THEORETICAL CONSIDERATIONS ON THE CONSUMPTION-BASED ECONOMIC GROWTH

Ph.D. Emil DINGA
"Victor Slăvescu" Financial and Monetary Research Centre, Romanian Academy
E-mail: emildinga2004@gmail.com

Abstract: The paper aims to analyse, from a critical point of view, the standard models of economic growth which are based on the consumption as command variable within a post-keynesian economy. To this end, firstly, the study identifies the theoretical macroeconomic variables which can stay as proxies for consumption (for example, the wage), extracting the pros and cons arguments for every of them. Finally, the paper provides a set of arguments in favour of considering the consumption as an appropriate macroeconomic variable to model the economic growth, especially in the post-pandemic COVID-19 period, based, of course, on taking into account the economic sustainability on medium and long term.
Keywords: economy, consumption, growth, sustainability.
JEL Classification: E20, O11, P24.

1. Preamble

Any economic theory, no matter its ideological background, aspires to clarify three basic elements: a) which are command variables, that is, those variables which, once triggered, causally generates the desired variation of the target variables; b) which are the target variables, that is, those variables whose variation is intended; c) the economic (and institutional mechanism) by which the command variables influence the target ones. The economic theories originated in the Keynesian philosophy presuppose the macroeconomic command variables are related to the real economy and causally act on the macroeconomic variables which are related to the nominal economy. In the present paper we'll situate within the post-keynesian economic theory in order to examine the consumption-based assumptions on the economic growth (Madrick, 2012).

2. On the final purpose of the economic activity

The economic activity is generated by the existential pressure, that is by the pressure exerted from the biological needs perspective (in more pedant terms, we'll talk here about the necessity of entropic exchange between individuals and the non-anthropic environment). In fact, in the beginning of the human society, when the resources were free because the biological needs were exceeded by the resources (that is, those resources were not scarce), the economic "activity" did not exist in the current meaning (in fact, today, the animals take almost freely the needed resources from the environment). So, in a general way, the economic activity is a social organized activity aimed at to procure the resources capable to sustain the life of the individuals and of the communities. In essence, this purpose remained (and, in my opinion, will perpetually remain) valid.

3. Economic activity sophistication

The direct consumption purpose of the economic activity is detectable, however, at the dawn of the human civilization only. As much as this civilization has developed, such a purpose became increasingly difficult to be viewed and understood. More and more fetishes arisen, more and more structural rings were been added in the economic activity chain (remember the scientific work of Marx to get, under the merchandise veil (fetish), the key of what he called the labour exploitation; remember, more recent, the scientific work of Minsky to get, under the financial structure of the modern society, the key of what was called then the Minsky momentum aiming to initiate financial crises and so on). Let's

logically examine the process of the economic activity sophistication and extract the causalities involved.

In the economic history can be observed three praxiologic paradigms which governed the economic activity: a) the *stationarity paradigm* – the economic activity is directly targeted to get the resources aimed at to satisfy the biological needs of life; b) the *optimality paradigm* – aimed at to extremize the result of the economic activity beyond the strict biological and social needs; c) the *sustainability paradigm* – aimed at to get the economic resources needed ensuring at the same time, the replication of that economic resources in an inter-generational perspective. With that, the economic activity suffered a permanent departure from its genuine purpose – i.e. satisfying the biological needs of life. Figure 1 tries to show such a process which led us, until today, to the current economic activity whose link with the initial economic purpose is almost unobservable.
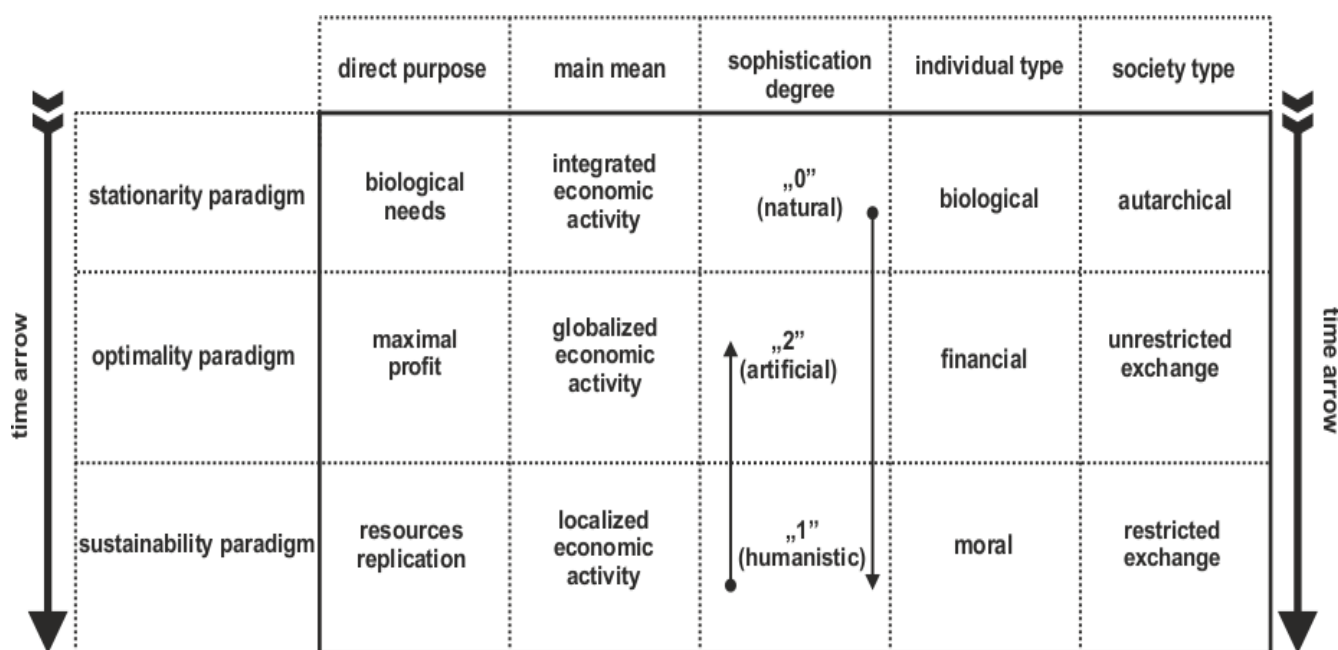
	direct purpose	main mean	sophistication degree	individual type	society type
stationarity paradigm	biological needs	integrated economic activity	„0" (natural)	biological	autarchical
optimality paradigm	maximal profit	globalized economic activity	„2" (artificial)	financial	unrestricted exchange
sustainability paradigm	resources replication	localized economic activity	„1" (humanistic)	moral	restricted exchange

Figure 1. Historical evolution of the economic (praxiological) paradigms.
Source: author.

4. Relationships between command variables and target variables

Logically, a command variable is the cause for the target variable, which is the effect. The way by which the cause generated the effect may be modelled functionally: $t = f(c)$, where with t is noted the target variable, and with c is noted the causal variable. With f is noted a function (or functional, in the case in which c is, in turn, a function itself) or a mathematical operator (or transformer) which transforms c into t. Of course, the analytical form of f is important but, for the purposes of present paper, it is not. Generally, but even more in the economic field, the relationship between command variable and target variable is not unidirectional, that is there is also a relationship between target variable and command variable. Some considerations could be here of usefulness:

- in the most cases, the bi-directionality of the causes and effects are of feedbacks nature (either negative or positive feedbacks). So, the „role" of cause or effect is „played" successively, but not concomitantly, by the c variables, and t variables,

respectively. It is important to draw attention here that the feedbacks act only related to the same system, not related to different systems (NB: to capture

feedbacks from different system one should put together those systems – in a way – so getting a unique system);

- there are too the possibility the reciprocity between the two „roles" – of cause, and of effect – act simultaneously. This case is a complicated one, because it lead us to the concept of co-evolution (or, what is the same, of circular causality – do not confuse the circular causality, which happens simultaneously, with the feedbacked causality, which happens successively);

- from a logical point o view, especially when we have not to do with irreversible process (as in the economic field we do), the cause and the effect are equivalent, in the senses that if we know the cause (c) and the function (al) f, we can get the effect t ($t = f(c)$), but also, if we know the effect t and the function (al) f, we can get the cause c: $c = f^{-1}(t)$, of course with the mathematical condition that f be bijective.

5.   What is a consumption-based model of economic growth?

The post-keynesian economic theory assumes as axiom that the command variables in the economic process are of demand-side type. This means, in the economic process, if we want change something regarding the behaviour of consumers, producers, investors and so on, the condition is to change one of the demand-side variables. As it is well known the aggregate demand in the economy has four components: a) the consumption (both private and of the government); b) the investments (both private and of the government); c) the net export (that is, the difference between the export of goods and services and the import of goods and services); d) the variation of stocks. So, a consumption-based model of economic growth implies that the command variable of such a model is the consumption. Usually, since the government consumption (that is, government acquisitions of goods and services aimed at to support the administrative activity of the government) is very small compared with the private consumption, in the economic models of consumption-based logic is used the private consumption. The private consumption is generally composed by: 1) final consumption of households; 2) final consumption of the non-financial firms; 3) final consumption of the financial firms; 4) final consumption of the non-governmental organizations. So, the consumption-based models of economic growth constitute a species of the demand-based models of economic growth. To be observed that the consumption is a component of GDP, after the expenditures method of calculation. So, the logic presupposition in such models is the following: increasing of the consumption (that is, increasing of the demand) will generate an increase of the supply (for example, through an increase of the average price, and as a result, GDP increases (of course, an increase of the average price is possible only because the supply cannot react immediately to the increase of the demand and so, for a while, the average price will increase. But an increasing of the average price will stimulate the producers (and the investors too) to produce (or invest) more because the profit will be more at a larger scale of production. The simplified logic of the consumption-based model of economic growth can be represented as in Figure 2.
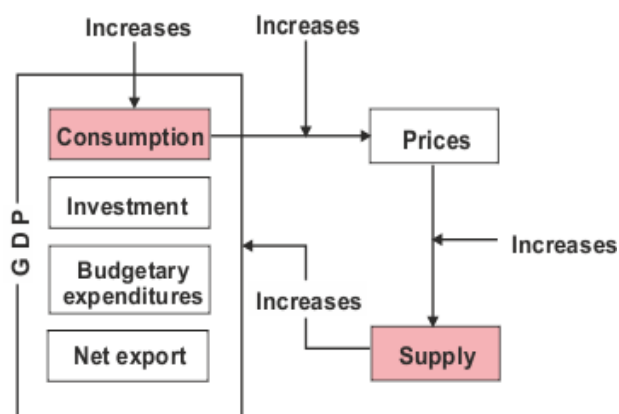
Figure 2. Positive feedback mechanism between GDP and consumption.
Source: author

6. Practical construction of the consumption-based model of economic growth

The idea is to find the economic variable which is the most controllable by the government (that is, by the public policy) and which ensure the consumption-based driving of the economic growth. As the households' consumption component of the final private consumption is the most important quantitatively, the usual model of such a category is the WLG (Wage-Led-Growth) model (Lavoie & Stockhammer, 2013). This principled means the followings:

- the strongest variable driving the consumption is the disposable income (that is, the personal income from which the direct taxes are subtracted);
- the largest component of the disposable income (Onaran & Obst, 2016) is the net wage (that is, the gross wage from which the direct taxes on wage is subtracted – that is, the social contributions and, from the remained wage, the tax on the wage);
- the net wage (that is, the disposable wage) is used for two and only two destinations: a) for consumption; b) for saving (no matter the way of such a saving – at banking deposits, or in own pockets);
- the shares of the two destinations is established by a behaviour parameter, called propensity to consumption, either as average ($apc = C/DW$, where apc is the average propensity to consumption, C is the monetary value of consumption, DW is the monetary value of the disposable wage), or as marginal ($mpc = \Delta C/\Delta DW$, where mpc is the marginal propensity to consumption, ΔC is the variation/change of the monetary value of consumption, ΔDW is the variation/change of the monetary value of the disposable wage); NB: obviously, the propensity to saving (either average or marginal) is the difference towards 1 of the propensity to consumption;

So, given the gross wage, the legal coefficients for social contributions, the legal rate of tax on wage, and the coefficient of the propensity to consumption, we know about the monetary assets which will be used to demand goods and services. Based on such information and using the demand and supply curves in the economy, we can establish the

price increasing (of course, under the hypothesis that the supply cannot react immediately to the increasing of price but with a given lag) which will drive the DGP increasing, as in Figure 3.
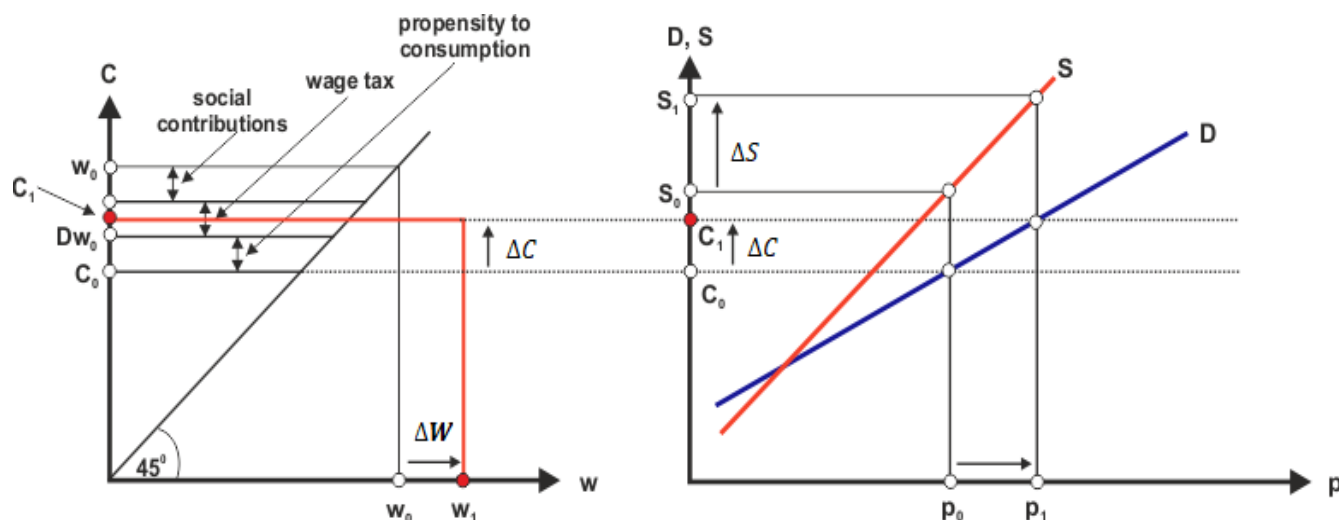
Figure 3. The mechanism of WLG model of economic growth.

Source: author

7.   Critical analysis of WLG model

7.1.   How can the government increase the wage?

First of all, it must be explained why the wage is selected as variable expected to drive the economic growth through the consumption. In fact, the government can conduct the wage level in the budgetary sector only (and in the state private domain, of course), so in a small part of the employed population. There are at least two ways by which, however, a legal possibility to change the wage level in the private sector too stay at the government disposal:

(a)by intermediation of the minimal wage value

The minimal wage is that monetary level of the gross wage under which no employer can pay someone. Once a level of the minimal wage is established by law, it results all the wages in the economy will increase at least with the increase of the minimal wage. So, the government get an increase of the wage according the WLG (Disoska, & Toshevska-Trpcevsk,, 2016) model of economic growth;

(b)by intermediation of the wage taxation

As shown above, the consumption is reduced compared with the gross wage through three ways (social contributions taxation, personal income taxation, and the propensity to consumption). The propensity to consumption of the disposal wage the government has not a direct influence, but on the two categories of direct taxation, by the contrary, it does. It result that, by reducing one or both of the involved rates of wage taxation, government can increase the net wage and this way can increase the consumption.

In both cases examined here, the government intervention in the economy is discretionary. Although there are situations in which such interventions cannot be than discretionary, the free decentralised market must be avoided from this type of interventions. So, some automatic stabilizers (or, if the case, distabilizers) should be designed and implemented in order to drive the wage evolution so the WLG models work. In the final of the paper, some suggestions in this matter will be provided.

7.2.   *Some adverse effects of wage increasing related to WLG model*

Figures 2 and 3 show how a wage increasing leads to economic growth, using the accepted economic theory (more exactly, the demand-side economic theory). However, the additional wage, and, consequently, the additional demand for consumption could manifest some adverse effects which compromise the expectations regarding the WLG (Lavoie & Stockhammer, 2012) model efficacy. Let's examine two (most probable) of them.

(1)increasing the propensity to saving when net wage increases

When the net wage (i.e. the disposable wage) increases, someone could find here a chance to increase not his/her consumption, but his/her saving. Such a motivation can arise from many reasons: a) s/he doesn't need to consume more from luxury goods and services, while the consumption from staple goods and services is anyway capped. Of course, such a case implies that the „law" of marginal propensity to consumption be violated, that is, as the disposable wage increases, the marginal propensity to consumption decreases; b) s/he is cautious and take measures to save the additional net wage for times to come, for the eventuality when the wage could be reduced. So, such adverse effect consists in the fact that as the net wage increases, the propensity to saving increases too.

(2)directing the additional net wage to external supply (import)

This time, the propensity to consumption doesn't decrease as the disposable wage increases, but the additional demand for consumption is not directed to the internal supply, but to the external one (that is, to import). As Figure 2 shows, the import is subtracted from the value of GDP, so GDP decreases as import increases. This means the increasing of the disposable wage do not lead the economic system to grow, but by contrary. Such an adverse effect always happens when the economies are open, but the contemporary economies are all open.

(3) autonomizing the wage kinematics from its economic foundations

The wage is the monetary expression of the marginal labour productivity. If the governmental interest is to increase the gross wage in order to push on the economic growth without correlating the increase with the increase of the marginal labour productivity, it is possible the wage increase become unsustainable. Of course, the government could increase the gross wage in the model of efficient wage (the concept of efficient wage means: paying to someone more than its marginal labour productivity will incite him/her to increase the productivity so to maintain the new level of the wage), but, even so, there is the risk to introduce unsustainability factors on the labour market.

8.   About automatic devices in WLG models

In order to avoid the discretionary intervention of the state (government) in the economy to generate an increase of the disposable wage, automatic devices could be designed and implemented (of course, in a …discretionary way) so such an increase (or decrease, after the case) occurs automatically. In the followings, some suggestions will be made. The suggestions will address punctually the two ways in which, discretionarily, the government changes the disposal wage.

(a)on the minimal wage

Establishing of the new level of the minimal wage must be removed from the government's aegis (or, after the case, from mix committees – government, employees' representatives, and employers' representatives) and linked to a macroeconomic variable which ensures the sustainability of the wage increase. As discussed above, such a macroeconomic anchor to sustain economically the gross wage increase can be the average productivity calculated based on gross added value and on average number of employees. An algorithm could be introduced by law so, any increasing of the average labour

productivity lead to increase the minimal gross wage at most with the index of average labour productivity.

(b) on the wage taxation

Using the wage taxation also allows designing and implementing of an automatic device. We'll briefly describe such a device:

- a grid regarding the average propensity to consumption, at national level will be introduced, so allocating a rate of wage taxation (either globally – that is, including the social contributions and the wage tax – or separately, for the social contributions and the wage tax) for any interval of average propensity to consumption variation;
- the grid will allocate progressively the rates of wage taxation to values of average propensity to consumption;
- so, whenever the average propensity to consumption decreases, the wage rate of taxation will decrease too, so more disposable wage remains to individuals, hoping the average propensity to consumption so will increase;
- to be mentioned that the automatic device will act only if a decreasing of the average propensity to consumption occurs, but not in the opposite case.

References

1. Disoska, E. and Toshevska-Trpcevsk, K., 2016. Debt or Wage-led Growth: the European Integration. *Journal of Economic Integration,* 31(2).
2. Lavoie, M. and Stockhammer, E., 2013. *Wage-led Growth. An Equitable Strategy for Economic Recovery.* Palgrave Macmillan.
3. Lavoie, M. and Stockhammer, E., 2012. *Wage-led Growth. Concept, theories, and policies.* Geneva: International Labour Office.
4. Madrick, J., 2012. *The Case for Wage-Led Growth.* Roosevelt Institute and Schwartz Center for Economic Policy Analysis.
5. Onaran, Ö. and Obst, T., 2016. *Wage-led Growth in the EU15 Member States: The Effects of Income Distribution on Growth, Investment, Trade Balance, and Inflation.* Post Keynesian Economics Study Group.