# PRE-KEYNESIAN THEMES AT BROOKINGS

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### RÉSUMÉ

#### THÈMES PRÉKEYNÉSIENS A BROOKINGS

Cette étude est consacrée aux travaux de la Brookings Institution pendant la crise de 1929, en particulier aux analyses de Harold Moulton. Les chercheurs de Brookings virent dans un défaut structurel de demande de biens de consommation, la cause principale de la crise, et, de façon plus générale, l'origine des faibles performances du capitalisme. Ils attribuèrent ce manque de demande à un biais dans la répartition des revenus, à l'avantage des revenus les plus élevés, responsable d'une épargne excessive. Ce pouvoir d'achat insuffisant fut finalement imputé au manque de flexibilité des prix, propre au capitalisme moderne (faisant suite aux transformations de la concurrence qui empêchaient le salaire réel de croître au rythme des progrès de la productivité du travail). Le cadre d'analyse utilisé était, à plusieurs points de vue, similaire à celui de Keynes ou à d'autres cadres keynésiens. L'épargne n'est pas nécessairement investie, et l'investissement est une fonction de la consommation, faisant ainsi écho à l'accélérateur de Harrod. Les principaux thèmes de cette analyse sont bien dans la ligne de l'évolution de l'économie américaine et des controverses qui l'accompagnèrent: les transformations de la concurrence et des lois antitrusts, ainsi que la forte croyance dans le pouvoir de l'organisation et des réformes. Cette attitude réformiste était commune à Brookings et à Roosevelt. Elle contrastait fortement avec l'insistance de Keynes concernant les politiques monétaires et budgétaires, et son rejet des programmes de réforme trop ambitieux, qui ouvrirent la voie à ses idées et permirent finalement leur suprématie.

#### ABSTRACT

#### PRE-KEYNESIAN THEMES AT BROOKINGS

This study focuses on the work of the Brookings Institution during the Great Depression, in particular on the analysis of Harold Moulton. Brookings' researchers identified a structural lack of demand for consumption goods as the central cause of the depression, and more generally of the poor performances of capitalism. This inadequate demand was blamed on a bias in income distribution to the advantage of higher income groups, the source of excess savings. This deficient purchasing power was eventually imputed to the price inflexibility prevailing within modern capitalism (in connection to the transformations of competition which impeded the rise of the real wage along the progress of labor productivity). The framework of analysis was, in many respects, similar to that of Keynes and several Keynesians. Savings are not necessarily invested, and investment is a function of the growth of consumption, thus echoing Harrod's accelerator model. The main themes of this analysis arise from the evolution of the American economy, and the corresponding controversies: the transformations of competition and the antitrust legislation, and the strong belief in the power of organization and reforms. This attitude was shared by both Brookings and the Roosevelt administration. In sharp contrast, Keynes' emphasis on monetary and fiscal policies, and his dismissal of excessively ambitious reform programs, paved the way for the final rise to dominance of his views.

MOTS CLEFS: Brookings Institution, Moulton, Keynes, crise de 1929, sous-consommation, concurrence. KEYWORDS: Brookings Institution, Moulton, Keynes, Great Depression, underconsumption, competition.

J.E.L. Nomenclature: B31.

# Introduction

This study is devoted to the work of the Brookings Institution during the Great Depression. The Brookings Institution ("Brookings") was created in 1916 as the Institute for Government Research, in Washington. It was later named after Robert Brookings (1850-1932), a self-made man, who devoted his activity and fortune to education after he retired from business in 1896. From its origin, the main interest of the institute was on public finance. During the New Deal, a group was formed to follow the work of the National Recovery Administration. The present study focuses on a large scale investigation, which was prepared in this context, entitled The Distribution of Wealth and Income in Relation to Economic Progress. Four volumes were published in 1934 and 1935: America's Capacity to Produce (NOURSE E.G. AND ASSOCIATES 1934), America's Capacity to Consume (LEVEN M., MOULTON H.G., WARBURTON C. 1934), The Formation of Capital (MOULTON H.G. 1935(m)), and Income and Economic Progress (MOULTON H.G. 1935(a)). It contains a diagnosis of the difficulties of the American economy, and suggests a basic remedy. The key figure in this investigation was Harold Moulton (1883-1965).

The four volumes form an impressive piece of work, both from a theoretical and empirical point of view. In sharp contrast with many other similar studies, measurements were provided whenever they were possible. Many, if not all, aspects of the economy were discussed: production, income distribution, technical change, competition, monetary mechanisms.

Considered from the perspective of more than sixty years, this piece of forgotten work will naturally be assessed as pre-Keynesian. Its preparation was actually contemporary to that of the General Theory (KEYNES J.M. 1936). It would, however, be a mistake to approach these analyses as merely foreshadowing Keynes' work, the imperfect form of something to come later. They also recall that Keynes was not the only active economist, dedicating his energy to undermining "classical economics". Brookings' and Moulton's work reveals many facets of economic theory in the US during those years.

The first part summarizes Moulton's views and compares them to Keynes' analysis and other frameworks of Keynesian inspiration. Moulton developed a theory of oversavings caused by a biased income distribution to the advantage of high incomes and a corresponding deficient real wage. From this maladjustment follows an inadequate utilization of productive capacity. The deficient real wage is blamed on the price inflexibility associated with the obstacles to competition within modern capitalism, *i.e.*, the progress of productivity is not passed on to wage-earners by price reduction. Like Keynes, Moulton begins with the refutation of (neo)classical

<sup>1.</sup> On the history of Brookings Institution up to the 1960s, see SAUNDERS C.B. 1966.

economics<sup>2</sup>: savings are not automatically invested. Instead, investment is a function of the growth of consumption. Due to this deficient consumption, the economy remains in what is now called a "Keynesian equilibrium". Moulton's major policy recommendations do not concern, however, spending policies or deficit, but rather a return to price flexibility as a prerequisite to the rise of the purchasing power of wage-earners. This framework of analysis also anticipates other "Keynesian" approaches such as the theory of non-Walrasian equilibria with fixed prices, or the French Regulation School that revived some components of Moulton's analysis of the difficulties of capitalism in the 1920s and 1930s.

The second part relocates Moulton's analysis in the context of the New Deal and the final dominance of Keynesianism. A strong reformist attitude was characteristic of the Roosevelt administration and of the President himself. The divergence with Moulton was not over income redistribution, but on the degree and forms of state intervention within competition. In particular, Moulton rejected the planning experience of the New Deal. Keynes was also very critical of reforms and of the activity of the National Recovery Administration. The New Deal was basically conducted independently of his growing influence. Still Keynes' views prevailed over that of Brookings, as the controversy over deficits was raging at the beginning of World War II. The focus of Keynes' analysis on macro policies—and his lack of support for other structural reforms—was certainly crucial in the final dominance of Keynes' ideas.

# 1 - Moulton, Keynes, and the Keynesians: A Theoretical Confrontation

The purpose of this first part is to present Moulton's analysis in his own words (section 1.1), and to compare it with Keynes' analysis (section 1.2) and several other Keynesian frameworks (section 1.3).

#### 1.1 Income distribution, economic progress, and prices

This section is devoted to Moulton's diagnosis concerning the problems of capitalism and the theoretical framework in which his analysis is conducted. Writing in the 1930s, the depression obviously overshadowed the Brookings' study. However, it was not presented as the unique or even central issue. Modern capitalism was described as *inefficient*. In the 1920s, productive capacity was underutilized of about 20 percent. *Economic progress* (growth, technical progress, and growth of the purchasing power of the masses) was considerably slowed by this maladjustment.<sup>3</sup>

<sup>2.</sup> Keynes, like Moulton, assimilates the classical and neoclassical trains of thought. On the difference between the two notions see DUMÉNIL G., LÉVY D. 1993.

<sup>3.</sup> Moulton H.G. 1935(m), p. 1.

 $1.1.1\,A$  first diagnosis: A deficient consumption demand blamed on a biased income distribution

Although the title of the general study discussed the distribution of wealth, Brookings' analysis can be best summarized by the formula "income distribution and economic progress". Along the four volumes which comprise the study, the core analysis was stated a considerable number of times. The following is an example:

This diagnosis or analysis of the economic mechanism may then be summarized as follows. Our study of the productive process led us to a negative conclusion—no limiting factor or serious impediment to a full utilization of our productive capacity could there be discovered. Our investigation of the distribution of income, on the other hand, revealed a maladjustment of basic significance. Our capacity to produce consumer goods has been chronically in excess of the amount which consumers are able, or willing, to take off the markets; and this situation is attributable to the increasing proportion of the total income which is diverted to savings channels. The result is a chronic inability—despite such devices as high pressure salesmanship, installment credits, and loans to facilitate foreign purchases—to find market outlets adequate to absorb our full productive capacity.<sup>4</sup>

The cause of the inadequate level of output was not seen in the functioning of the productive system, but imputed to a structural lack of demand. This lack of demand was primarily manifested as a deficient demand for consumption goods, which was "attributable to" excess savings.

It is only briefly suggested in the above statement that excess savings followed from the pattern of income distribution, but this was the previous element in the chain of explanatory factors. The disproportion between savings and consumption was blamed on a bias in distribution to the advantage of high incomes. Thus, it was not simply that consumers were not "willing to" consume, as suggested in the above quotation, but that their purchasing power was deficient:

Our diagnosis of the economic system has revealed that the way in which the income resulting from the nation's productive activities is divided among the various groups which comprise society lies at the root of our difficulties. Inadequate buying power among the masses of the people appears to be fundamentally responsible for the persistent failure to call forth our productive powers.<sup>5</sup>

The basic notion underlying this analysis was the strong *inequality* in the distribution of income. According to Moulton, this income inequality had been increasing from 1900 to 1929.<sup>6</sup> Clearly, the four volumes generally avoided the reference to excess profits, but this assessment was implicit in the entire argument.<sup>7</sup>

<sup>4.</sup> MOULTON H.G. 1935(a), p. 45-46.

<sup>5.</sup> MOULTON H.G. 1935(a), p. 87.

<sup>6.</sup> Moulton H.G. 1935(a), p. 40.

<sup>7.</sup> One exception is MOULTON H.G. 1935(m), p. 137.

#### 1.1.2 The criticism of (neo)classical economics

Moulton's point of departure was his criticism of "classical writers", in particular F.A. von Hayek. Moulton, quoting von Hayek, listed the major points of disagreement. For von Hayek, the economy is constantly in an *equilibrium* (he refers to modern "equilibrium theory") in which resources are utilized optimally. In this framework:

- 1. Savings are automatically spent in investment goods.
- 2. There is a "dilemma" between consumption and investment.
- 3. The idea of a "reserve army" is contrary to facts and to theory.
- 4. Credit expansion only leads to inflation.
- 5. There is a trade-off between profits and real wages.
- 6. A "neutral money" policy would ensure "permanent stability".

A crucial element in Moulton's framework of analysis was that savings are not automatically invested: "money saved is not necessarily "spent for capital goods" 9", the typical situation being that of excess savings. Thus, there is no trade-off (no "dilemma") between consumption and investment.

#### 1.1.3 Consumption, savings, investment, and policies

Beginning with this rebuttal of (neo)classical principles, Moulton stressed the leading role of consumption: "The controlling importance of consumption was, however, more conclusively revealed by the discovery that the rate of growth of new plant and equipment in a period of industrial expansion is adjusted to the rate of increase of consumptive demand rather than to the volume of savings available for investment purposes<sup>10</sup>". Thus, consumption was viewed as the fundamental element in the dynamics of economic progress, "the base of the economic pyramid<sup>11</sup>", so to speak. The financing of investment per se should not be at issue in relation to excess savings. However, in any given situation of distribution, consumption can be deficient, and there is no stimulus for investment. Under such circumstances, only bank credits can provoke, according to Moulton, the simultaneous rise of the two components of demand.<sup>12</sup>

Thus, Brookings' analysis can be alternatively described as a theory of underconsumption or of excess savings, in conformity with the identity: Savings = Income - Consumption. Investment is, in some sense, deficient with respect to savings, and if it were adjusted to savings, there would be overinvestment with respect to demand. Actually, investment is simply adjusted to demand. Moulton would

<sup>8.</sup> MOULTON H.G. 1935(m), pp. 164-166.

<sup>9.</sup> MOULTON H.G. 1935(m), p. 153.

<sup>10.</sup> MOULTON H.G. 1935(a), p. 43.

<sup>11.</sup> MOULTON H.G. 1935(m), p. 71.

<sup>12.</sup> MOULTON H.G. 1935(m), p. 76.

certainly have rejected the characterization of his diagnosis as one of overproduction. A sharp distinction was made between overproduction—the maintenance of the production flow while output is not sold but accumulated in growing inventories—and the underutilization of productive capacity with the adjustment of output to demand (Brookings' view).

One can finally mention that the funds rendered available by excess savings flew to the capital market, where they were used to bid up the price of securities. This analysis can be understood as an attempt to reconcile the alleged deficient utilization of productive capacity in the 1920s with the dramatic rise of the stock market.

The main policy recommendation put forward at Brookings directly echoed the diagnosis. It was the increase in the purchasing power of the masses, whose wants were still very large. <sup>13</sup> Only less inequality and a larger purchasing power for the masses of wage-earners could guarantee adequate levels of demand, more satisfactory capacity utilization rates, full employment, and larger growth rates.

Two extreme ways of increasing real wages can be distinguished: increasing nominal wages with constant prices, or diminishing prices with a constant nominal wage. These two cases were discussed by Moulton. In his opinion, the rise of nominal wages was not the solution, since firms react to larger costs, by increasing their prices. What was needed was a genuine transformation of firm behavior, to create a downward trend of prices along the progress of productivity. Both wage-earners and employers would benefit from such trends.

In the presentation of Brookings' analysis, that we have followed up to this point, a sharp distinction was maintained between the diagnosis in terms of demand and income distribution, and the reference, in the discussion of possible remedies, to price inflexibility. Rigid prices were not originally listed among the factors accounting for the structural lack of efficiency of capitalism. However, moving to the last chapters of the fourth volume of the study, prices and competitive mechanisms appear retrospectively, not only as the solution to the problem, but as the original culprits!

# 1.2 Keynes: Say's Law, the multiplier, and short-term equilibrium

Although the overall perspective was different, most of the basic ingredients of Keynesian economics were present in Moulton's analysis. Moulton was as conscious as Keynes of attacking "classical economists", and Say's Law. Their consumption functions were similar as were their views of the multiplier. In a modern formulation, both substituted a *short-term equilibrium by quantities* for (neo)classical

<sup>13.</sup> MOULTON H.G. 1935(a), p. 87.

<sup>14.</sup> One individual firm is not conscious of the favorable effect on demand of increasing nominal wages, since wage-earners only possibly spend a small portion of their income in their employer's firm (MOULTON H.G. 1935(a), p. 111).

equilibrium. Unlike Keynes, Moulton began his analysis in terms of disproportions, but this problem translated into one of general level of activity for the entire economy. Finally, Moulton had a quite peculiar view of financial mechanisms, alien to Keynes' framework, in which excess savings flow to the stock market bidding up the price of stocks.

#### 1.2.1 Say's Law refuted and the multiplier

Like Keynes, Moulton's point of departure was the critique of (neo)classical economists. Although he never uses the term "Say's Law", this is precisely what is at issue:

It has been generally assumed that the amount of new capital goods created will always be roughly equal to the aggregate volume of money set aside as savings by individuals and corporations. In other words, it has been thought that pecuniary savings are automatically transformed in due course into capital equipment  $[\ldots]$ .<sup>15</sup>

(Neo)classical economists erroneously assumed that "goods are really exchanged against goods". For them, "production and demand are [...] basically the same thing<sup>16</sup>". The refutation is standard: we do not live in a "barter" economy, but in a "pecuniary" economy.

Moulton's view of the consumption function was similar to that of Keynes. Consumption was described as an increasing function of income, but high income groups consume proportionally less or, equivalently, save more. While Keynes assumed a constant propensity to consume over time (a given schedule), more insistence was placed by Moulton on the impact of income distribution and on the variations of the propensity to consume along the phases of the business cycle. The multiplier shows that an expenditure creates new streams of income and expenditures at the next period, and that this process is repeated from period to period. The same idea was present in Moulton's analysis:

New construction of plant and equipment also involves enlarged payments both to workers and to producers of raw materials. Thus in every direction the disbursement of funds is increased.  $[\ldots]$  as a result of the expansion of credit, whether for the production of capital goods or consumption goods, the stream of money income  $[\ldots]$  is enlarged. The aggregate money income of the nation in the ensuing period of time is in consequence augmented. <sup>18</sup>

This analysis was followed by a discussion of possible limiting factors, such as the full utilization of productive capacity, the availability of labor or firms' wants of credit, which echoed that of Keynes.

<sup>15.</sup> MOULTON H.G. 1935(m), p. 27.

<sup>16.</sup> MOULTON H.G. 1935(a), p. 63.

<sup>17.</sup> MOULTON H.G. 1935(m), p. 34.

<sup>18.</sup> MOULTON H.G. 1935(m), p. 108.

#### 1.2.2 Short-term equilibrium by quantities

Again like Keynes, Moulton contended that production was adjusted to demand. This situation described what is now known as a *short-term equilibrium* by quantities, or simply a Keynesian equilibrium. Moulton was very explicit concerning the fact that, in this situation, there is no excess inventory of unsold commodities<sup>19</sup>, *i.e.*, no overproduction in the strict sense. In his framework of analysis, the adjustment of production to demand materializes in the short term in a given capacity utilization rate:

While the actual volume of production may be adjusted to the existing demand for such goods, there nevertheless exists a general excess of productive capacity relative to existing  $demand.^{20}$ 

This definition of a short-term equilibrium by quantities is very clear, and far less ambiguous than in Keynes. Keynes did not refer explicitly to the level of inventories and, more importantly, had no clear concept of capacity utilization.

A difference with Keynes lay in Moulton's analysis of the equality between savings and investment. In spite of the very ambiguous discussion of the equality between savings and investment (an identity or a condition for equilibrium) in chapter 7 of the *General Theory*, Keynes always assumed short-term equilibrium: savings are always equal to investment due to the adjustment of output. Consequently, the notion of excess savings is irrelevant in a Keynesian equilibrium. <sup>21</sup> Moulton's view was opposite: he discussed in great detail, with empirical measurements as always, what becomes of excess savings. The concrete analysis of this phenomenon is obviously complex, because of the possible export of capital, of the issuance of new shares for financial institutions, etc. However, Moulton's basic conclusion was straightforward:

The answer is that, aside from that portion which went into foreign issues, the excess savings were absorbed, dissipated, in bidding up the prices of outstanding securities.  $[\ldots]$  The expansion of commercial bank loans for investment and speculative purposes served in fact to intensify the disorder in the financial markets.  $^{22}$ 

## 1.2.3 Proportions, dimension, and disproportions

A unique aspect of Keynes' analysis was its macroeconomic character. Keynes' approach could be understood in a model with only a single commodity. A special role was conferred on investment, but consumption was defined in relation to total income, and the two components of demand only differed in the way they were

<sup>19.</sup> Except in the first steps of a recession, a transient disequilibrium situation.

<sup>20.</sup> MOULTON H.G. 1935(a), p. 64.

<sup>21.</sup> With an obvious notation: Y = C + I is equivalent to I = S, since S = Y - C.

 $<sup>22.\ \ \, \</sup>text{MOULTON H.G. 1935(m), p. 151.}$ 

determined. Disproportions were not a significant component of Keynes' analysis, contrary to Moulton's work.

In the discussion of these issues, we distinguish between proportions, the relative values of the capital stocks, outputs and prices among industries, and dimension, the general levels of activity and prices (DUMÉNIL G., LÉVY D. 1993, Ch. 9). With this terminology, one can contrast Keynes' and Moulton's viewpoints. Keynes did not address any problem concerning proportions, and this explained his macroe-conomic perspective. Moulton's analysis began with a problem of disproportions in the distribution of income, which in turn was responsible for a deficient demand of consumer goods. However, Moulton thought that these disproportions would lead to the adjustment of production in each sector, and a corresponding short-term equilibrium with an underutilization of productive capacity in both industries.

## 1.3 Other Keynesian frameworks

We will now discuss the relationship between Moulton's analysis and a number of Keynesian frameworks: the accelerator and the post-Keynesian investment function, Kalecki's analysis, non-Walrasian equilibria with fixed prices, and underconsumption and the French Regulation School.

#### 1.3.1 The accelerator model and the post-Keynesian investment function

Like Keynes, Moulton relates the decision to invest to the outlook of profitability, but the two basic determinants, in his view, are the growth of consumption demand and the capacity utilization rate. His investment function is thus closer to Harrod's accelerator and to the post-Keynesian analysis of investment than to Keynes' comparison between the marginal efficiency of capital and the interest rate.

What could be called Moulton's "consumption accelerator" was stated repeatedly. He showed on empirical grounds that consumption and investment are positively correlated, and that consumption is leading. This relation was substituted for the automatic investment of savings (Say's Law). Although Moulton did not provide any equations, the strong sensitivity of this dependency was explicit. <sup>23</sup> A role was also conferred on the capacity utilization rate.

With its consumption and investment functions, Moulton's framework is similar to Paul Samuelson's multiplier-accelerator model (SAMUELSON P.A. 1939 and HANSEN A.H. 1941), although Moulton does not give us any model and does not investigate possible oscillations.

Moulton described the 1920s as a sequence of short-term equilibria, what would be called today *temporary equilibria*. Along this trajectory, not only production is adjusted to demand, but investment is also reduced to a rate consistent with the growth of demand:

 $<sup>23. \ \, \</sup>text{MOULTON H.G. 1935(m), p. 72.}$ 

Second, and of more fundamental significance, the actual rate of growth of new plant and equipment during these years was held in hand. Instead of being expanded to the fullest degree possible, the growth of new capital was adjusted to the growth of consumptive demand. Our studies reveal in general no marked increased in the amount of unutilized capacity [...].<sup>24</sup>

Moulton's analysis is based on the inadequate demand for consumption. This maladjustment could materialize in a structural disproportion among the various sectors. Because of the above adjustment of investment, this disproportion is transformed into a deficient level of demand in the economy, which explains simultaneously the low capacity utilization rate and the slow rate of growth. This framework of analysis echoes that of contemporary post-Keynesian models (LAVOIE M. 1992).

#### 1.3.2 Non-Walrasian equilibria with fixed prices

Moulton's panacea for economic progress was the flexibility of prices to ensure the full utilization of productive capacity, a property that had been lost, due to the transformation of competition. With this analysis, Moulton appears as a pre-Keynesian in his assessment of real capitalism, and a (neo)classical in his reform program—or what could be called a "normative (neo)classical". This is obviously a sharp difference with Keynes, who did not impute the problems of capitalism to price inflexibility and never suggested the return to price flexibility.

It is interesting to note, that most, if not all (neo)classical economists, developed the same type of analysis when they confronted maladjustment within capitalism. Difficulties are typically blamed on the deficient flexibility of prices, in particular wages. There is one difference in Moulton's analysis, however: he did not emphasize the flexibility of wages, but rather only prices, and he saw price flexibility as a key to the rise of the real wage and not to its reduction.

This interpretation is fully explicit in Moulton's work. In chapter VIII of *Income and Economic Progress*, he claimed that "classical" economists, that he criticized so radically concerning savings and investment, did formulate the solution:

Did the theory foresee a problem of distributing the additional flow of wealth which would result from increasing productive efficiency? [...] The answer is that not only did the theory underlying the capitalistic system squarely face the problem of income distribution and recognize the necessity of a constantly expanding purchasing power, but it set forth in detail the mechanism by means of which the desired results would be accomplished. [...] The expanding demand required to take the increasing

<sup>24.</sup> MOULTON H.G. 1935(m), p. 139.

<sup>25.</sup> In the Kaleckian perspective (KALECKI M. 1965), the nominal wage is given, and the real wage is determined as soon as the mark-up rate is known. This mark-up rate is itself the expression of firms' market power. This analysis directly tracks that of Moulton. Competition is of primary importance in wage determination.

quantities of goods off the markets would be automatically created by the reduction in prices.  $^{26}$ 

With this double analysis, Moulton appears as a precursor of the 1970s interpretation of Keynes in terms of *rigid prices* (BENASSY J.P. 1982 and MALINVAUD E. 1977), or what has been called "non-Walrasian equilibria". This interpretation defines a kind of *synthesis* between the Walrasian and the Keynesian trains of thought.

#### 1.3.3 Underconsumption and the Regulation School

Even more strikingly Moulton's analysis appears as one of the many interpretations of the Great Depression that focus on underconsumption. The similarity is, in particular, striking concerning the *Regulation School* (AGLIETTA M. 1979, BOYER R. 1989).

The diagnosis of the Great Depression in this train of thought is that the surge of labor productivity during the 1920s was not passed on to workers, thus creating a lack of purchasing power (in terms of total demand or disproportions depending on the writers). On the contrary, wages were pegged to labor productivity—through various institutional mechanisms—after World War II. These new trends are said to account for the so-called "thirty glorious years". This is really the core of Moulton's analysis, but not of Keynes himself.

The relationship with the Regulation School is uncanny because of the similar insistence on technical progress. This was repeatedly stated by Moulton either negatively to explain the difficulties: "gains in efficiency resulting from technological progress were not manifesting themselves in price reductions<sup>27</sup>" or positively, as a remedy: "the gains resulting from increasing technological and operating efficiency are passed on to consumers through the medium of price reductions<sup>28</sup>". One difference is, however, that Moulton favored the reduction of prices, assuming a constant nominal wage.

# 2 - The Depression and the Keynesian Revolution

This second part is devoted to the historical background of Moulton's analysis, and the slow but irresistible ascension of Keynesianism. We first discuss Moulton's attitude during the New Deal, and his relationship with the Roosevelt administration. The transition from the ambitious reformist perspectives of Brookings and of the first New Deal toward the dominance of Keynesian policies is then considered.

<sup>26.</sup> MOULTON H.G. 1935(a), p. 117-119.

 $<sup>27.\ \ {\</sup>rm MOULTON\ H.G.\ 1935(a),\ p.\ 131.}$ 

<sup>28.</sup> MOULTON H.G. 1935(a), p. 119.

### 2.1 Moulton's analysis in its American context

The New Deal was not the Keynesian demand policy it is often said to have been. Both Moulton and the administration were considering important structural reforms, although significant disagreements were also evident.

#### 2.1.1 The New Deal as a plan for reforms

When Franklin Delano Roosevelt stepped onto the stage, his first decision concerned the ongoing banking crisis and the declaration of a national banking vacation. The responsibility of financial and monetary institutions in the crisis was judged to be significant, and a new legislative framework was progressively defined to avoid a repetition of similar dramatic events. We will abstract from these important developments.<sup>29</sup>

In the analysis of Roosevelt's policies during the depression, two distinct New Deals are traditionally identified. The central pieces of the first New Deal of 1933 were the *National Industrial Recovery Act* (NIRA), instituting the National Recovery Administration (NRA) $^{30}$ , and the *Agricultural Adjustment Act* (AAA). The NIRA was declared unconstitutional in 1935. The second New Deal refers to the measures taken as a response to the recession of 1937.

Many aspects of the New Deal were seen by the administration and the President as components of a broad reform of the American economy. The most dramatic element in this device was the attempts to substitute actual "planning" to the traditional workings of competition.

Most people surrounding Roosevelt did not view the New Deal as a transient policy device, concerning both competition and income redistribution. The majority view was that a number of basic things had to be changed within capitalism, and state intervention was crucial. Only public spending was viewed as an emergency policy. This reformist attitude was shared by the President.<sup>31</sup> State intervention was clearly at issue:

The essence of the first New Deal was affirmative national planning. The men of 1933 believed that, in a modern industrial society, the problem of price-wage-profit behavior and of the allocation of resources, could not be left to solve themselves. These problems could be handled, in their view, only by a considerable integration of private and public planning. [...] The first New Deal proposed to rebuild America through the reconstruction of economic institutions in accordance with technological imperatives.<sup>32</sup>

It is interesting to notice that the control of the macroeconomy, in the modern sense of the term, is not mentioned in this list.

<sup>29.</sup> See DUMÉNIL G., LÉVY D. 1995.

<sup>30.</sup> See DEARING C.L., HOMAN P.T., LORWIN L.L., LYON L.S. 1934.

<sup>31.</sup> STEIN H. 1969, p. 117.

<sup>32.</sup> SCHLESINGER A.M. 1960, p. 389.

Of all the measures taken during the first New Deal, the codes were the most spectacular. The NRA organized business into 12 industrial groups and made decisions regarding market shares, prices, and wages in each group. The explicit purpose of these codes was to stop "cut-throat" competition and to manage wages, prices, and outputs (to limit production and to share markets) centrally. Gardiner Means' analysis was typical of that of the "planners" (MEANS G.C. 1935).<sup>33</sup>

As can be guessed, planning was a quite controversial issue. The choice was between "atomizing" the market or "supplement[ing] the market with institutional arrangements<sup>34</sup>", i.e., planning. To Means, the first option was a historical regression: only the second was realistic, with the difficulty of defining the exact content of the new framework. Concerning the first option, the return to smallness, the emblematic character in this controversy was Justice Brandeis. <sup>35</sup> As Schlesinger states it: "The fight of 1935 [at the end of the first New Deal] was essentially between the planners and the neo-Brandeisians, the devotees of bigness and the devotees of competition<sup>36</sup>".

#### 2.1.2 Moulton against the administration?

Overall, Brookings, and Moulton in particular, were in conflict with the administration after 1933 over the issue of competition, at least up to the second New Deal, when antitrust policies were revived. The central disagreement was over the intervention of the state within competitive mechanism.

Independently of this issue, there was a large overlap in the various analyses, in particular concerning income distribution and spending policies.

These convergences and conflicts are well explained by the historical background in which these controversies existed. The notion of reform, and to a certain extent, state intervention was common to every stream of thought. However, the diagnosis concerning competition had always remained ambiguous, and the involvement of the state within competitive mechanisms was very controversial.

The relationship between Brookings' analysis and that underlying the first New Deal, including Roosevelt's own views, was striking. Stein, in *The Fiscal Revolution in America*, summarizes Roosevelt's views in words which could have been

<sup>33.</sup> Means expressed what Schlesinger calls: "a powerful statement of the need for general planning" (p. 218): "He [Means] cogently argued that administered prices had superseded market prices in vital parts of the economy, and that this was a necessary phase in economic growth. "Administrative coordination—the very thing that has made modern technology and a high standard of living possible—has destroyed the effectiveness of the market as a coordinator"". (SCHLESINGER A.M. 1960, p. 218). This structural change called forth a structural reform of the economy.

<sup>34.</sup> SCHLESINGER A.M. 1960, p. 218.

<sup>35.</sup> Brandeis was 79 years old in 1935. He presented himself as working in the tradition of Jefferson and Wilson (of whom he had been an adviser). His main contention was that concentration was a threat to the traditional democratic values of America, and advocated the return to "small units". He was successful in animating a group of young followers. 36. SCHLESINGER A.M. 1960, p. 398.

attributed to Moulton: "in the twenties too small a share of the national income had gone to the workers and farmers—the consuming classes". The President also believed that the program of raising wages would not "work to the disadvantage of profits", since a high income would mean larger profits. Stein refers to "the President's long-standing ideas about purchasing power" based on the view that "the income of workers and farmers had a special value as purchasing power to get the economy going and keep it going, a value not shared by the incomes of entrepreneurs and capitalists, which could be taxed with impunity." Stein also relates that in 1937, the President stressed that the production of durable goods (understand investment goods) was rising faster than consumer goods, a fact that, in the President's words, "almost all economists" would describe as a threat to the economy.<sup>37</sup> The role played by Moulton in the promotion of this analysis is, however, unclear. These ideas were globally "in the air" during those years. 38 Moulton disagreed on the idea of raising money wages. He favored declining prices. The same concern about the purchasing power of wage-earners justified the fiscal policy of the administration.<sup>39</sup> Moulton rejected the use of taxation for income redistribution. These differences do not offset, however, the overall agreement on the need to modify the pattern of income distribution.

Moulton was rather critical of spending policies and deficits. His attack on public spending was based on the view that people favored "better food, clothing, shelter and more necessities and conveniences in the home". His rejection of the deficit relied on the traditional argument that "the accumulating indebtness necessitates the imposition of heavier taxes". Thus, these spending programs could lead to deficits in the short term, but public debt had to be held under control. Spending was seen as a policy for periods "of great emergency", but not "as part of permanent policy<sup>40</sup>".

In all these respects, Moulton was very close to the President, who consistently resisted the growing pressures toward deficits and public works. Moulton was well aware of these new trends:

The belief has come to be widely held in the United States that the only solution of the unemployment problem lies in the development of extensive public enterprise to supplement private business. That is to say, public works are now regarded by many as essential not only in time of acute

<sup>37.</sup> STEIN H. 1969, pp. 49, 49, 82, 82, and 95.

<sup>38.</sup> They were also the object of much criticisms of "classical" inspiration. Very typical of this attitude was Sumner Slichter (who also collaborated with Brookings): "Because the Roosevelt administration has concentrated its attention upon raising consumer purchasing power and has overlooked the vital importance of correcting maladjustments in prices relationships, its truly heroic efforts to end the depression have yielded only small increases in spending, production, and employment. [...] Stabilizing the prospects for profit would require, among other things, the introduction of considerable flexibility into costs. As wages are the principal cost of production, it would require flexible wages" (SLICHTER S.H. 1934, p. iv).

<sup>39.</sup> STEIN H. 1969, pp. 85-86.

 $<sup>40. \ \ \</sup>text{MOULTON H.G. } 1935(a), \ pp. \ 96, \ 99, \ and \ 95.$ 

depression, but as a permanent means of providing employment.  $[\ldots]$  It is the same thought which underlies the program for shortening the working week  $[\ldots]$ .<sup>41</sup>

Stein suggests that the President became more open to deficits when confronting the 1937 recession. But this position remained very ambiguous.<sup>42</sup>

Moulton was very critical of the measures concerning competition and the increasing role of the federal administration.<sup>43</sup> Limiting production and raising prices was radically opposed to his own policy recommendations. More generally, he objected to any limitation of competition and undue profits:

The basic economic policy which we are enunciating [diminishing prices with the purpose of increasing real wages] does, however, definitively attack what we regard as a serious abuse of the profits system and the institutions of private capital which have grown up in modern times. This is the tendency to centralize economic advantage, to protect existing business enterprises by protecting the price structure. For more than fifty years this process has been developing through the devices of corporate consolidation, pools, trusts, cartels, trade associations, and code authorities. Particularly since the World War, and often with the active assistance of governments, efforts have been going forward to "stabilize" existing business situations [...]. We believe the evidence is clear that such attempts, however well intentioned, are dangerously short sighted. They result inevitably in "freezing" situations which in the interest of economic progress must be left as fluid as it is possible to make them. <sup>44</sup>

The conflict with the administration became rapidly explicit. Before his election, Roosevelt who had been a friend of Robert Brookings, the founder of the Institute (who died in 1932), asked Moulton for his assistance in the preparation of his program. But Brookings' suggestions were not followed by the administration. A group was formed in the institute, under the direction of S. Lyon to investigate the new policy. General Hugh S. Johnson, the administrator of the NRA was very upset at the conclusion of the report emanating from this group, wishing Robert Brookings would still be alive to "drive out with the rope around his robe the men who perverted his ideas<sup>45</sup>". This tension was maintained until World War II, when Roosevelt appointed Moulton to the War Resource Board.

Moulton's views concerning competition are not easy to disentangle. His analysis did not really match any of the options in the traditional alternative between the competition among small firms, and monopoly or oligopoly. He was certainly opposed to what has been called "loose consolidation" (cartels) and that he himself used to label "collective monopoly". but he had no nostalgia for small firms. He

<sup>41.</sup> MOULTON H.G. 1935(a), p. 90.

<sup>42.</sup> STEIN H. 1969, pp. 99-100.

<sup>43.</sup> SAUNDERS C.B. 1966, p. 53.

<sup>44.</sup> MOULTON H.G. 1935(a), p. 162.

<sup>45.</sup> SAUNDERS C.B. 1966, p. 55.

fully recognized the technical and managerial efficiency of large corporations. He was critical of their behavior in the determination of prices and outputs. He had a favorable view of the antitrust legislation of the late 19th century, and complained about the encouraging attitude of the government toward trade associations. <sup>46</sup> One may surmise that Moulton thought that appropriate competition policy was the best way of cumulating the efficiency of large corporations and the advantages of flexible prices.

## 2.2 Toward the Keynesian "revolution"

Retrospectively, what is often called the Keynesian "revolution" appears less radical than the program of the New Deal. A more appropriate terminology would oppose the "revolutionary" program of the NRA to the Keynesian macroeconomic "reforms". This feature of Keynesianism might well provide the ultimate explanation for its success.

#### 2.2.1 Keynes, policies, and reforms

Although the terminology, "fiscal and monetary policies" had not been forged, Keynes' basic policy framework had already been defined in 1933 (KEYNES J.M. 1933). A basic aspect of his attitude was the opposition to "reforms", in particular to those of the NRA, in the sense of a program in which the transformation of the behavior of private agents was implied.

Keynes' assessment of reforms was opposed to that of Moulton and of the President: reforms were superfluous or even detrimental under the conditions prevailing in the 1930s. There was unfortunately no such thing as a debate between Keynes and Moulton. Keynes' attention was directed toward the policies of the administration, and he explicitly questioned the relevance of New Deal reforms, not that of Moulton's analysis.

Robert Skidelsky summarizes and comments, in his biography of Keynes, on Keynes' open letter to the President of December 31, 1933. This document is perfectly explicit with respect to reforms (for clarity, we emphasized quotations from Keynes):

The President was engaged on a 'double task, recovery and reform—recovery from the slump, and the passage of those business and social reforms which are long overdue'. But 'even wise and necessary reform may [...] impede and complicate recovery. For it will upset the confidence of the business world and weaken its existing motives to action before you have had time to put other motives in their place [...]. And it will confuse the thought and aim of yourself and your Administration by giving you too much to think about at once.' This passage clearly brings about Keynes's

 $<sup>46.\ \ {\</sup>rm MOULTON\ H.G.\ 1935(a)},\ p.\ 138.$ 

order of priorities, while deliberately leaving open the question of the long-term future of the capitalist system. [...] The NRA should be put into cold storage. It was a programme of reform, disguised as recovery, which probably impeded recovery. But Keynes also attacked faults in Roosevelt's technique of recovery. Recovery meant increased output. Trying to raise prices by restricting output was exactly the wrong way round: 'it is like trying to get fat by buying a larger belt'. This was a dig at Roosevelt's gold-buying policy: the 'gold standard on the booze' Keynes called it.<sup>47</sup>

This does not prove, however, that Keynes had no notion of a structural transformation of capitalism, requiring new strategies. These evolutions required a thorough reform of the functioning of capitalism, but limited to state intervention in the management of the macroeconomy.

#### 2.2.2 Keynesian policies in the US

It is difficult to establish the impact of Keynes on policies in the US, and even more difficult to assess the effects of policy developments and controversies in the US on the formation of Keynes' ideas. Keynes was finally acknowledged as the key supporter of spending policies, but most of the New Deal was conducted autonomously on the basis of American traditions. At the beginning of World War II, the debate was over the permanent character of deficits, as opposed to a succession of deficits and surpluses depending on the situation of the macroeconomy.

Keynes was not cited in the four volumes of Brookings. To our knowledge his name appeared for the first time in one of Moulton's later studies, concerning deficits. This finding echoes the view that Keynes was not important in the definition of the New Deal, certainly for the first New Deal, and probably not concerning the second. It is not that Keynes was unknown in the US during those years, it was that he only began to influence theoretical discussions, as well as the controversies over public works and the deficits, in the late thirties. This is discussed in detail by Stein. The following passage summarizes his findings:

Keynes was a great and important man. But it is possible to describe the evolution of fiscal policy in America up to 1940 without reference to him.<sup>49</sup>

The situation was identical concerning monetary policy.<sup>50</sup>

When Roosevelt moved from the codes of the NRA (declared unconstitutional, and already deemed unmanageable), he was tempted for a while to reorganize industries within similar structures, but in a more autonomous fashion, in an attempt

<sup>47.</sup> SKIDELSKY R. 1992, p. 492-493.

<sup>48.</sup> MOULTON H.G. 1943, p. 15.

<sup>49.</sup> STEIN H. 1969, p. 131.

<sup>50. &</sup>quot;The American monetary ideas of the 1920's, which Keynes found congenial, were indigenous; at least they were not learned from Keynes (STEIN H. 1969, p. 143)". During the 1920s, Irving Fisher had created a group, the *Stable Money League*, active in promoting the idea of monetary policy as a means to stabilize the economy, taking considerable distance from the gold standard.

to revive the tradition of trade associationism. In April 1938, he sent a message to the Congress on this issue. The Temporary National Economic Committee (TNEC) was created on this occasion, originally to investigate competitive mechanisms, but it turned out that the main focus was Keynesianism. The reports were completed between 1939 and 1941. The main witnesses before the committee were Alvin Hansen, Adolf Berle, and Laughlin Currie, all defenders of Keynes' views. The 1940 report written by Dewey Anderson raved. <sup>51</sup> It is worthwhile to refer to this document here, since the 1940 report is the only document in which we were able to find reference to both Moulton's and Keynes' works side by side. <sup>52</sup>

Although the spending policies were used before Keynes stepped onto the American stage—already by Hoover<sup>53</sup>—it is not impossible that Stein underestimated Keynes' actual impact on the fiscal stimulus program. It is interesting to note that when Moulton mentioned Keynes in his 1943 study, he presented Keynes as the true initiator of the new policy. We will not discuss here the history of Keynes' attempts to interact with the course of events in the US: his open letter to the President and his visit. The press was originally very critical of Keynes' views; professional journals published several reviews of the General Theory, usually also quite critical. Still Keynes' ideas went progressively their way.

The opinion that public spending and deficits were to become a necessary feature of modern capitalism was progressively penetrating the minds of a number of economists in the late 1930s and early 1940s. The central issue became the permanence of such deficits.

This development inspired Moulton to write *The New Philosophy of Public Debt* (MOULTON H.G. 1943). There, he contrasted two views. According to the traditional view: "continuously unbalanced budget and rapidly rising public debt imperil the financial stability of the nation" (p. 1). This was the analysis of the Treasury and the Board of the Governors of the Federal Reserve System, as well as that of Moulton himself. This first view was described as an obsolete economic dogma by the tenants of the second view, a new breed of economists, mostly from the *National Resources Planning Board* <sup>54</sup>: a permanent deficit and a growing public debt are a national asset. According to Moulton, the two main supporters of this position were Adolf Berle and Alvin Hansen.

<sup>51.</sup> Anderson H.D. 1940, pp. 30-31.

<sup>52.</sup> The report also presents the conclusion of the rather radical report An Economic Program for American Democracy of 7 Harvard Tufts economists, among which Paul Sweezy (GILBERT R.V., HILDEBRAND G.H., STUART A.W., et al. 1938). It is interesting to know that Roosevelt discussed this text with his father.

<sup>53.</sup> Deficits were already large during Hoover's presidency. According to Stein: "The stimulating effect of the fiscal policy of all governments—federal, state, and local—was larger in 1931 than in any other year of the 1930's (STEIN H. 1969, p. 26)".

<sup>54.</sup> The views defended by the Board were judged extreme: "There also had been a series of reports from the president's National Resources Planning Board that were legitimating the use of planning and fiscal policy to shape the economy; in fact, the board's 1943 report dealing with postwar policy, Security, Work, and Relief Policies, was considered so radical by a majority within Congress that the board was abolished by congregational action three months after the report appeared." (DOMHOFF G.W. 1990, p. 196).

Moulton's presentation of the first view was rather moderate. The budget does not have to be constantly balanced, but only in the average.<sup>55</sup> This analysis foreshadowed the compromise reached at the end of World War II in the vote of the *Employment Act* in 1946, defining the maintenance of full employment as a duty of the Federal Government, with explicit reference to Keynesian economics. The Act also created the Council of Economic Advisors, whose first chairman was... Edwin Nourse, the author of the first Brookings' report!

#### 2.2.3 The emphasis on macroeconomics: from Moulton to Keynesianism

There are many facets to the transformations of the policies and institutions in the US during the first half of the 20th century. Several important aspects of these phenomena have been neglected in the present analysis, for example the new legislations concerning finance or the relationships between firms and labor, since they were not central in Moulton's analysis. This does not mean that they were unimportant, and some ambiguity exists in this respect since the term "Keynesianism" is often used to encompass a very broad set of transformations. This extension lends probably too much to Keynes' own work, and overlooks the links between the transformations of US capitalism at the turn of the century and the features of the US economy in the 1960s.

Focusing on the controversies discussed in this study, one striking element emerges. Keynes and Moulton were particularly critical of state involvement within competitive mechanisms, at least beyond antitrust legislation. There was a common thread, shared by the two economists, that private interests were best able to handle what we call "proportions" within capitalism: to allocate capital among various spheres, to decide on production and prices, at least as far as the relative values of these variables are at issue.

Moulton, however, only moved halfway. He was critical of any form of planning, but rekindling the old debate on competition, he thought that "something", that he never made clear, had to be done to revive price flexibility. He imagined that the *macro* effect of this new behavior would autonomously ensure prosperity and progress. In his 1948 piece on economic systems, he contends that the free adjustment of prices by individual firms is essential to a capitalist market economy. The only alternative, that he rejects on political grounds, would be planning and socialism: "In the absence of a functioning price and profit mechanism, the allocation of productive effort would thus have to be made directly by the government<sup>56</sup>". He insists, however, on the necessity of regulating business practices, and in particular the functioning of banks. Its is very interesting to notice that macro policies are only treated negatively, in this late analysis, as part of the criticism of all-out and cumulative deficit spending.

Keynes thoroughly dismissed any form of state intervention concerning proportions, but he emphasized the role of the state in the maintenance of an adequate

<sup>55.</sup> MOULTON H.G. 1943, p. 50.

<sup>56.</sup> MOULTON H.G. 1948, p. 30.

level of activity, what we call "dimension". This distinction was quite explicit in the *General Theory*, as well as the decision to focus on the general level of activity, Keynes' own research program.<sup>57</sup> This analysis was both theoretically and politically very shrewd. First, Keynes acknowledged the ability of capitalism to handle proportions mechanisms, and simultaneously perceived the difficulty of stabilizing the general level of activity. Second, his views outlined the contours of a possible political compromise, in which the autonomy of private interests would be preserved while the responsibility of macro policy was transfered to the state (DUMÉNIL G., LÉVY D. 1996). That this compromise was still difficult to obtain, in particular with respect to financial institutions, is well known, and the conflicts are not over.

<sup>57.</sup> KEYNES J.M. 1936, pp. 4-5.

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