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# Inequality and its Persistence in a Classical-Keynesian Perspective

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#### Abstract

The purpose of this paper is to explain persistent income inequality in a classical-Keynesian long-period manner, that is, on the basis of the functioning of the institutional system. In this perspective chronic involuntary system-caused unemployment is the fundamental cause for persistent inequality. The socio-economic power of large enterprises, financialisation and free trade in the framework of globalisation and large free-trade areas reinforce the tendency to increased inequalities in income distribution. The only way out seems to be in a new economic and financial order based on Keynes's 1944 proposals at Bretton Woods.

*Keywords:* income distribution, unemployment, monopoly capitalism, financialisation, free trade

### Problem and Plan

Persistent inequality as a crucial feature of present day capitalism is considered an almost normal feature of capitalism by neoclassical economists. In this view distributional outcomes are due to market forces and interventions regarding distribution, incomes policies to wit, would not be considered appropriate since this would reduce the efficiency of the market system. Here it should be mentioned that Léon Walras dealt with the problem of efficiency in his *Eléments d'économie politique pure ou théorie de la richesse sociale* (Walras 1952/1900) and that he devoted an entire volume on the problem of distribution: *Eléments d'économie sociale: Théorie de la répartition de la richesse sociale* (Walras 1936). However, Walras's second volume has never been considered seriously, and an unequal distribution of income is now considered, more than ever, a precondition for efficiency and higher growth. It would seem that this orthodox view on distribution and growth has even gained increased prominence since the downfall of Socialism around 1990. The view on distribution changes dramatically if we move from the neoclassical-Walrasian exchange paradigm to a classical-Keynesian monetary theory of production (Bortis 1997 and 2003a). The purpose of this paper is precisely to deal with the problem of persistent *inequality* in a classical-Keynesian perspective. It is made up of five sections. In the first, basic, section, we allude to the fundamental reasons why there is a need to move from the neoclassical exchange paradigm to a classical-Keynesian monetary theory of production. Subsequently, some crucial features of classical-Keynesian political economy are presented. Specifically it is suggested that, in a classical-Keynesian perspective, economic activity is always governed by effective demand, also in the long run; since in a long-period classical-Keynesian perspective, institutions, including permanent social forces govern distributional outcomes, these tend to be *permanent*. Given this, we argue in section two that persistent inequality is *inherent* to a monetary production economy and that inequalities may increase because of an interaction between distribution and long-period involuntary unemployment. This negative interaction between unequal distribution and persistent unemployment is reinforced by three main factors: the emergence of very large firms due to increasing returns (section 3), the rapidly growing financialisation which takes place in capitalist economies (section 4), and international trade, dominated by the law of mass production and technology gaps (section 5).

### 1 From the neoclassical exchange paradigm to a classical-Keynesian theory of production

For theoretical and (empirical-) historical reasons, there are strong reasons to believe that there is no tendency at all towards a full employment of resources, above all of labour, although such a tendency might exist at times. The theoretical reasons are associated with the interrelatedness of markets and with the nature of the process of production. In interrelated markets in disequilibrium there may be no tendency towards equilibrium, since the tendency towards equilibrium in one market may deepen the disequilibrium on other markets. For example, when there is unemployment and money wages fall, the demand for consumption goods, and, subsequently, for investment goods may decline, increasing thus the amount of unemployment; or, increasing volumes of investment do not reduce, but raise rates of profit; this is standard post-Keynesian theory. Moreover, with production being a social process, no regular, well-behaved associations between ,rates of interest' and ,quantities of capital', in general between factor prices and factor quantities, exist in principle; this is the main result of the capital-theoretic discussion (Harcourt 1972). This result implies that the concept of factor markets stands on very shaky foundations.

The capital-theoretic discussion culminated, in the mid-sixties, in the publication of several important articles, which are gathered in the *Quarterly Journal of Economics*, vol. 80 (1966); for a brief summary of events see Pasinetti (1977, pp. 169–77, especially footnote 9 on p. 171). Samuelson sums up the discussion in a crucial statement: "Lower interest rates may bring lower steady-state consumption and lower capital–output ratios, and the transition to such lower interest rate can involve denial of diminishing returns and entail reverse capital deepening in which current consumption is augmented rather than sacrificed.

There often turns out to be no unambiguous way of characterizing different processes as more 'capital intensive', more 'mechanized', more 'roundabout' [...] If all this causes headaches for those nostalgic for the old time parables of neoclassical writing, we must remind ourselves that scholars are not born to live an easy existence. We must respect, and appraise, the facts of life" (Samuelson 1966, p. 250).

As Pierangelo Garegnani has perceived the outcome of the capital-theoretic discussion opens the real way to implement the principle of effective demand (Garegnani 1983). Specifically, effective demand now governs output and employment also in the long run. This implies that the neoclassical exchange paradigm must be replaced by a monetary theory of production as has been required by Keynes in 1933 (Keynes 1933). A very simple scheme presented by Marx in the second volume of *Das Kapital* (p. 31) exhibits the essentials of a monetary production economy and allows us to theoretically situate the the classical-Keynesian system of political economy:

 $M - C \dots P \dots C' - M'$  [original:  $G - W \dots P \dots W' - G'$ ] (1)

(M = money and finance - financial sector; C = means of production; P = social process of production; C' = final output - social product; M' = money - effective demand).

In the first place, the crucial role of money clearly appears in scheme (1). Financial means, own financial means and outside finance, represented by M are used to buy means of production C: labour force, primary and intermediate goods, and capital goods. These are transformed into final goods C' in the social and circular process of production P. The final output C' (equal to the social product Q) is determined by effective demand (M'). In this

sequence, all calculations are made in money; *commodities are always exchanged against money, never* against other commodities; given this, absolute, not relative prices are all important. Since production takes time (Paul Davidson), and outlays and receipts associated to investment projects extend over several years – the lifetime of investment projects -, *money becomes the link between the past and the future* (Keynes). Since outlays and receipts are not synchronised, the producers require access to finance (credits) to be provided by the banking system. Hence money *and* finance play a crucial role in a monetary production economy.

In the second place, in a monetary economy the scale of output and employment is governed by effective demand: in scheme (1) this is shown by the sequence C' - M'. This implies that *involuntary* unemployment may come into being in the short, medium and long term. Longperiod output (Q) and employment (N) are governed by the supermultiplier relation (2), which thus governs long-period quantities. All the variables on the right-hand side of the supermultiplier equation are governed by technology and institutions and are, as such, constant or slowly evolving. The trend growth rate (g) is given by the weighted growth rate of the autonomous variables: government expenditures (G) and exports (X). Given this, relation (2) represents the institutional-technological trend, which, as a rule, is below the fullemployment trend (Bortis 1997, p. 146 and Bortis 2003a, p. 464).

$$Q = \frac{G + X}{z_{s}[1 - \frac{1}{k})] + \pi(b_{1} + b_{2}) - (g + d)v}$$
(2)

This relation tells us how trend output (Q) is determined in principle, that is, independently of time and space (trend output Q is measured in terms of a bundle of necessary consumption goods, the money price of which is p). Q is positively associated with the size of the autonomous variables, G and X and with the gross investment-output ratio I/Q = (g + d)v (g = trend growth rate, d = depreciation coefficient and v = K/Q, the capital coefficient). However, output Q declines or the trend is shifted downwards if the terms of trade worsen ( $\pi$  rises) or if the import coefficients (b<sub>1</sub> and b<sub>2</sub>) increase (b<sub>1</sub> = necessary imports required in production as a fraction of the social product, b<sub>2</sub> = non-necessary imports (out of the surplus) as a fraction of national income).

Most importantly, however, trend output and employment decline because institutionalised or *permanent* income distribution becomes more unequal, if the surplus share (P+R)/Q = 1-(1/k)

increases (R = land and labour rents; labour rents include surplus wages, and wages due to some privilege (privilege rents), for example excessive manager wages, and high wages due to special abilities (ability rents), P = gross profits, k = mark-up over wages, and 1/k = W/Q is the share of normal or socially necessary wages in income). If the surplus is itself unequally distributed, the ratio of saving out of the surplus (s<sub>s</sub>) will be high and so will the leakage coefficient  $z_s$ :

$$z_s = s_s + t_s = 1 - c_s$$
 (3)

where  $(t_s)$  is share of taxes paid out of the surplus and  $(c_s)$  is the fraction of the surplus consumed. Obviously, a high leakage coefficient implies that the fraction of the surplus consumed will be relatively low. This tendency will be reinforced if taxes are mainly paid by lower surplus incomes, that is, the surplus wages of the middle classes in the main (to simplify we assume that no taxes are paid out of socially necessary wage incomes).

Obviously, both a low wages share (1/k) and an unequally distributed surplus (P+R) lead on to a high leakage share in national income (definition 3); according to the supermultiplier relation (2) more permanent, and increasing, inequality in income distribution will result in lower longperiod income and employment levels, the reason being a low purchasing power of the general population.

While the long-period effective demand condition, that is, the supermultiplier relation (2), governs long-period quantities, the long-period prices are, in fact, prices of production determined in the social process of production (P) in scheme (1) above. In a vertically integrated economy, the prices of production are synthesised by the Kalecki-Weintraub pricing equation (Bortis 1997, p. 145 and Bortis 2003a, p. 463):

$$p = w_m n k = w_m (1/A) k$$
 (4)

The money price of a bundle of necessary consumption goods, the unit in which the social product (Q) is measured, is governed by there factors: the money wage level ( $w_m$ ), the conditions of production, summarised by the macroeconomic labour coefficient n = N/Q, which equals the inverse of labour productivity A, and by the mark-up over wages (k), which governs distribution (it should be noted here that the microeconomic mark-up is smaller that the macroeconomic k, because for the individual enterprises, k is the mark-up on total wages, whilst, on the macroeconomic level, the wages consist of socially necessary wages only, and surplus wages are included in the social surplus).

Classical-Keynesian prices depend, then, upon two groups of factors: the conditions of production, summarized by the labour productivity (A), and the social forces regulating distribution, represented by the money-wage level  $(w_m)$  and the mark-up (k). This is crucially important: in a classical-Keynesian framework distribution is, fundamentally, not a market problem but a social problem, in fact, a problem of social power if we look at the distribution issue in a positive vein. In socio-economic reality the degree of workers' organisation, entrepreneurial associations and the state may all play a role in determining income distribution; in a normative perspective, distribution is the fundamental problem of social ethics, the fundamental issue is to realise the ideal of distributive justice as closely as possible; in socio-economic reality, the evaluation of workplaces to get a basis for fixing wages, trade-union activity aiming at establishing a fair wage structure between industries, and the determination of a socially appropriate rate of profits, are all means to bring about as much distributive justice as possible.

Thus, in a classical-Keynesian long-period perspective system outcomes like normal prices and normal quantities are *permanent*, simply because they are *institutionalised*. This also holds for distributional outcomes, which are governed by permanently existing social forces. In fact, technology and institutions are the constant or slowly evolving magnitudes Ricardo had in mind when writing his *Principles*. Given this, classical-Keynesian political economy is, fundamentally, about institutional-technological system equilibria or fully adjusted situations which are located in the present and, consequently, are always there to determine normal prices and quantities as well as distributional outcomes.

In the following sections, it will be suggested that income (and wealth) inequalities are not only inherent to a capitalist system, but that there are powerful forces tending to increase these inequalities.

### 2 Inequality and involuntary unemployment

The existence of permanent system-caused involuntary unemployment is certainly the most important factor leading on to the persistence of a more unequal distribution. This emerges from the analysis of the supermultiplier relation (2) above as has been briefly presented in the previous section. Persistent unemployment is bound to lead to a downward pressure on wages in general, that is, social necessary wages and surplus wages. Lower socially necessary wages are directly associated with a rising surplus share in national income, [1-(1/k)]; this depresses the social product Q as is immediately evident from the supermultiplier relation (2) above. This tendency is reinforced through a more unequal distribution of the surplus (P+R). Indeed, if

profits and wages due to privileges, manager wages for instance, rise relatively to surplus wages, consumption out of the surplus will decline and saving correspondingly increase. This tendency is reinforced by the fact that the tax burden is, to a large extent, carried by ordinary surplus wages. Since tax rates for high and very high incomes are relatively low, saving increases for the high-income group. The final result is increase in the leakage coefficient ( $z_s$ ) in the supermultiplier relation (2). Again, trend or long-period output and employment are pushed downwards because of a reduction of effective demand for consumption goods. This tendency is reversed to some extent by the fact that luxury consumption increases as distribution becomes more inequal.

Hence the reduction of effective demand through a more unequal income distribution will entail a lower employment level. This will lead on to a downward pressure on wages, which, in turn, leads on to an increase in unemployment. Given this, inequalities in distribution will be growing because of an interaction between distribution and long-period involuntary unemployment. Such cumulative processes or vicious circles resulting in growing disequilibria in distribution and employment are characteristic of neoliberal capitalist economies.

All this implies that persistent and growing inequalities are, in a classical Keynesian perspective, not only permanent but also *inherent* to an unstable monetary production economy.

#### 3 Increasing returns to scale, monopoly capitalism and rising inequalities

Neoclassical economic theory is dominated by the law of decreasing returns. This ensures that demand curves are falling on goods and factor markets and that, correspondingly, supply curves are rising. This is supposed to bring about stable equilibria at full employment, if there are *competitive conditions*.

The classical economists have associated the law of diminishing returns with agriculture only. At the same time, they have emphasised, that industry is dominated by the law of increasing returns, or falling average costs. This is bound to transform Marshall's competitive market economies into Marx's monopoly capitalism, because prices do not increase, but fall with larger quantities, because more mechanised production processes are being used by large firms. Here concentration leads to larger firms dominating markets in the process of accumulation, because firms realising higher profits are bound to grow faster. This is reinforced by Marx's centralisation, where the action of finance capital brings about large enterprises through take-overs and mergers, for example. As is evident from the price equation (4) above large enterprises are bound to entirely dominate small and medium-sized enterprises,

because of a very high labour productivity (A) or, conversely, very low unit costs. This is the law of mass production which allows the large firm to pay higher wages and to realise higher profits, and, nevertheless, to be offer some commodity at a lower price. In order to survive smaller firms have to produce at very low wages. Given this, the permanent presence of involuntary unemployment will enable large enterprises to pay lower wages, too, and, simultaneously to realise higher profits. Once again, income distribution becomes more unequal, depressing thus output and employment as emerges from the supermultiplier relation (2) above.

#### 4 Generation of inequality through financialisation

In a monetary production economy money is intimately linked to production, which is at the heart of the real sector of an economy. Here the labour force transforms, by means of fixed capital (past labour), primary, intermediate and final commodities into final products (see scheme 1 above). In the real sector there is always an exchange of money (M) and commodities, that is, labour (force) and means of production (C) and final goods (C'). Hence new values are created in the real sector of an economy, Keynes's industrial circulation in his Treatise on Money (volume I, chapter 15). In the processes of circulation taking place within the real sector, money represents values, since it has no intrinsic value. However, once money leaves the real sector for the financial sector - Keynes's financial circulation in his *Treatise on Money* – there is no longer any real equivalent and, consequently, money does not represent any real values. Given this, money circulating in the financial sector always looks for acquiring already *existing goods*; some of these goods are reproducible (houses, industrial equipment, or enterprises, to give instances), others are not reproducible (for example, land or old masters); money circulating in the financial sector may also look for *already existing* financial titles, for example, already existing state bonds and shares which ought to represent the value of already existing enterprises.

Let us now consider the interaction between the real and the financial sector of a monetary production economy at the level of principles. Within the global financial system – global because of the worldwide mobility of financial capital – there is the quantity of money (M), made up of high-powered basic money (coins and banknotes), cash deposits and saving and term deposits. The fraction r of M, made up of basic money ( $M_0$ ) and of cash deposits, circulates in the real sector; in fact, (rM) equals ( $M_1$ ). Obviously, (rM) represents 'the amount of cash held to satisfy the transactions- and [the short-term] precautionary motives' (Keynes, 1973/1936, p. 199). A complementary fraction of (M), (f = 1-r) to wit, circulates in the

financial sector to buy commodities and financial assets with the aim of selling these with a profit or of deriving an income. Keynes denoted this quantity of money (*fM*) 'the amount of money held to satisfy the speculation motive' (p. 199). However, speculation is only one aspect of the quantity of money (*fM*); in fact, (*fM*) also represents the monetary wealth resulting from past savings and, as such, also denotes hoarding. In any case, (*fM*) broadly equals  $(M_3 - M_1)$ . It should be evident that monetary wealth may be used to exert economic, social or political power. Now, the flows of saving and investment will leave the stocks of money, (*fM*) and (*rM*), unchanged, simply because, in the real sector saving is, *in principle*, always equal to investment (S = I). Indeed, saving (*S*) leaves the real sector in the form of non-consumed income and moves to the financial sector to appear as saving and time deposits there. On the other hand, financial means made up of bank credits (B), reinvested savings by firms in the form of retained profits and *new* shares subscribed by households (*bS*, with *b*<1), leave the financial sector to ensure the monetary financing of investment (*I*). Given this, the quantity of money in the real sector is (*rM* + (*I* – *S*) = *rM*); and in the financial sector (*fM* + (*S* – *I*) = *fM*).

Hence, in a first step, saving and investment leave the quantity of money in the financial and in the real sector unchanged, because, in the real sector, saving adjusts to investment through quantity adjustments as is implied in the supermultiplier relation (2) above.

The quantity of money (*fM*) remains in the financial sector when wealth holders diversify their monetary wealth through buying *already existing* commodities (real estate, land, precious metals and the like), and ,old', that is, *already existing* financial assets (shares, bonds, and so on). Now, the clue to understanding the interaction between the real and the financial sector is to examine the macroeconomic significance of saving in a monetary theory of production. Here the distinction between saving and finance is crucial. Banks, that is, the *banking system*, provide finance. This is the *monetary* financing of investment (*I*) through bank credits and acquiring *new* shares or bonds by the banks (*B*) and through financial means of the enterprises themselves, for example reinvested profits; part of current or past saving may also participate in the financing of current investment, for example through subscribing *new* shares or loans by households. Let us denote the fraction of *current or new* saving used by firms and households to finance *current or new* investment by (*bS*). Hence the equation for the *monetary* financing of investment is:

$$B + bS = I \tag{5}$$

Obviously finance *precedes* investment. Here it is of crucial importance to note that, in a long-period perspective, banks cannot extend the credit volume (B) at will because the *trend* 

*investment volume is given* in the long run; in fact, trend I is governed by the supermultiplier relation (2) above.

In a monetary production economy the equation for the *real* financing of investment is always:

$$I = S = s Q \tag{6}.$$

Saving makes available the resources (labour, capital equipment and land) required to produce investment goods. And, crucially, with the real financing of investment through saving, investment *precedes* saving, which, in turn, *adjusts* to investment (I) through changes in output (Q) and employment (N) as emerges from the supermultiplier relation (2) above. Thus, the whole sequence of monetary and real financing of investment is given by

$$B + bS = I = S = s Q . \tag{7}$$

This relation already shows that in a monetary production economy the *long-period investment volume (I) as governed by effective demand* (relation 2 above) stands at the centre of events. The left-hand side pictures how, in principle, the *monetary* financing of investment goes on, the right hand side how the *real* financing goes on, also in principle. It must be noted that, in relation (7), saving (S) on the right-hand side of investment has not the same meaning as (S) on the left-hand side. Saving on the right of (I) is non-consumed income that makes available real resources, present and past labour, for producing investment goods. Saving on the left of (I) are saving or term deposits, which represent the basis for granting long-term credits by banks to finance part of investment (B) and are the source for financing part of investment by own financial means, that is, by retained profits and subscription of *new* shares, for instance. In fact, non-consumed income is almost immediately transformed in to saving or term deposits. However, since, in these notes, we consider *principles* only, no time lags need be introduced.

Now, the Basel agreements (Basel I 1988 and Basel II 2007, and now Basel III, 2010) have replaced reserve requirements by prescriptions on own capital to be held as a percentage of assets. This implies that, in principle, there is no upper limit to the credit volume the banking system can provide. However, as already mentioned, the investment volume is, according to classical-Keynesian theory, strictly limited in the long run through long-period effective demand as emerges from the supermultiplier relation (2) above. It is likely that, in order to maximise profits, banks will attempt to finance as much of the new investments as possible with credits (B) at the expense of directly reinvested savings. Hence the newly created money simply equals the credits provided by the banking system:

$$\Delta M = B = (1-b) S \tag{8}.$$

This relation exhibits the principle of *endogenous* money creation by the *global banking system*, which is always valid.

At this stage we may mention that *endogenous* money creation also takes place if banks buy government bonds to partly finance government deficits. Moreover, if the Central Bank buys *new* state bonds *exogenous* money creation takes place. Finally, if the Central Bank buys *existing* state bonds, for example, in the course of a monetary easing operation aimed at maintaining low interest rates on state bonds to keep the government debt service at a low level, the additional exogenously created money will directly flow into the financial sector. Given this, budget deficits are, as one would expect, at the origin of monetary expansion through the banking system comprising banks and Central Banks. It is very likely that the larger part of the newly created money will end up in the financial sector. All in all, and if the world level is considered, the capacity of banks and central banks to create money simply seems immense.

The newly created amount of money ( $\Delta M$  in relation (8) above) implies that only a fraction of saving is required to finance investment, since

$$\Delta M + (S - \Delta M) = I \tag{9}$$

Given this, saving amounting to  $(\Delta M)$  flows into the financial sector. As a consequence, the ratio (fM/rM = f/r) continuously grows. The evolution of the quantities (rM) and (fM) is indeed significant. In 2005 it has been estimated that in the last thirty years, that is from 1975 onwards, the quantity of money in the real sector (rM) has been multiplied by *four*, and the quantity of money in the financial sector by *forty*! To be sure, the total quantity of money has grown, too, but the main reason for this development is the increase of the relation (f/r). It is very likely that, in the meantime, (M) and (f/r) have increased still more, also because of the massive interventions of the Central Banks to save 'too-big-to-fail' banks. If such interventions are financed by the taxpayer, 'good' money, originating from the real sector, where it was a representative of value, has been turned into ,bad' money representing no values at all. In other words, this money has simply been frittered away.

Given this, the problem of the financial sector can now be assessed. In the *classical-Keynesian* perspective put to the fore in this paper, the *financial sector becomes increasingly* an extractor of social surplus through financialisation because it is far too large compared with the real sector. Too much money circulates in the financial sector  $[fM \ge (fM)^*$ , the amount of money that would normally be needed for long-term precautionary and reserve motives], subduing thus increasingly the real sector to the financial sector. Given this,

'monetary production economies' tend to become 'monetary finance economies', in which the banks and some big customers, including hedge funds, will tend to play a crucial role. Instead of factories, banks and hedge funds will tend to dominate an economy as is particularly visible in economically underdeveloped and transition economies. As a result, financial transactions more and more dominate the production of goods and the rendering of services. In fact, the production and service enterprises in the real sector, whether listed at the stock exchange or not, have to maximize their short-term profits in order to maximize shareholder's values. Otherwise takeover threatens. Given this, all firms have to reduce costs, wage costs most importantly, to realize high and rising profits. Distribution gets more unequal and internal demand stagnates or declines. Exports are the only way out. This, in turn, leads to a world war between workers and employees through a downward pressure on wages, worsening working conditions and delocalisations. These processes are enhanced through the fact that real sector enterprises have to reinvest large parts of their profits in the financial sector because reduced effective demand also reduces investment opportunities in the real sector. The final result is a continuous downward pressure on living standards worldwide, accompanied by growing poverty and misery and an increasing number of the working poor. This process of financialisation occurs because, in some or all banks of an economy, traditional commercial banking becomes secondary and investment and private banking, complemented by the activities of the hedge funds, move to the fore. This process goes on deterministically, driven by a dramatic excess of money (fM) above the socially necessary quantity of money,  $(fM)^*$ , circulating in the financial sector. This means that, to fully restore monetary production economies, the size of the financial sector has to be reduced, until socially appropriate relations between the financial sector and the real sector are established.

It is remarkable that the French philosopher Jacques Maritain has, in the 1930s already, pictured this rather perverse relationship between financial and real sector. In theory, Maritain says, one may easily conceive of an association between money (and finance) and productive labour, with money feeding, in a way, the various enterprises, contributing thus to increase a country's wealth. In reality, however, this scheme operates in an entirely different, even pernicious, way. In fact, money becomes a living organism nourished by the real economy. Profits are no longer the normal result of enterprise nourished by money, but the fruit of money fed by productive enterprise. This reversal of values most importantly implies that the claims to dividends become primary at the expense of the claims to salary. In this way, the

real economy becomes ancillary to the power of money, which thus gets primacy over goods useful to man (see on this Maritain, quoted in Dembinski 2008, French original, pp. 178-79).

Hence financialisation powerfully contributes to render income distribution more unequal. Moreover, yet another cumulative process or vicious circle between financialisation and income distribution comes into being. Indeed, if income distribution get more unequal the volume of saving (*S*) in relations (7 and 9) above increases and so does ( $z_s$ ) in the supermultiplier equation (2) above. However, since the long-period investment volume in equation (9) and the investment-output ratio (I/Q = (g+d)v) in the supermultiplier (2) are both determined in the long run, something will have to adjust to bring saving and investment and the corresponding ratios into line again in relations (7 and 9) and (2) respectively. What will adjust is the level of employment and output in the supermultiplier (2). In fact, with saving exceeding investment, and the saving-income ratio exceeding the investment-output ratio, output in (2) will decline. With the state expenditures (*G*) given a budget deficit occurs. This is equivalent to negative saving. Given this, output will decline until saving equals investment again.

A chronic budget deficit implies of course rising state indebtedness. But the declining level of employment exerts a pressure on wages. Hence income distribution will get more unequal. Additional saving will move to the financial sector (relation 7). This, in turn, means that more idle money will look for profits, increasing thus the degree of distributional inequality. In this way a new vicious circle between growing financialisation and additional income inequality comes into being. Inequalities persist and increase even more. Moreover, interest payments on public debt lead to a transfer of monetary resources from the taxpayer, the middle-class taxpayer in the main, to the owners of large monetary wealth, partly held in the form of bonds issued by the state. Again, income distribution tends to get more unequal, resulting in an increase in system-caused involuntary unemployment. Hence because high incomes and large fortunes are not taxed enough to prevent budget deficits, money flows into the financial sector and has to be channelled back into the real sector in the form of additional bonds issued by the state to finance budget deficits. This leads to increase in public debt and higher interest payments on this debt. In this way, a new downward spiral associated with growing inequality in income distribution and increasing involuntary unemployment comes into being.

5 Income distribution, international trade, the law of mass production and technology gaps On the basis of the exchange paradigm, neoclassical-Walrasian mainstream economists argue that, in principle and in competitive conditions, international trade is associated with harmony, equilibrium and peace. Montesquieu already said that countries trading with each other would not engage in war. However, in a classical-Keynesian perspective, grounded on monetary theory of production, an entirely different picture emerges. If indeed there is no tendency towards full employment, international trade tends to become a struggle for workplaces. This struggle will be all the more ferocious, the higher is the level of involuntary unemployment is. In the preceding sections it has been argued that involuntary unemployment causes income distribution to become more unequal, and that growing inequalities in distribution result in higher unemployment. Various factors may reinforce this vicious circle, the extension of monopoly capitalism and financialisation probably being most important. In this section we argue that international trade is also very likely to contribute substantially to the immense inequalities of income distribution between individuals and social classes, as well as between regions and countries.

In a monetary production economy, output and employment may, in principle, be determined by two mechanisms, the internal and the external employment mechanism (Bortis 2003b, pp. 74-78). As a rule, output determined by the internal mechanism ( $Q_I$ ) and by the external mechanism ( $Q_E$ ) diverge. This will be reflected in a current account surplus or deficit appearing in the numerator of relation (10) below. Various possibilities exist to adjust both employment levels to each other. For example,  $Q_I$  and  $Q_E$  may adjust mutually to each other through variations in government expenditures G or through variations in the propensity to import non-necessary goods related to consumption ( $b_2$ ). However, in a globalised economy, the external mechanism will ultimately govern economic activity in the long run , implying that  $Q_I$  will have to adjust to  $Q_E$  (Bortis, 1997, p. 169 and pp. 190-99; Kaldor, 1989).

The internal employment mechanism is exhibited by relation (10) - for the notation see the supermultiplier relation (2) above:

$$Q_{I} = \frac{G + (X - \pi M)}{z_{s}[1 - \frac{1}{k})] - (g + d)v}$$
(10)

The internal mechanism (10) will, as a rule, determine economic activity in large countries like the United States, Russia, China, and France. Hence, government expenditures, income distribution and gross investment will be crucial in governing economic activity. The foreign balance will, in normal circumstances, play a secondary role; however, for some large countries, China for example, the export surplus has become crucial for determining output and employment.

The external employment mechanism is pictured by relation (11); again the symbols used are explained in the context of the supermultiplier relation (2) above:

$$Q_{\rm E} = \frac{X}{\pi(b_1 + b_2)} \tag{11}$$

Densely populated countries lacking primary resources (agricultural products, raw materials and energy resources) are, as a rule, outward oriented with the external output and employment mechanism (11) governing economic activity. Obvious examples are Germany, Japan, Singapore, Switzerland, and Taiwan. Here  $Q_E$  will exceed  $Q_I$ , and vice versa for the weaker countries or, above all, for all those who are crushed on the world markets, and have, correspondingly, to accept the grand scale invasion of foreign products in their countries, who, as a consequence, will suffer from heavy foreign balance deficits.

The internal employment mechanism (relation 10) is politically exceedingly difficult to manage in an open economy. There is, first, an inherent difficulty. The internal employment mechanism in fact requires establishing socially sound proportions between state and the private sector, reflected by the ratio G/Q, *and* a socially acceptable distribution of incomes, such that economic activity is near to, or, ideally at, the full employment level. And, second, internal policies must be such that the external balance ( $X = \pi M$ ) is broadly preserved. These aims simply cannot be pursued in an open economy where remaining competitive is all important.

Given the immense difficulties associated with the internal employment mechanism it is natural that, with the creation of large free-trade areas and with globalisation, more and more countries will have to rely upon the external employment mechanism to secure levels of employment as high as possible. The employment effect of foreign trade will be particularly strong if the bulk of exports consists of high-quality industrial products and services and if imports are, in the main, made up of primary goods as is necessarily the case with the successful exporters just mentioned, and with the terms of trade being favourable. High-quality industrial goods and services are, as Nicholas Kaldor has emphasised time and again, labour-intensive - if account is taken of direct and indirect labour – while primaries are land-intensive. Countries mainly exporting primaries and, eventually, some standard industrial products at unfavourable terms of trade will suffer from heavy unemployment and income

distribution will be very unequal since the export revenues of primaries accrue, as a rule, to a small number of people only. Again there is strong link between persistent inequalities and permanent system-caused involuntary unemployment.

Now, there is a contradiction between the external and the internal employment mechanism at the world level. In fact, *world economic activity* ( $Q_W$ ) must be governed by the *internal* employment mechanism (relation 12 below) since the world as a whole is a closed system. The share of world economic activity attributed to each country is, however, governed by the *external* employment mechanism (relation 5 above). Hereby, the shares in world industrial production and services activities are, of course, of particular importance.

$$Q_{\rm W} = \frac{G}{Z_{\rm s}[1 - \frac{1}{k})] - (g + d)v}$$
(12)

In order to successfully set to work the external employment mechanism, countries and regions have to offer favourable conditions in order to attract firms, which create additional work places and, subsequently, export the bulk of their production. The work force has to be of good quality, but wages not too high; the infrastructure should be in a good state and should be available at low costs to the users; public services, education in the main, should be of high quality, but taxes not too high. Taxes may, in turn, be lowered if state activities are privatised. Given the endeavour to create, in each country, a favourable environment for exporting firms, it is likely that government expenditures stagnate or even decline at the world level. Even more importantly, income distribution has become markedly more unequal in the last twenty years or so (Galbraith and Berner, 2001). According to relation (12) a more inequal income distribution and stagnating or eventually declining government expenditures both imply that, in principle, long-period world economic activity - output and employment - remains more or less constant or even declines. As a consequence, the struggle for world market shares, mainly of industrial goods and services, will intensify. Through the external employment mechanism the successful exporters of high-quality industrial goods and services, using far superior technologies, may nevertheless enjoy a satisfactory, even a booming economic situation. The losers, however, will be precipitated into the abyss of mass unemployment and of social and political instability. Owing to the law of increasing returns and to the use of advanced technologies as well as to the principle of effective demand, Kaldorian cumulative processes may be set into motion resulting in larger inequalities of income, wealth and employment opportunities worldwide. The poor countries with very high unemployment levels will now be ready to accept foreign enterprises even at very bad conditions. Very low wages and disastrous working conditions may come into being; the situation gets worse through employing woman and children. This tendency may be reinforced through transnational enterprises, which practice a division of labour on the world level. The components of some product are produced in low wage countries, frequently at disastrous working conditions. These components are then assembled in the home country of the transnational firms. The final output is subsequently sold on the home market or exported at a relatively low price, which, because of the very low wages in the production of the parts allows nevertheless to realise high profits.

With distribution getting more unequal, internal demand stagnates or declines. Exports are the only way out. This explains why the successful exporters – Germany and Switzerland – realise exports surpluses and why the losers correspondingly incur import surpluses. In any case, this neo-mercantilist policies lead to *a world war between workers and employees* through a downward pressure on wages, worsening working conditions and delocalisations, entailing the deindustrialisation of vast areas. These processes are enhanced through the fact that real sector enterprises have to reinvest large parts of their profits in the financial sector because limited effective demand also reduces investment opportunities in the real sector. The final result is a continuous downward pressure on living standards worldwide, accompanied by growing poverty and misery and an increasing number of the working poor.

In general, then, international trade becomes a machine of generating inequalities if commodities are produced in low-wage countries and subsequently exported into high wage and high price countries. And, the huge trade profits are, as is very likely, shifted into the financial sector, which, as has been suggested in the above, reinforces inequalities. And, to recall the central classical-Keynesian proposition, increasing inequalities lead on to rising system-caused involuntary unemployment, and vice versa.

#### Conclusion: a new economic and financial world order is required

There is no way out. To overcome persistent and growing inequality as well as chronic involuntary unemployment, both related to neoliberal monopoly capitalism, financialisation and the disruptive effects of international trade, a new world economic and financial order is required. The state must be in a position to deal, in cooperation with the ,social partners', with the scale of economic activity and with the problem of distribution, the great distributional shares and the distributional structures, the wages structure in the main.

To bring about a high employment level associated with a socially acceptable distribution within each country means putting to work the *internal* employment mechanism. It is this, which requires a new world economic and financial order along Keynesian social liberal

lines. Social Liberalism in fact constitutes an alternative to actually dominating neoliberal Capitalism and centrally planned Socialism. A central element of a social liberal world order would be a supranational money (Keynes's *Bancor*) to effect international transactions, with each country or even region having a money of its own, precisely to be able to carry out employment and distribution policies. If successful such policies would create areas of stability worldwide. This implies that globalisation must take place upon a solid socio-economic basis comprising, most importantly, high employment levels and fair distributional arrangements. The point is that with massive unemployment and very unequally distributed incomes, life becomes a struggle for survival, implying social conflicts, that is, conflicts between individuals, social classes as well as ethnic and religious groups. However, when the employment level is high, and distribution socially acceptable, people can live together while preserving their cultural identity. Cultural diversity, in our view, is crucial since an exchange of ideas may take place, with individuals, regions and countries mutually enriching each other.

However, when long-period output and employment increase on account of incomes and employment policies, deficits in the current account might arise. This requires a slight management of imports: the coefficient of non-necessary imports must be adjusted such that, broadly, an equilibrium in the balance of current account obtains in the long run. This would imply free trade, within the constraint of keeping the foreign balance in equilibrium in each country. Moreover, a high level of employment and a socially acceptable distribution of incomes would enable free mobility of individuals between countries. With a high employment level everywhere the immigrant would, from an economic point of view, no longer be an enemy who will eventually occupy a scarce work place, but an ally and a partner within the social process of production. Given this, we do not see the future world a kind of ,oligarchic' capitalism where huge multinational and transnational enterprises engaged in the production of goods and services and powerful actors in the sphere of finance are struggling in a semi-feudal way for market shares and for power. This worldview would be defendable if the world market system were self-regulating. However, as is suggested in Bortis (1997) for example, there is no self-regulation at all of the market system. In a monetary production economy, effective demand ultimately governs economic activity, and the broad management of demand requires state intervention. Hence, we conceive of the coming world as a family of strong and sovereign states, where each state creates internal stability in terms of a high employment level and of fair distribution. On this solid social and political basis a very large degree of liberty of movement would be open for individuals and goods as is in the spirit of

economic and political liberalism. Hence the point is to leave presently dominating neoliberal Capitalism, and to create the social basis for a truly liberal world as Maynard Keynes had envisaged.

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