Marx and the theory of economic crisis

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I. Basics of Marxist economic analysis

- Main economic agents: social classes (not individuals as in neoclassical (N-C) theory). The capitalist system (capitalist mode of production CMoP) consists of two fundamental classes: **capital and labour**. There is conflict of interest (resulting in **class struggle**) between them.

- Main assumption: **the active creator of wealth is labour** (value-creating substance), because this sets in operation and transforms its means of labour, thus producing the output of production. Thus, a **Labour Theory of Value (LTV)**: living labour (the worker) uses the mop (which belong to the capitalist) in order to produce goods. Marx’s LTV is based on the conception of **abstract labour** (which is close but different from Ricardo’s **embodied labour**).

A corollary: (labour) **values detn. → prices**

- Thus, instead of the n-c theory of productive factors (capital, labour, land etc. seen as technical factors) Marxist economic analysis has a **theory of productive forces** (labour, means of labour). Labour is the working class (and its productive activity). Means of labour are the means of production (mop – machinery, infrastructure, materials etc.)
In the CMoP almost all goods become commodities (exchanged in market). Each commodity has a value (which is the labour-time required in order to produce it):

$$\beta = c + v + s$$

where  
\( \beta \): value of the product  
\( c \): constant capital (fixed investment of capitalist)  
\( v \): variable capital (wages paid to workers)  
\( s \): surplus-value (profit of capitalist)

CMoP is a **system of exploitation of labour** by capital. This exploitation is **non-violent** (in principle): labour is obliged to sell its ability to work to the mop’s owners because otherwise it cannot sustain itself. The negotiation of the labour contract is a process between nominally equal participants. However, once concluded it results in a hierarchical relationship: the capitalist acquires the **managerial privilege** (directs the labourer’s work) and the labourer becomes his subordinate. On this basis the capitalist is able to direct the labourer to work more than the labour-time corresponding to its payment. Thus, he pays the labourer only for a part of its labour time (the value of its labour power (VLP), covered by variable capital (v) in the form of wages) and keep the rest for himself (as surplus-value (s) in the form of profits):

$$T = v + s$$

where  
\( T \): total labour-time of the worker  
\( v \): variable capital (paid labour-time)  
\( s \): surplus-value (unpaid labour-time)
Every mop is organized as an **economic circuit** comprising of spheres of economic activity. In every mop the sphere of production is the dominant one (it determines the two others but there exist feedback relations between them).

In each mop (e.g. slavery, feudalism, capitalism) each sphere is organised differently. Thus, there exist different relations of production (e.g. serf – feudal lord, waged labourer – capitalist) resulting in different circulation and distribution systems.
II. Theories of economic crisis: A general framework

Economic Crises in capitalism

Systemic event, Endogenous causes
(Minority of Classical Pol. Economy, Marxism, Keynesianism)

- Underconsumption
  (Sismondi, Malthus, Luxemburg, Sweezy, Keynes)

- Falling profitability
  (Marx, Grossman)

- Chaotic character
  (Tugan Baranowski)

Accidental event, Exogenous causes
(Majority of classical Pol. Economy, N-C theory, New Keynesianism)

- Stagnation
  (Ricardo)

- Growth
  (N-C, New Classicals)
CLASSICAL POLITICAL ECONOMY

- Majority (Smith, Ricardo) vs Minority (Sismondi, Malthus)

- **Majority** (as expressed by Ricardo): there cannot be a ‘general glut’
  - Accepts Say’s Law: supply creates its demand and equates to it instantly (or with a time-lag according to Walras)
  - Hence, there cannot be a disequilibrium between S and D. Partial disequilibria can exist but in the long-run and in aggregate they will be smoothen out.

- **Minority**: underconsumption (S>D) is possible
  - **Malthus**: there is no guarantee that demand can keep up to investment → therefore, luxury consumption (by landowners) matters → rent (the price paid for renting land) should not be curtailed in favour of entrepreneurial profits
  - **Sismondi**: the fall of workers’ purchasing power causes lack of sufficient demand
capitalism is a perfect system

Say’s Law works: supply creates its demand and equates to it instantly

\[ S \xrightarrow{\text{\small equates to}} D \]

Crises occur only when some agent behaves without following the norms and thus distorts the perfect functioning of the market system (usual culprits: workers, a redistributive state, rarely irresponsible entrepreneurs)

Modern versions (e.g. the New Marcoeconomic Consensus [fusion of conservative New Keynesianism with mild Neoliberalism]): there is a possibility of short-run disequilibrium but in the long-run it will be rectified.

An economic policy corollary: active monetary policy (but not fiscal policy unless utterly required) is useful in the short-run in order to avoid or surpass disequilibria.
KEYNESIAN ECONOMICS

- Capitalism is not a perfect system
- D (instead of S) drives the system
- Say's Law does not work: there is an inherent tendency in the system for D to fall behind of S → lack of effective D
- Thus, the possibility of an (underconsumption) crisis exists: Possibility theory of crisis
- The state intervention is required – through fiscal (primarily) and monetary policy – in order to support D and avoid (or surpass) crises.
1) Economic crises are part of the normal functioning of the CMoP (that is they have endogenous [systemic] causes).

➢ This implies that crises are a usual and frequent event (that is they are a systematic phenomenon).

➢ This does not imply that the CMoP is in continuous crisis neither than that it is destined to collapse due to simply an economic breakdown. Rather that the CMoP passes from periods of boom (growth) to periods of bust (recession). This succession causes the fluctuations of economic activity (economic cycles) and is expressed both in the short-run economic cycles and in the long-run ones.
III. Marx’s fundamental assumptions about the capitalist economic crises

(1) Economic crises are part of the normal functioning of the CMoP (that is they have endogenous [systemic] causes).
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(2) The systemic causes of crises derive from the dominant sphere of production (and are subsequently expressed in the others and not vice versa). They express the contradictions of capitalist accumulation and they operate even without the effects of class struggle (i.e. crises appear even without workers’ militancy).
The basic determinant (systemic cause) of both the short-run and the long-run economic fluctuations is the profit rate (and the related with it mass of profits). The profit motive is aim and, hence the determining factor in the operation of the CMoP. Therefore, its fluctuations determine both the short-run and the long-run fluctuations of the accumulation of capital (grossly expressed in the fluctuations of investment and the GDP).

The basic rule that determines the movement of profit is the Law of the Tendency of the Rate of Profit to Fall (TRPF). It provides the central direction. It co-exists in continuous struggle with a number of counter-acting tendencies. Their interplay causes both the long-run fluctuations (alteration between ‘golden eras’ of strong growth and deep structural crises) and the short-run fluctuations (alterations between growth and slump).

Intra-capitalist competition takes place in view of rates of profit (each capitalist eyes his adversaries) and is crucially shaped by its firm’s technical structure. Therefore, technical change is the main determinant of competitive advantage. This crucial role attributed to technical change differentiates Marx from both A.Smith (he considered technical change but not in relation to the rate of profit) and D.Ricardo (he did not considered technical change in relation to the rate of profit).
(6) The crisis is both an expression of the **problems** of the CMoP and a **rectification mechanism**. **Problems**: the very success of the system (its overaccumulation of capital) causes its failure (the inability to continue to accumulate). Its overextension leads it to surpass its social and technical limits (in the given period).

**Rectification**: a process of destruction and reconstruction. Part of the system must be destroyed (e.g. bankruptcies) in order to leave space for its rebuilding.

(7) **The system is inherently prone to exaggeration**. This Marxian thesis is a precursor to the **animal spirits** mechanism of Keynes. Both in the growth and the slump phase the system tends to overshoot. During growth phases it tends to be overoptimistic (believing that these phases would go on almost indefinitely). During slump phases it tends to be overpessimistic.
IV. The idea of a falling profit rate in Classical Political Economy and Mainstream Economics

CLASSICAL POLITICAL ECONOMY

Classical Political Economy considered the rate of profit (or the rate of return on investment) as the central variable of the CMoP: capitalism is a for-profit economic system, hence its functioning is determining crucially by the extent that it succeeds (or not) in acquiring (to a sufficient extent) this profit.

The stylized fact (empirical belief) that a falling profitability tendency permeates the functioning of the capitalist system was very popular within the Classical Political Economy. Thus it predated Marx:

- **A. Smith**: increased competition → falling profitability
- **D. Ricardo**: the more consistent exposition:
  - decreasing returns to scale in agriculture (because accumulation leads to expand to less fertile land) → increased rents (paid to landlords) → diminishing profits in agriculture → capital moving to industry → diminishing profits in industry (while industrial profits’ fall is reinforced by the rising cost of wages [in terms of food] → the profit rate of the total economy falls → investment falls → stagnation (as investment ceases when the profit rate is nullified)
For N-C Economics the profit rate is not a significant variable in determining general equilibrium (or disequilibrium, i.e. crisis).

Curiously enough, they provide a theory of capitalism without a theory of profit. A weak treatment of profit is offered in Microeconomics (a theory of profit (or what it calls interest), the “marginal productivity” theory, according to which interest is determined by the marginal productivity of capital).

- This theory has been proven to be logically contradictory (see “Capital Controversy”), and lacks explanatory power. For this reason it is silently sidestepped in most textbook presentations.

- More specifically, it cannot explain the conflict between labour and capital over (a) the length of work-time: according to the N-C theory of the supply of labour the length of the work-time is determined by the workers’ preferences and the interest depends on the marginal productivity of capital (thus it does not depend on the length of the working day).

(b) the intensity of labor: interest is independent of the intensity of labor.

- It cannot explain capitalism’s drive towards technological change: technology generally treated as “exogenously given” and constant.
The Keynesian Economics focus on the lack of effective demand (which is determined by other factors than the profit rate as such).

Keynes had considered some role for the Marginal efficiency of Capital (MEC - the expected rate of return from new investment or the marginal productivity of capital): entrepreneurs compare MEC with the rate of interest in order to decide whether they will invest or save (or borrow in order to invest). MEC is the closer Keynesian concept to the Marxian rate of profit.

However for Keynes it is not a falling MEC that causes crisis. A low MEC can lead to an over-abundance of capital in relation to profit expectations and therefore to a 'potential' over-production of commodities (capitalists do not invest). However, it is the demand side that matters. A slowing down of investment is not the main cause of a disequilibrium between S and D. After all investment generated by the government can solve the problem. Where the problem gets out of control and leads to a crisis is when the propensity to consume falls and entrepreneurs’ expectations (acting in a herd-like ‘animal spirits’ manner) become uncontrollably pessimistic and foment a panic.

Hence, Keynesian Economics look to other factors (e.g. unemployment, propensity to consume, capacity utilization) in order to explain the crisis.
<table>
<thead>
<tr>
<th></th>
<th>Rate of Profit</th>
<th>Economic Crisis in Capitalism</th>
<th>Rate of Profit &amp; Economic Crisis</th>
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</thead>
<tbody>
<tr>
<td><strong>Classical Political</strong></td>
<td>determining variable</td>
<td>accidental, however the system is prone to stagnation</td>
<td>Falling profitability leads to stagnation</td>
</tr>
<tr>
<td><strong>Economy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Marxist Political</strong></td>
<td>determining variable</td>
<td>Normal (because of TRPF and overaccumulation)</td>
<td>Falling profitability leads to economic crisis</td>
</tr>
<tr>
<td><strong>Economy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Neoclassical</strong></td>
<td>non-determining variable</td>
<td>accidental</td>
<td>irrelevant</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Keynesian</strong></td>
<td>non-determining variable</td>
<td>possible (because of the inherent inability to regulate effective demand)</td>
<td>non-significant</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td></td>
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V. The Tendency of the Rate of Profit to Fall (TRPF)

- Profit rate and Organic Composition of Capital (OCC): an inverse relationship

Profit rate:
\[ r' = \frac{s}{c+v} \]  \hspace{1cm} (1)

Rate of surplus-value:
\[ s' = \frac{s}{v} \]  \hspace{1cm} (2)

The rate of s-v is an index of labour’s exploitation

Organic Composition of Capital:
\[ g = \frac{c}{v} \]  \hspace{1cm} (3)

The OCC is an index of the technological level

Dividing both the numerator and the denominator of eq. (1) with v and substituting (2) and (3):
\[ r' = \frac{\frac{s}{v}}{\frac{c+v}{v}} = \frac{\frac{s}{v}}{\frac{c}{v} + 1} = \frac{s'}{g + 1} \]  \hspace{1cm} (4)

Hence, there is an inverse relationship between \( r' \) and \( g \)
A crucial assumption about the predominant type of technical change

- Till now it has been shown that there is an inverse relationship between \( r \) and \( g \): \( \uparrow g \rightarrow \downarrow r \)
- But the TRPF argues something much stronger: there is a secular tendency for \( g \) to increase
- This is substantiated by a crucial assumption regarding the predominant type of technical change in the CMoP: Marx argues that, because of the competition between capitals, predominates the labour-saving and capital-using type of technical change.

This implies that \( c \) increases faster than \( v \) (\( dc > dv \)) and thus \( g = \frac{c}{v} \uparrow \).

- Consequently, ceteris paribus, there is a secular tendency for the OCC (\( g \)) to increase and thus to depress the rate of profit (\( r \))
- This occurs because when the proportion of the capitalist’s investment that goes into variable capital (living labour) falls in proportion to the investment in constant capital then the proportion of the investment that generates a profit declines as well.

- Why Marx makes this assumption?
There are **3 basic types of technological change**:

1) **Labour-saving and capital-using**: economizing in the use of labour (v) and intensifying the use of fixed capital (c)

2) **Capital-saving and labour-using**: economizing in the use of fixed capital (c) and intensifying the use of labour (c)

3) **Neutral**: if it is neither capital-saving nor labour-saving

Marx argues that the 1st predominates because:

a. The **mop** (constant capital [or fixed capital in Mainstream terminology]) belong to the capitalist and are the means for his dominance in the production process (they are its fundamental weapon in order to ‘discipline’ its labourers).

b. The **competition** between capitals is capitalism’s coordinating mechanism. This is a blind mechanism (it is affected but not reigned by regulatory institutions) and it operates along the principle ‘your death, my life’ (e.g. cut-throat competition).

c. The more sound way for a capitalist to vanquish his competitors is to be a **technological innovator**, that is to produce more cheaply using a more advanced technology.

d. In principle (because there can be exceptions), **labour-saving and capital-using technology** is the best: it increases both labour productivity (output per labourer) and the efficiency of capital (constant capital per labourer). Thus, it augments the production of value.
How operates the driven by technical change intra-capitalist competition? In order to understand it we have to see how operates, according to Marx, the **Law of Value**. The Law of Value is a central tenet not only of Marxist but also of Classical Political Economy (A.Smith, D.Ricardo). It argues that (labour) values [labour-time expended in production] determine the actual prices (that are observed in the market). Marx has a more sophisticated and flexible understanding of its operations (than both Smith and Ricardo): values are transformed to final process through a **two-stage process** (instead of a one-stage). Furthermore, in retrospect there exist **feed-back relations** between prices and values. Last, in practice prices would **oscillate around** their values but rarely will they coincide with them.

Each firm produces **values** (β), which should be transformed to **prices of production** (P) (and ultimately to **market prices**).

<table>
<thead>
<tr>
<th>Value</th>
<th>Price of Production</th>
<th>Market Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>detd. in production [according to the expenditure of labour-time]</td>
<td>detd. in circulation [by l-r competition according to technical structure]</td>
<td>detd. in circulation [by s-r competition according to S-D]</td>
</tr>
</tbody>
</table>
We shall examine the 1st part of this transformation procedure (from $\beta \rightarrow P$); the 2nd part follows easily.

Each firm produces according to each own technical structure (hence different $g_i$) and social relations (balance of power between capitalists and workers). For reasons of simplicity let us assume that the latter is the same (same $s'$).

$$\beta_i = c_i + v_i + s_i$$

This implies that different production structures will result in different rates of profit ($r_i$).

However, in the l-r competition between capitals in the sphere of circulation will establish (through migration of capitals between different sectors) a uniform General Rate of profit. This, according to Marx, would be the median rate of profit:

$$R' = S/(C+V)$$

where $S = \Sigma s_i$, $C = \Sigma c_i$, $V = \Sigma v_i$.

Then each individual capital would not get its value but its Price of Production:

$$P_i = c_i + v_i + R(c_i + v_i) = (c_i + v_i) (1 + R)$$

Two equations hold: (1) total $\beta = \text{total } P$, (2) total $S = \text{total } R$ (equivalence conditions).

Prices of Production entail transfers of value from some individual capitals to others.
The following table will present a simple example of the Marxian transformation procedure using some simplifying assumptions:

- The economy consists of one sector (producing the same commodity)
- There are 5 competing firms (numbered from 1 to 5)
- There exist 3 different technologies (A advanced, T traditional, O old-fashioned):
  - Firm 1 is a technological innovator, with technology A; hence has a higher OCC (g=c/v))
  - Firms 2-4 are traditional, with a technology T; hence have a lower g than 1
  - Firm 5 is old-fashioned, with a technology O; hence has the smaller g
- Each firm invests the same amount of capital (100 units). However, because of their different OCCs they divide them differently between c and v
- The degree of exploitation of labour (s’) is the same in all firms (despite the different technical conditions): 100% (that is the labourer for each hour of work he is being paid he gives an additional hour of unpaid work)

Then values, OCCs, individual rates of profit, the general rate of profit are being calculated. On this basis the prices of production are being derived.

Note that the two equivalence conditions hold.
<table>
<thead>
<tr>
<th>Firm</th>
<th>c+v</th>
<th>g</th>
<th>s'</th>
<th>s</th>
<th>β</th>
<th>r'</th>
<th>R'</th>
<th>P</th>
<th>Deviation of P from β</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm 1</td>
<td>90c+10v</td>
<td>9</td>
<td>100%</td>
<td>10</td>
<td>110</td>
<td>10%</td>
<td>20%</td>
<td>120</td>
<td>+10</td>
</tr>
<tr>
<td>Firm 2</td>
<td>80c+20v</td>
<td>4</td>
<td>100%</td>
<td>20</td>
<td>120</td>
<td>20%</td>
<td>20%</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>Firm 3</td>
<td>80c+20v</td>
<td>4</td>
<td>100%</td>
<td>20</td>
<td>120</td>
<td>20%</td>
<td>20%</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>Firm 4</td>
<td>80c+20v</td>
<td>4</td>
<td>100%</td>
<td>20</td>
<td>120</td>
<td>20%</td>
<td>20%</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>Firm 1</td>
<td>70c+30v</td>
<td>2.3</td>
<td>100%</td>
<td>30</td>
<td>130</td>
<td>30%</td>
<td>20%</td>
<td>120</td>
<td>-10</td>
</tr>
<tr>
<td>Total</td>
<td>400c+100v</td>
<td>4</td>
<td>100%</td>
<td>100</td>
<td>600</td>
<td>20%</td>
<td>20%</td>
<td>600</td>
<td>0</td>
</tr>
</tbody>
</table>
The previous table shows that the formation of prices of production implies transfers of value from the laggard technically firm (5) to the innovating one (1). Moreover, the latter by getting R’ achieves a rate of profit higher than its individual one.

This implies that innovating capitals are in position to acquire extra-profit (on top of their normal one) at the expense of laggard capitals. This put them in a position to expand their operation (accumulation of capital), expand their market-share and push out of the market the laggard capitals.

Once Firm 5 is eliminated and Firm 1 has doubled its size then the latter would start to acquire super-profit at the expense of Firms 2-4. In the end, and unless its competitors succeed in rushing to imitate Firm 1, the latter would push all of them out of the market.

In any case – either pushing them out of the market or the others imitating the innovator – the new structure of the market would be completely different. There wont be neither innovators nor laggards (as all would have the same technical structure), no extra-profit to accrue but a higher OCC for the whole economy and hence a lower R’.

Thus, the quest for extra-profit (in intra-capitalist competition via capital-using and labour-saving technical change) leads to a higher OCC and a lower profit rate. This explains the operation of the TRPF.
More analytically, this process works as follows:

➢ In intra-capitalist competition, each individual capital strives to reduce unit production costs (unit cost-prices).

➢ This requires the rapid introduction of capital-using and labour-saving technical change: at normal capacity utilization, the unit production costs will be lower.

➢ By increasing the quantity of fixed capital per unit output, economies of scale are achieved. Because larger-scale production enables a given number of workers to process a greater amount of product, both raw materials and output per unit of labour tend to rise.

➢ At the same time, the greater amount of fixed capital per unit output implies higher depreciation charges and auxiliary materials costs (electricity, fuel and so on) per unit output.

➢ Consequently, for innovative production methods, the higher capital advanced per unit of output implies higher unit non-labour costs (unit constant capital) while the higher productivity implies lower unit labour costs (unit variable capital).

➢ For the innovation to be profitable, the fall in the latter must be greater than the increase of the former so that the overall effect would be the decline of unit production cost (the sum of unit constant and unit variable capital).
However, under given technical conditions, existing technology has definite limits.

When these limits are reached, subsequent increases in investment per unit output will lead to smaller reductions in unit production costs. Therefore, the more advanced individual capitals would tend to achieve a lower unit production cost at the expense of a lower rate of profit. The lower unit production cost enables them to capture a larger share of the market.

At the same time, because the dominant market price is determined not by the more advanced individual capitals, but by the average conditions of production in each branch, innovating capitals supplement their profits by getting extra-profits in the market. These are a net transfer of surplus-value generated under the auspices of other capitals who operate on average or below average conditions. These extra profits and the loss of market share compels other capitals to adopt the new production methods.

However, this would sooner or later curtail the extra profits of advanced capitals, as their advantages would be eroded. When all production is stabilized at the new technical level, the result would be an increased rate of total constant over total variable capital and a lower general rate of profit.
The effects of the TRPF can be temporarily offset by an increase of the mass of profit, through the expansion of production. However, sooner or later, the TRFP weakens the incentive to invest leading to the stagnation of the mass of profit.

The mechanism of this interaction is the following:

\[ r' = \frac{s}{c+v} \quad s = r' \times (c+v) \]

Thus, the **mass of profit** (here the mass of surplus-value, which is its equivalent) depends on the **rate of profit** and on the **accumulation of capital** (investment on c and v).

The accumulation of capital (investment) depends on existing investment and new investment:

- The TRPF decreases the mass of profits of exiting investment.
- On the other hand, the addition of new investment increases the mass of profits.
- In total, the continuation of TRPF would strangle incentives to add new investment. Once this point is reached, then the crisis begins.
The root cause of crisis is the TRPF. The rate of profit depends on \( g \) and \( s' \) (rate of surplus-value). It has an inverse relationship with the first but a direct with the second. 

\[
    r' = \frac{s'}{g+1} \quad r' = f(s', g)
\]

The countervailing tendencies belong to the following categories:

1) Those that increase \( s' \): (a) intensification of work, (b) extension of work, (c) reduction of wages
2) Those that restrain the increase of \( g \): (a) economies in the use of \( c \) (including the access to cheaper inputs abroad), (b) new production activities where \( g \) is lower
3) Profits from investment abroad that supplement the domestic profitability
4) A faster turnover of capital (that a smaller time required for an investment to bring back profits).

Notwithstanding, TRPF is the dominant side of this contradictory unity because the counter-tendencies operate within strict constraints.
Crisis of Overaccumulation of Capital

- From the above analysis, Marx concluded that the TRPF causes the major economic crisis of capitalism, which he characterizes as crises of Overaccumulation of Capital: the very success of the system (accumulation) leads to its failure (crises). ‘the law of the tendency of the rate of profit to fall’ is ‘in every respect the most important law of modern political economy’ (Grundrisse, pp. 748-9).

- Increased investment produces the same or less surplus value than before, and hence there is a lower rate of profit.

- The TRPF weakens the incentive to invest leading to the stagnation of the mass of profit. This will lead to the inability to invest profitably the accumulated capital and thus overaccumulation takes place: the amassed capital is standing idle.

- The only solution is the devalorisation (the destruction) of a significant amount of the accumulated capital. When devalorisation has proceeded enough then the surviving capitals will be adequately restructured and the field for profitable investment would be again expanded (with the bankruptcies of many enterprises). These will provide the necessary ground for restarting the accumulation process.
Capitalism is characterized by fluctuations of its economic activities which are called economic cycles.

There are several types of cycles of which the more important and researched are: (a) business cycle (5-7 years), (b) Kondratieff cycles or long-waves (46-60 years).

Marxist economic analysis is concerned with these two only. In both cases it attributes their fluctuations to the interplay between the TRPF and its counter-acting tendencies.

The short-run business cycles exhibits milder fluctuations. The long-run Kondratieffs are determined, on top of the fluctuations of the profit, by structural features.

The following diagram presents a representation of a simple (not structural) profitability crisis.
The cycle of economic crisis: destruction and reconstruction.

- Slow-down of the rate of increase of profit rate and accumulation.
  - Beginning of overaccumulation.

- Increase of profit rate and of accumulation.

- Mass of profit restarts growing as labour cost falls and overaccumulation decreases.

- Fall in investment leads to increased unemployment and shrinking consumption & Collapse of the financial system (as debts cannot be repaid and leverage collapses).

- Peak of overaccumulation: Mass bankruptcies and destruction of productive forces.

- Fall of the profit rate and (with a time-lag) of accumulation as the mass of profit starts to decrease.
  - Crisis in the sphere of production.

- Increase of profit rate and of accumulation.
Critiques of the TRPF

- The TRPF has been at the centre of modern debates. Okishio (1961) maintained that under certain assumptions (e.g. constancy of the real wage, perfect competition) viable technical change raises the rate of profit. More specifically, if the real wage rate remains constant (i.e. if capitalists rip all the benefits from the improved conditions of production) then the profit rate would increase. It can only fall if workers are benefited at least partially by these new conditions of production.

- Okishio has been disputed by many by questioning his assumptions.

- Foley (1986) shows that if wages rise in order to maintain a constant wage share of output, capital-using technical change lowers the rate of profit.


- Shaikh (1978) accepts Okishio’s assumptions but criticizes his definitions. He distinguishes between the rate of profit estimated over total fixed and circulating capital (that is, covering the value of producer durable goods which transfer their value over a number of periods) and the margin of profits, estimated over current costs only. Capitalists introduce new techniques which - by lowering current costs - increase the profit margin but reduce the profit rate (through increased mechanization).
The modern presentations of Marx’s TRPF and Overaccumulation Crises has been pioneered by Grossmann (1929).

There is a debate within Marxist Political Economy regarding whether Marx was an underconsumptionist (e.g. Luxembourg (1913), Sweezy (1949)).

There are several modern debates in Marxist Political Economy on the issue of crisis. Different views represent, to a great extent different readings of Marx.
REFERENCES