The modern revival of the classical surplus approach: implications for the analysis of growth and crises

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Abstract

• Sraffian economics has recovered the surplus approach to the theory of value and distribution that was developed by the classical economists and Marx and then obscured by the emergence of marginalist economics in the second half of the 19th century.

• It has also laid the foundations for a robust capital-theoretic critique of the marginalist theory of distribution.

• By virtue of this twofold contribution, Modern Classical Theory is well-suited to absorb and reinforce the more revolutionary insights of Keynes’s legacy.

• The presentation will suggest the implications for modern macroeconomics and the interpretation of the global and European crises.
Implications of Modern Classical Theory

• A) criticism of neoclassical capital theory
  → it undermines the foundations of modern Macroeconomics (pars destruens) and save the most revolutionary Keynesian propositions (pars construens)

• B) recovery of the Classical “surplus” theory of distribution
  → Conflict (non-harmonic) theory of distribution and identification of the roots of the problems of effective demand in income distribution inequalities
Pills of the surplus approach

- Central to the Classical theory is the concept of social surplus:
  \[ S = P - N \]
- \( S \) is that part of the net social product \( P \) (net of the reproduction of the means of production) which is left once workers’ necessities \( N \) are paid.
- In a very simple corn model (Ricardo’s *Essay on profits*) the rate of profit is determined by the equation:
  \[ r = \frac{(P - N)}{N} \]
- The importance of the concept of social surplus in human development is clear in Jared Diamond, *Guns, Germs, and Steel: The Fates of Human Societies*, 1997 (antecedent Turgot)
Measurement problems

• Measurement problems here too: how to measure P and N outside a corn model? Both Ricardo and Marx used the labour theory of value.
• You may perhaps know Marx’s version of the surplus equation: \( r = \frac{s}{c+v} \) in which the variables are measured in labour content.
• The labour theory of value is valid only under very restrictive assumptions (one commodity world, incidentally the same assumption that validates long-period neoclassical theory).
• Sraffa’s contribution is to show the validity of the surplus approach under more general assumptions.
• Before we draw the macroeconomic implications of the surplus approach, let us draw the consequences of the capital critique for modern macroeconomics
Implications of the capital theory critique for modern macroeconomics (pars destruens)

- Main tenets of modern macro:
  - Decreasing labour demand curve → full employment
  - Decreasing investment demand curve → no problems of aggregate demand: at the natural interest rate, investment will always be sufficient to absorb saving from full capacity output.
  - These factors’ demand curve are not «well behaved» (this is acknowledged but treated as a paradoxe)

- Results:
  - lower real wages do not lead to full employment;
  - the interest rate does not affect investment.
Keynes and the capital critique

• Unfortunately Keynes accepted $I = I(i), \frac{dI}{di} < 0$.
• To show the existence of non-full employment equilibria he had to rely on the obstacles that the monetary authority can meet in driving the interest rate at its full employment equilibrium (liquidity trap).
• As Garegnani pointed out in 1962 and as we know from the present experience, the CB may have no difficulty to drive interest rates to very low levels without, however, affecting investment.
• So the outcomes of the capital theory controversy let us to free Keynes from the dead track where he was led by the acceptance of $I = I(i)$.
• A better investment theory would rely on the old accelerator theory according to which investment depends on expected Effective Demand, the one at which they expect to sell realising a normal rate of profits.
• (incidentally, Sraffian economists do not believe that $I = I(r)$.)
• The interest rate has an important influence on AD by affecting autonomous consumption and public spending.
Criticism of modern macro in one page

- Mainstream tales: Central banks must be independent and maintain the economy at the natural unemployment rate (or Nairu). No involuntary unemployment.
- $U_n$ or Nairu defined as those rates at which inflation is zero or constant.
- Expansionary monetary policy is not effective unless there is monetary illusion.
- Criticism: Independent central banks are watchdogs of income distribution: involuntary unemployment high enough to keep workers disciplined (Marx’s industrial reserve army)
- Monetary policy (particularly if associated with fiscal policy) is effective but the fall in industrial reserve army leads to higher real wage claims and inflation.
- This is why we have unemployment in capitalism: to discipline workers.
Other macro-implications

1) Solow’s model is false (and all endogenous growth theory too)
2) Heckscher-Ohlin model is false
3) Textbook monetary theory is false
1) Solow: outside equilibrium, where e.g. $sy > (d+n)k$, $k=K/N$ falls. After the capital controversy this is not acceptable.
A graph shown by Prof. Petri explains why. Note that these are accepted results, why are they not taught to you?
Walras and Solow

• Incidentally, one may concede that the modern, short-period (neo-Walrasian) GET is not affected by the capital critique (although Garegnani spent his last years trying to show that it is affected), I let my mainstream colleagues to show how can this version of GET support Solow’s model.

• In general all modern macro depends on the long-run version of GET: e.g. how can you demonstrate the prevalence of rational expectations – that imply a learning process of the long period equilibrium – in a short run framework (beautiful paper by Ariel Dovskin...).
2) Heckscher-Ohlin: another obvious victim

- According to the H-O theorem, there is a reciprocal advantage in international trade: with factors’ flexibility each country will specialise in producing those commodities that use relatively more of the factor(s) relatively more abundant in that country.

- We know now that there is no reason why the country endowed (say) with relatively more “capital” respect to labour, and that therefore has a lower interest rate, should specialise in capital intensive productions. We know in fact that there is not a definite relation between $r$ and $k$.

- [Ricardo is often also used to show the advantages of free trade: he is misused, since he proved these advantages supposing no mobility of capital: if there is capital mobility, competition from technologically advanced countries will de-industrialize less advanced economies.]

- Mercantilism, that had a disharmonic view of international trade, and Friedrich List, the theoretician of protectionism are vindicated: free trade does not lead to growth, necessity of the developmental State.
3) Monetary theory: exogenous money

- Neoclassical economics: savings $\rightarrow$ deposits $\rightarrow$ loans $\rightarrow$ investment
- The CB fixes the monetary interest rate equal to the natural interest rate so that investment (loans) is equal to full employment saving (deposit)
- This is called the loanable funds theory (DHR).
- More specifically, the CB creates an amount of monetary base (banks reserves) and fixes $i_m = i_n$ so that through the deposit multiplier we have:

  - reserves

  - Full employment savings ($i_n$) = deposits ($i_m$) = loans ($i_m$) = investment ($i_n$)
  - Note in particular the sequence
    - Reserves $\rightarrow$ deposits $\rightarrow$ loans
  - Which reminds us the deposits multiplier:
    - $D = (1/\alpha + \beta) \text{MB}$ where MB is the monetary base, $\alpha$ is the reserve coefficient and $\beta$ the share of the MB held as banknotes.
  - This theory is wrong.
Monetary theory: endogenous money

- After the capital-theory controversy and the Keynesian critique we know that it is investment that determine saving and that a «natural interest rate» that equilibrates full-employment saving and investment does not exist, so the correct sequence is:
- the CB fixes the (short period) interest rate
- Investment is not very sensitive to the interest rate but autonomous consumption and public spending are sensitive
- given the interest rate the economy expresses a certain demand for loans
- Any new loan correspond to the creation of a new deposit
- the CB creates reserves on request of banks, that is
  - Loans $\rightarrow$ deposits $\rightarrow$ reserves
- If the CB does not satisfy the demand for reserves, the interest rate would diverge from the target interest rate.
Pars construens: surplus approach and effective demand

• We have introduced above the concept of social surplus:
  \[ S = P - N \]

• S is that part of the net social product P (net of the reproduction of the means of production) which is left once workers’ necessities N are paid.

• We may think of the social output as composed of necessities (N) that are demanded by workers, and investment goods and luxuries (S) that are purchased by “capitalists”. (Luxuries might include the subsistence of artists, scientists and all the attaché that capitalists like to see around them)

• But suppose that S is so large that not all of it is demanded and consumed by capitalists (and by their attaché), then we have a problem of aggregate demand.

• One solution would be to increase N (as Marx said each capitalist would like that the other capitalists pay higher wages...)

• Another solution is that capitalists decide to invest all the surplus they do not consume themselves. To produce what? More and more capital goods.

• Science fiction? No, is the solution envisaged by Tugan-Baranowski, a Russian economist of the beginning of last century
Surplus approach and external markets

• Michal Kalecki – the marxist Keynes - appreciated TB idea that the satisfaction of human needs is not the purpose of capitalism: production of means of production by means of means of production would be fine as far as this lets the absorption of the social surplus.

• Kalecki would also accept the idea that if capitalists decide all together to systematically invest all their savings, then there would no problems of effective demand.

• The problem is that this would entail some economic planning and “capitalist do many things as a class but do not plan investment as a class”

• Following Rosa Luxemburg, Kalecki envisaged in the “external markets” the solution: endogenous money creation would finance public spending, autonomous consumption and foreign markets that will absorb the part of the social surplus that capitalists will not consume themselves.
The Sraffian supermultiplier

• A modern formulation of this idea is the Sraffian Supermultiplier
• Investment is induced (according to the old accelerator theory: $I \leftarrow \Delta Y^e$):

$$I = v_n g^e Y_D$$

• and income is equal to:

$$Y = \frac{1}{1 - c(1-t) - v_n g^z + m} (\bar{C}_a + \bar{G} + \bar{E})$$

• The supermultiplier suggests the idea that it is final demand (external markets) that sustains output and investment (via accelerator), and that saving is generated by the full exploitation of existing capacity (in the short run) and by the creation of new capacity (in the long run)
External markets and the present crisis

• An example of the role of autonomous consumption financed by consumers credit is the American “great moderation” era: increasing income inequality, expansive monetary policy, growing of debt-financed consumption, residential investment bubble.

• Interestingly, demand-led/debt-driven growth was followed by a Minskian crisis.

• An example of mercantilist/export-led growth is Germany in the Eurozone. Also in this case the financial system created credit in favour of peripheral countries (for instance fuelling an housing bubble in Spain) that bought goods from core countries.

• This was also followed by a foreign-debt crisis (the fiscal crisis was the result of the banks’ bail out by the peripheral States)

• You see that the germ of the crisis in capitalism is in income inequality and in the precarious way it tries to solve the problem.

• A more «human» capitalism would be in principle possible, but it would lead to an increasing workers’ bargaining power an, therefore, capitalists oppose it.
THANK YOU
Here some references

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  • M. Kalecki Political Aspects of Full Employment (1943) (google)

• **Solow’s model:**

• **Heckscher Ohlin and international trade**
• **Endogenous money**

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