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DETERMINANTS OF ECONOMIC ACTIVITY – THE KEYNESIAN PERSPECTIVE [1]

The lack of effective demand is commonly treated as a cornerstone of Keynesian attitude towards the deterioration of economic activity and a drop in growth indexes. However, the Keynesian paradigm has been evolving for seventy years. Hence, the opinions concerning the causes of downturn should expose the same tendency. Actually, John M. Keynes and post-war Keynesians ascribed the economic problems to the demand side of market. Together with the development of Keynesianism the demand started to lose its meaning. Step by step it became a second-order factor influencing the economy only temporarily. It is the supply side that plays a much more important role nowadays. New Keynesians claim that in order to attain suitable growth indexes (high employment above all) one must remove the barriers and imperfections typical of supply side. Thus, identifying the term "Keynesian policy" with "demand policy" became ungrounded and misleading.

Keywords: Keynesianism, economic growth, demand side, supply side

INTRODUCTION

Keynesianism is commonly identified with demand interventions stimulating the system and turning it to the path of steady economic growth. The fundamental cause of depression and its worse aspect, namely involuntary unemployment, is the lack of adequate investment and consumption expenditures. Insufficient effective demand resulting in a slump and a drop in growth indexes is treated as a cornerstone of Keynesianism. However, the Keynesian school has been evolving for 70 years. Hence, the opinions concerning the sources of downturn are also different now than over a half a century ago. Actually, Keynes and post-war Keynesians claimed that all the problems originate from the demand side of economy. Together with the evolution of the Keynesian paradigm the demand has been gradually losing its dominant role. Step by step it became a second-order factor only temporarily influencing the economy. It is the

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supply side that is much more important nowadays. Consequently, New Keynesians believe that in order to acquire sufficient economic indexes (high employment above all) one must remove the barriers and imperfections characteristic of supply side.

The aim of this paper is to compare the viewpoint of Keynes and post-war Keynesians on the one hand and New Keynesians on the other, towards the determinants of economic growth. The succeeding changes in theoretical structure of basic Keynesian models show clearly that initial demand perspective has been replaced by the supply one. Therefore, identifying the term "Keynesian policy" with "demand policy" became ungrounded and misleading.

1. KEYNES AND POST-WAR KEYNESIANS

In his theory formulated during the Great Depression, Keynes (1960) was concerned with well developed economies. For that reason he grounded his analysis on proper production structure and well functioning financial markets. To be able to act correctly again such a system needs only some kind of demand impulse during the recession. Therefore, Keynes was interested in the short-term perspective. Since he argued that long-run tendencies depend on relations observed in the shorter periods, such problems like economic growth and development or business cycles have been omitted. In the *General Theory* there is some more information on the business cycles only. One could find it in chapter 22 of the book titled *Short Notes Suggested by the General Theory* which proves clearly a minor role of this question for Keynes. Keynes focused on transitory changes in real variables leading to the persistent depression and he subjected the long-run upturn to overcoming the actual failures.

For Keynes the main factor determining the level of economic activity in a given period was effective demand conditioned by the volume of consumption and investment expenditures. Investment spending was the leading factor, since it could imply serious variations in national income. Hence, prompting the economy meant inducing the investment demand. Keynes proposed reductions in the interest rate (by means of monetary expansion) and enlargements in budget spending (public works for example), resulting in much higher effects than the initial inputs owing to investment multiplier. In order to induce the level of consumption Keynes suggested progressive taxes (reducing passive savings) together with transfers to the poorest members of society (encouraging active consumption). Since Keynes concentrated on the short-term demand phenomena, he did not explain the supply side accurately and missed its connections with aggregate demand (for example, he entirely ignored the influence of investments on production capacity). Such an attitude was grounded by Keynes' belief that effective demand is the most significant question calling for a detailed analysis. On this basis Keynes also denied that one could induce production and employment through money wage cuts. In his opinion, the elasticity or rigidity of prices and wages did not matter and the only serious source of depression was insufficient effective demand.

The opinion that demand gives rise to the upturn became a widespread belief among almost all post-war Keynesians. It was dominant especially between the so-called orthodox Keynesians like Joan V. Robinson, Abba P. Lerner, Nicholas Kaldor, Alvin H. Hansen. They considered the fluctuations of aggregate demand as a crucial justification of slowdown. According to Hansen's (1941) theory of secular stagnation, for example, well developed countries are fated to a reduction in rate of growth because of a gradual decline in investment demand which in turn results from: 1. a drop in birth-rate (a society that grows old saves rather than invests its money); 2. limitations in geographical expansion (narrowed markets); 3. changes in the type of technological progress (investments that need less capital). Hansen proposed tax incentives for entrepreneurs and government contribution to the investment projects. Such actions cannot entirely restrain the negative tendencies but can diminish the amount of unemployment caused by the lack of effective demand.

Deficiency of demand become a key factor for the two classic Post Keynesian models of economic growth presented by Roy F. Harrod (1948) and Evsey D. Domar (1962), too. Those constructions not only made all the analysis of economic growth more dynamic but has also included (together with the demand effect) the supply effect illustrating the influence of investments on production capacity. In the authors' opinion government guarantees of a sufficiently high and stable rate of investment growth is a precondition for guiding the system towards the path of stable economic growth.

Focusing on the demand shortages in the 1940s when economies were rebuilding after the war damages seems to be very surprising. However, it must be mentioned that the *General Theory* was commonly interpreted as a set of instructions concerning active government policy. Many Post Keynesians were engaged in politics and administration representing the interests of democratic and labour parties, and of trade unions. Hence, the

"Keynesian policy" of active and extensive interventionism so very distinct from Keynes' sound judgments, has been almost immediately applied in practice.

In the 1950s and on the turn of the 1950s demand stimulation was still a prevailing policy. On the theoretical ground neoclassical synthesis represented by Hansen and Paul A. Samuelson started to play a key role. The impulse to its invention and further advance came from the world economic environment. The development of capitalist economies in the 1940s and 1950s, stable rates of growth and low unemployment brought some economists back to the fundamental classical ideas undermined by Keynes. In the basic model of neoclassical synthesis, namely IS-LM, the downturn was assigned to the lack of effective demand together with rigid prices and wages. This assumption was a heritage of the original IS-LM model created by John R. Hicks (1937) and Franco Modigliani (1944). They believed that the main causes of depression are inelastic nominal wages and/or liquidity trap. The succeeding versions of the model prevailing in the 1950s and 1960s did not overstress both the factors but did not either abandon them. Instead, in subsequent models the effective demand began to exert much more power than Hicks and Modigliani permitted. This is notably apparent in Samuelson and William D. Nordhaus' (1998) book popularizing the ideas of neoclassical synthesis. Its fundamental conclusion is that adequate monetary and fiscal policies help to avoid excessive fluctuations in effective demand and support the tendencies of economic growth.

The traditional IS-LM model was a typical demand model where the supply side and pricing processes were fully ignored. IS-LM was a useful tool in the 1950s when industry and monetary sectors were stable, so were the prices, wages and the short-run supply curve. However, in the 1960s economic environment changed considerably. For the first time in the post-war period highly developed countries began to experience serious supply shocks. The additional factor increasing inflationary pressure and disturbing the economy was the Keynesian demand policy that had been conducted for twenty years. Expansionary monetary policy and increasing budget spending must have resulted in high budget deficits and public debt that made the attainment of economic stability impossible.

Rising inflationary threat prompted Keynesians to extend their research and incorporate the supply side behaviour into their analysis. For that purpose they turned to Alban W. Phillips' (1958) empirical results justified theoretically by Richard G. Lipsey (1960). Although Phillips-Lipsey's idea yielded a description of wage settlements that IS-LM model missed, it was actually based on the pure demand mechanisms. Phillips applied to the labour market a simple demand law showing the wage competition between producers during the boom. The higher the wages, the lower unemployment inducing the higher inflation. Hence, the Phillips-Lipsey curve could not solve the problem of absent connections between the demand and supply side. Moreover, the curve has been criticized severely by Monetarists and New Classicists. They disapproved a lack of expectations and microfoundations and an application of nominal variables (money illusion). Those theoretical objections impaired the practical implications of the curve. At the instance of Samuelson and Robert W. Solow (1960) the Phillips-Lipsey curve has been interpreted by Post Keynesians as a stable long-run trade-off between inflation and unemployment. It served as a guide for the long-run policy of economic growth, since it demonstrated all the combinations between the two phenomena. Monetarists and New Classicists' critique confined the usefulness of the Phillips-Lipsey curve for short periods only.

The other but equally important faults of post-war Keynesian theories have been pointed out by Robert W. Clower (1965) and Axel Leijonhufvud (1968). They presented their achievements in the late 1960s when the Keynesian school entirely lost its position in favour of Monetarists and New Classicists. Such a fundamental change in theory and practice made demand a second-order factor. The leading role has been acknowledged to the supply side neglected so far by Keynesians. Moreover, the economic analyses have been supported by solid microfoundations lacking in Keynesian studies. Clower and Leijonhufvud took a similar line in the latter question. Although they still favoured the demand factors, they were aware of the serious weaknesses of Keynesian researches which focused wholly on macroeconomic perspective. Microfoundations formulated by Clower and Leijonhufvud revealed another factor underestimated by Keynesians, namely the problem with dissemination of correct and reliable information. Obtaining the knowledge necessary to coordinate the economic activity in a decentralized system takes time and money. Hence, unemployment is a predictable consequence of a drop in demand when the traders do not possess perfect information of new clearing-price. Providing the information about the economic state that help to coordinate the decisions of individual agents and to lessen the discrepancy between effective and notional demand is a precondition of economic growth. In ten years Clower and Leijonhufvud's remarks developed into the crucial problem of Keynesians scientific program.

2. NEW KEYNESIANS

Though the success of neoliberalism in the late 1960s was commonly perceived as the end of Keynesian school, in the mid 1970s Keynesianism began to come into prominence again. However, under the influence of Monetarists and New Classicists on the one hand and the nature of actual economic problems on the other, modern Keynesians are much more interested in the supply than demand side. In New Keynesians' opinion it is the supply side that creates disturbances calling for government actions. Hence, they continue Keynes and post-war Keynesians' belief that the Walrasian auctioneer does not exist. In effect the economic system does not work perfectly, but generates only partial employment of resources. Simultaneously, they claim that price and/or wage rigidities should be accounted the most serious coordination failure of the capitalist economic system. They distinguish between nominal and real rigidities. The former refer to insensitivity of nominal prices and/or wages to changes in nominal demand. The latter apply to inelasticity of one wage to another, wage to price or price to price. The analysis is usually conducted from the perspective of one of the three markets – labour, goods or financial. The rigidities identified in each of them cause the fluctuations of economic activity and restrain employment, production and income growth. The recognition of the type and origin of inertia allows to eliminate this failure, makes the market more elastic and gives rise to economic growth.

The most influential New Keynesian theories concerning the sources of downturn are the following:

I. Labour market theories:

1. Nominal wage rigidities:

a) staggered wage contracts,

b) job search.

2. Real wage rigidities:

a) implicit contracts,

b) efficiency wages,

c) insider-outsider model,

d) NAIRU and hysteresis.

II. Goods market theories:

1. Nominal wage rigidities:

a) near rational behaviour and small menu costs.

2. Real price rigidities:

a) customer markets,

b) input-output table,
c) dependence of quality on the price.
III. Financial market theories:
1. Real rigidities:
a) imperfect substitution of internal and external funds.

In the staggered wage contracts model (Fischer 1977; Phelps and Taylor 1977) the cause of production and employment fluctuations is assigned to entrepreneurs' behaviour who fix wages in order to avoid the costs of negotiations with workers. In the face of disturbances only quantities can be adjusted and wages remain unchanged because of binding commitments. Variations in employment and production can be counterbalanced by the monetary authority responding to the shocks that emerge during the wage contracts.

The idea of job search (Mortensen 1970; Phelps 1970) gives rise to the reservation wage model and natural rate of unemployment model. These constructions explain both nominal and real wage rigidity. Their cornerstone is a lack of perfect knowledge about existing vacancies which induces workers to search for the best opportunity available in the market. It is assumed here that the searching process will be much more effective if the individual is unemployed. Hence, the worker quits and invests all his resources in acquiring the information about the most attractive job. The longer the period of searching, the higher and more persistent the unemployment.

Within the implicit contracts model (Azariadis 1975; Grossman and Hart 1983) one can distinguish between symmetric information model (worker and employer posses the same knowledge concerning the state of economy) and asymmetric information model (one of the parties displays informational advantage). Employers offer workers an implicit contract that guarantees stable wages independent of the economic state instead of the possibility of firing some workers during the depression. Therefore, any negative shock will result in higher unemployment and constant real wages.

In the efficiency wage models (Shapiro and Stiglitz 1984; Stiglitz 1974; Weiss 1980; Akerlof 1982) it is assumed that workers' productivity depends on their real wages. Employers are not inclined to lower wages even in the situation of excessive labour supply because such actions would diminish the productivity of workers bringing about higher total labour costs. Therefore wages are determined above the market clearing level causing involuntary unemployment. There are various groups of models based on efficiency wage hypothesis: shirking models (high wages raise the cost of losing the job and induce workers to devote a required effort); negative selection models (high wages attract the most effective labour compensating higher wage costs); turnover models (high wages encourage workers to stay at a firm reducing the costs of labour turnover); sociological models (higher wage is a “gift” for the worker who reciprocates honestly devoting an effort higher than required).

Insider-outsider model (Lindbeck and Snower 1988) assumes that there are turnover costs giving workers some kind of market power. It allows them to manipulate the economic rent in wage bargains. Consequently, the turnover costs make actual workers (insiders) and unemployed (outsiders) imperfectly substitutable. Even if insiders exert a pressure on high real wages, outsiders have no chance to get a job by the means of bidding wages.

NAIRU (Layard 1986) is a long-run unemployment rate non-accelerating the inflation. It is dependent on the process of wage negotiations between firms and trade unions. NAIRU reflects the level of unemployment sufficient to establish by unions such a real wage that will be acceptable by employers. If workers escalated their wage demands, the unemployment would rise because employers will not be able to accomplish higher claims. In the case of hysteresis models (Blanchard and Summers 1986; Carlin and Soskice 1990; Layard *et al.* 1991) it is argued that NAIRU is not stable and can change following the transitory fluctuations in the actual unemployment rate. Hence, any long-run steady-state unemployment rate will be conditioned by the history of its variations. There are three types of hysteresis models: insider-outsider model (after some workers lose their job, as the result of negative shock wages are determined by a new smaller group of workers; they are not interested in the reemployment of those who have been fired but decide about actual wages in order to protect their own work places; therefore, employment and unemployment have no tendency to get back to their previous values observable before the shock); capital scarcity model (lower capital levels being a consequence of depression are an obstacle to raising production and employment when the economy starts to boom); loss in human capital models (longer unemployment period lessens the effectiveness of job search; it leads to a reduction in skills and qualifications and consequently to permanent unemployment).

According to the near rational behaviour and small menu costs models (Akerlof and Yellen 1985; Mankiw 1985) firms may not adjust their prices in response to small disturbances if there are only considerable costs of such decisions. A firm compares the gains to changing price with the necessary costs of adjustment (printing new catalogs and price offers, for example). If the costs are greater than profits, the firm decides to fix its price. In effect small shocks will alter real variables leaving the price level unchanged.

The cornerstone of the customer markets model (Okun 1991) is the assumption that there is a long-run implicit commitment between consumers and sellers based on trust and honesty. The firm is obliged to conduct a predictable policy of honest prices and the buyer is obliged to loyalty to his seller provided that the agreed rules are binding. In the consequence of such implicit bilateral contracts the economy displays a large quantity of fluctuations offsetting the insensitivity of prices to demand changes.

The input-output table (Gordon 1981) offers an explanation of both nominal and real price rigidity. The main source of price inertia leading to changes in economic activity is heterogeneity in goods and transactions and serious differences in communication and coordination costs between agents acting within the input-output table. Thousands of relations between suppliers and producers make a synchronization of all the decisions in response to disturbances impossible. In such a situation, firms prefer to keep their prices till all the information about competitors and partners' decisions are known than make losses caused by own inappropriate reactions.

In the dependence of quantity on price model (Stiglitz 1987) consumers act with imperfect information about the characteristics of purchased product. They follow the belief that higher priced goods offer better quality. If a higher price guarantees each producer a reputation of a deliverer of high quality, the aggregate prices will display a serious real rigidity above the market clearing level.

In the imperfect substitution of internal and external funds models (Bernanke and Gertler 1989) it is assumed that since the borrower is always better informed than the lender about the project under consideration, the cost of external funds exceeds the cost of internal resources. The boom prompts the agent's net wealth, increases the level of self-financing and makes more enterprises possible to undertake. During a depression a firm is more dependent on external resources, hence the costs of realization of projects rise. Through this channel, a firm's financial structure may significantly influence the aggregate economic activity.

CONCLUDING REMARKS

For Keynes and post-war Keynesians, a slowdown of economic activity was generated by demand factors. In view of modern Keynesians a recession is caused by frictions and imperfections typical of supply side, rigid wages and/or prices above all. Hence, the problem is imperfect or asymmetric information, heterogeneity, mismatches between workers' skills and qualifications required by employers, poor coordination of individual price and wage decisions, trade union pressure, high coefficient of long-run unemployment, wages exceeding labour marginal product, unfavourable structure of firms' finance, high cost of negotiations and price and wage adjustments and so on. Consequently, the policy of economic growth should focus on improving the long-run market performance. Since in New Keynesians' opinion the demand factor can change real variables only in short periods, recent demand policy is designed simply to counterbalance temporary disturbances.

The reason why New Keynesians are less interested in effective demand is also the nature of unemployment. For Keynes and post-war Keynesians, the greater part of high unemployment was involuntary, while the modern approach suggests that contemporary unemployment is often of a voluntary character. For example, job search models generate unemployment that is entirely voluntary. This is a result of decisions made by agents maximizing their utilities. Workers decide to quit and involve themselves in finding the best wage offer. Hence, the pool of unemployed represents an equilibrium (natural) level. The same line is followed by the implicit contracts model. Unemployment maximizes the wealth of workers and employers by the terms of voluntary commitments. Obviously, such a revolution in theoretical foundations immediately changes the policy perspective. With natural unemployment, markets are in the steady-state equilibrium, given the production structure, rate of birth, imperfections and other long-run factors. Lower natural unemployment is determined by the improvements of supply side allowing the economy to work well, not by demand interventions that are supposed to influence the system only temporarily.

Another reason for discounting the issue of effective demand is the analysis focused on the single market without explicit connections to the level of aggregate demand. This way modern Keynesians ignore Keynes' original idea continued next by Post Keynesians that unemployment should be explained from a broad perspective of the whole system. The imbalance in one market can induce the same tendency in the other ones. However, New Keynesian models perceive unemployment as a phenomenon typical of a single market and are not able to deduce it from imperfect working of economy as a whole.

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