions. The proportion of saving in income should thus prove lower during recessions than expansions.

In the first phase of the approach, these arguments are obviously not expressed in terms of the marginal propensity to consume (save) or the proportion of consumption (saving) in income. Nor was the behaviour of saving clearly studied in Veblen's analysis or in the 'applied works'. A clear assessment of the residual nature of aggregate saving is, however, found in Kyrk's analysis.

In the analyses of the 1940s, during the second phase of the approach, this behaviour of consumption and saving is clearly stated but its relevance is strictly confined to the analysis of cyclical fluctuations. Together with this short-run or cyclical behaviour, Duesenberry also assumes, like Modigliani and Samuelson, that a given proportion of saving out of income tends to emerge in the long run over the cyclical fluctuations of income.

According to Duesenberry, this *long-period* value of the average propensity to consume is determined by the factors stated above and thus essentially independent of cyclical asymmetric behaviour of consumption.

Here we find thus two views of saving. The first is relative to cyclical fluctuations: savings are determined residually once consumption standards have been acquired. This view is similar to the one found in Kyrk's analysis and is to be regarded as implied by the approach to the analysis of consumption based on its social relevance.

The second is connected with the assumption of long-period trends of the economy characterised by full-employment conditions. In Duesenberry's analysis, it is clear that this view derives from reference to traditional marginalist principles; it is the result of a process of the choice between present and future consumption made by each individual with an indirect effect of the interdependence of desires. In the long run, the level of saving thus tends to be a given *desired* proportion of full-employment income. This proportion can then be interpreted as a proportion of income that the economy as a whole wishes to save, i.e. as a *propensity* to save.

We could argue, however, that the reference to traditional long-run analysis was not a necessary development of the approach. Its primary features were originally developed independently of traditional principles and by authors adopting explicitly critical stances toward these principles[25].

The relationship between the two views of saving is not clearly explained in the analyses of the 1940s, and their heterogeneity thus appears to generate an inconsistency. The existence of these two ideas of saving and the lack of a sound explanation of the relationship between them is the major weakness of these mature formalisations of the approach to the analysis of consumption as a social phenomenon. This weakness can be seen as a major factor leading to the general abandonment of the approach.

[25] The notion of marginal utility was explicitly criticised by Veblen in particular.

A few years later, the Permanent Income Hypothesis and the Life Cycle Hypothesis were in fact to offer an explanation of the difference between the cyclical and long-run values of the propensity to consume that proved both more self-consistent and more in line with the mainstream marginalist theories.

In putting forward his Permanent Income Hypothesis, Milton Friedman [1957] stated what is now known as the Stylised History of the Consumption Function. Most of the works considered in this paper and the approach to the analysis of consumption identified in them found no place in that history.

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