8 | IRRELEVANCE OF THE MDGS AND A REAL SOLUTION TO POVERTY: UNIVERSAL CITIZEN'S INCOME

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Introduction

In this chapter, we examine the relevance of Millennium Development Goal I (MDGI), Target I on halving from 1999 to 2015 the proportion of the population below the World Bank's extreme poverty lines, both in itself (methodologically) and against the background of two features of capitalism – periodic economic crises and the process of automation – which can be seen as the main forces determining global poverty trends.

The first section compares the central features of the Keynesian and neoliberal variants of capitalism, showing how the first mitigates capitalism's tendency to produce poverty and the second reinforces it. The tendency of global poverty to increase during the present neoliberal phase of capitalism is denied by the World Bank (WB), whose calculations imply the opposite trend. These calculations are shown to be biased. Moreover, the poverty threshold used by the WB is shown to be an Ultra Extreme Poverty Line (UEPL) arbitrarily detached from any conception of human need, implying that human beings can be treated as cattle.

Once the 'empirical evidence' from the WB has been shown to be false, we continue with our argument, looking, first, at MDG1 as a very limited initiative, as it is completely disconnected from the main causes of poverty trends. The second section discusses the conceptual limitations of MDG1, while the third looks at the Mexican experience, showing that, at least in this experience, this goal is completely irrelevant, both because the method for the identification of the poor is flawed and does not correspond to the methods which the Mexican federal government and the Mexico city government use to identify the poor, and because the fact that Mexico subscribed to the MDGs has not modified, in any sense, Mexican anti-poverty policies.

The fourth and fifth sections broach the two main causes of global poverty trends. Some Marxist and mainstream theories of capitalist crises are analysed in the fourth section. The fifth section starts by pointing out the nature and consequences of the Scientific and Technical Revolution (STR), which has made possible automation, and which is bringing to an end a form of a societal organization centred on paid work, i.e. the wage-based society. We look also at the (potentially) positive consequences of automation as it opens up the possibility of human emancipation from 'forced', repetitive and alienating work. The policy response of a Basic or Universal Citizen's Income - regarded as a promising alternative that saves capitalism and gradually, peacefully, transforms it into the basis for a more humane post-capitalist society. is addressed in the sixth and last section, together with other proposals. A very brief section of final reflections closes the chapter.

Capitalism and poverty in the Keynesian and neoliberal periods

Although capitalism per se has a tendency to produce poverty. this tendency was mitigated by Keynesian welfare states, while left unbridled by neoliberalism. Keynesian welfare states combined economic policies aimed at full employment and the institution of unemployment insurance so as to maintain positive rates of growth in effective demand, with very broad social policies. This variant of capitalism, prevalent for around forty years in many high-income countries, developed as a response to the 1929 Great Depression. which in turn was a crisis of overproduction and over-accumulation of capital, associated with low wages, as well as a response to the perceived successful establishment and economic performance in the USSR of what appeared as an alternative to capitalism.

Neoliberalism, on the other hand, was developed as a response to the 1970s crisis, which was generated by a declining rate of profit In Keynesianism, employment and wages are regarded as factors of effective demand. However, the Keynesian model ceased to be functional for capital when the rates of profit became too low. At that point in time, capital had the power to replace Keynesianism with a variety of capitalism that regards employment not as a demand factor but merely as a production cost, which, as all costs, must be reduced. Capital's counter-revolution was launched and is still under way globally. Neoliberalism can be seen as a global drive to reorganize the entire social order so as to subordinate it to the logic of accumulation

and profit. The restructuring of capitalism focused on an offensive against labour, which was devalued and fully recommodified. The result has been a massive redistribution of income from labour in favour of capital on a global scale. But in its sin, neoliberalism carried its own penance: in generating global production without global consumption, it raised to a planetary scale the unsolvable contradiction between global growth of production and global decline in real wages, the same contradiction which had caused the Great Depression of 1929.

The global devaluation of the workforce occurred in the context of two revolutions: one in information technologies that made deterritorialization of production possible, and the other in automation, which is making the direct use of labour less and less necessary in the production process. Under neoliberalism, the main instruments to expand demand are credit expansion, based on over-indebtedness of households, enterprises and governments, and financial bubbles or financialization.

Capitalism has gone back to the laissez-faire variant of capitalism that prevailed before 1929, and has globalized it further. The style of globalization fostered has been asymmetrical: commodities and capital move freely, but labour does not. The mobile factor of production (capital) imposes its conditions on the non-mobile factor (labour).

Capitalism is again in a crisis - the Great Financial Crisis - at least as severe as the 1929 Great Depression, and more global. Neoliberal capitalism increases poverty as it is based on the full commodification of labour, and on its devaluation. This is in stark contrast with Keynesian welfare state modalities of capitalism, which decreased poverty, at least in the developed countries, by revaluing the labour force.

Capitalism is coming to an end. It can be saved only in a radical way that would lead gradually to its transformation into the basis for a post-capitalist society. The main reason for this is the automation revolution, which is under way not only in industry, but also in agriculture and, crucially, in services. It is incompatible with the wage system as the main distributor of income that enables the sale of commodities and the very reproduction of life - in other words keeping the worker alive and allowing for intergenerational reproduction. Both automation and deterritorialization of production imply the devaluation of labour, massive unemployment combined with the growing presence of precarious employment and with them the globalization or generalization of poverty. Capitalism has to be radically transformed from within, The fourth and fifth sections broach the two main causes of global poverty trends. Some Marxist and mainstream theories of capitalist crises are analysed in the fourth section. The fifth section starts by pointing out the nature and consequences of the Scientific and Technical Revolution (STR), which has made possible automation, and which is bringing to an end a form of a societal organization centred on paid work, i.e. the wage-based society. We look also at the (potentially) positive consequences of automation as it opens up the possibility of human emancipation from 'forced', repetitive and alienating work. The policy response of a Basic or Universal Citizen's Income – regarded as a promising alternative that saves capitalism and gradually, peacefully, transforms it into the basis for a more humane post-capitalist society—is addressed in the sixth and last section, together with other proposals. A very brief section of final reflections closes the chapter.

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or it will destroy the planet as it tries, desperately, to save itself from death.

The decline of global poverty in the neoliberal period according to the World Bank

This analysis of a generalization of poverty is negated by World Bank statistics. These present declining levels of poverty in the global South, where most of the world's poor live. These statistics are false and misleading. Thomas Pogge and Sanjay Reddy (2010: 42-54) have illustrated a number of problems and flaws in the World Bank's poverty measurement. They include inter alia:

- The alleged evolution of world poverty between 1981 and 2005 depends highly on the poverty line (PL) used. If using the 'official' WB PL of \$1.25 (at purchasing power parities: PPP) per person per day, poverty over those twenty-five years decreases by 27 per cent; but if using a \$2.00 PL, poverty increases by 1 per cent. Using a \$2.5 PL, it increases by 13 per cent. As can be seen, three totally different diagnoses: the lower the PL, the more optimistic and more favourable the outcome of neoliberal capitalism. The total population living in poverty in 2005 would be, respectively. 1.38 billion at \$1.25 PL; 2.56 billion at \$2 PL; and 3.08 billion at \$ 2.50 PL.
- 2 The WB official PLs have been falling in real terms, while the institution attempted to give the impression of a rising PL. The reality is that in terms of 2009 purchasing power, the original PL of \$1, which was used between 1990 and 1997, was \$1.99 dollars; that of \$1.08, used between 2000 and 2008, was \$1.60; and that of \$1.25, which is now being used, is equivalent to \$1.37.

By lowering the PL in real terms, the WB calculations imply that poverty is falling, thereby adding a fallacy to an open and shameless cynicism implied in offering, to nearly half of the world's population, a perspective of bare animal-level survival - a standard of living attainable with \$1.25. The PLs of \$1.25 and \$2.00 per person per day lack any conception of human needs. This can be illustrated with the example of Mexico, where the PL of \$1.25 PPP results in very low poverty incidence levels (5.3 per cent in rural areas and 1.3 per cent in cities). Conversely, the two official poverty measures (one multidimensional, the other income poverty) applied by the federal government (Coneval) show poverty incidences of around 50 per cent of the national population. Two other measurement options (one of which is the official one for Mexico City) show a poverty incidence around 80 per cent.2

Moreover, in basing its PL on the extreme poverty line (EPL) of the poorest countries, the WB falls into circular reasoning, since it takes as a normative parameter the lowering of expectations by accepting a universal extreme poverty line (UEPL). The WB assumes food to be the sole human need, leaving all other needs fully unmet, and thus adopting a conception that reduces human beings to the status of animals.

The conceptual limitations of MDG1

The 2008 financial crisis has spread around the world, and its negative effects have combined with the food crisis, caused by increases in food prices. Consequently, the achievement of MDG1, Target 1 halving extreme poverty in developing countries - is threatened (World Bank 2009: xi). The WB estimated in 2009 that between 55 and 90 million people would fall into extreme poverty as a result of the crisis.

Among the various factors behind the adoption of such a low UEPL is the dominance, since the early twentieth century, in social sciences, especially in economics, of logical positivism and the replacement of human needs by preferences. Putnam (2002: 33, emphasis in original) deconstructs the idea of the facts/value dichotomy as follows:

What of the idea that the correct description of the world is the same as objectivity? This idea rests, pretty clearly, on the supposition that 'objectivity' means correspondence to objects ... But it is not only normative truths such as 'murder is wrong' that pose counterexamples to this idea; ... mathematical and logic truths are likewise examples of objectivity without objects ... it is time we stopped equating objectivity with description.

For Putnam, acceptance since the 1930s of the fact/value dichotomy destroyed the capacity of welfare economics to undertake an evaluation of economic well-being. The logical consequence of accepting the fact/ value dichotomy in economics should have been that economists reject altogether the existence of the discipline of welfare economics. Instead,

economists sought an optimal economic performance criterion that was neutral in terms of values, and found one in the notion of the 'Parero optimal' - or at least so they thought. Putnam highlights the weakness of the Pareto optimality criterion using the defeat of Nazi Germany in 1945 as an event that, according to this criterion, did not improve the world's well-being because at least one agent, Adolf Hitler, was worse off. Taking this example, Putnam argues that if there should be a discipline of welfare economics, and particularly if it is to deal with problems of poverty and other deprivations, then welfare economics cannot avoid substantive ethical issues.

Economists who defend the fact/value dichotomy have, paradoxically. invaded the study area of poverty. Poverty is an entangled term, where statements of facts cannot be separated from value judgements. As economists assume that in terms of values there can be nothing rational. they have not taken seriously the definition of the poverty threshold, which is a heavily value-laden task, thus facilitating the task for the World Bank and others of its ilk, which seeks to reduce measured poverty to a minimum. Opponents of value judgements, orthodox economists have impoverished poverty studies in the same way they impoverished welfare economics.

Let us look at how the WB defines its UEPL. In its first report on poverty (World Bank 1990: 26-7), the Bank defines it as 'the inability to reach a minimum standard of living', a standard which the WB defines as a level of consumption which must include 'two elements; the expenditure necessary to achieve a minimum level of nutrition and other basic needs, and an additional amount that varies from one country to another and reflects the cost of participating in daily life of society' (ibid.: 26). The first of the above elements is regarded by the WB as being 'relatively simple' to calculate, because it can be done 'by finding out the prices of the foodstuffs that comprise the diet of the poor. Ignoring the circular reasoning involved in this last phrase, the WB then argues that the second element is 'by far more subjective as in some countries piped water inside the dwelling is a luxury, but in others it is a "necessity" (ibid.: 27, emphasis added). The Bank regards the decision to consider piped water necessary a subjective exercise and tries to induce the belief that it is impossible to reach agreement on what human needs are, by qualifying piped water as both a 'luxury' and a 'need'.

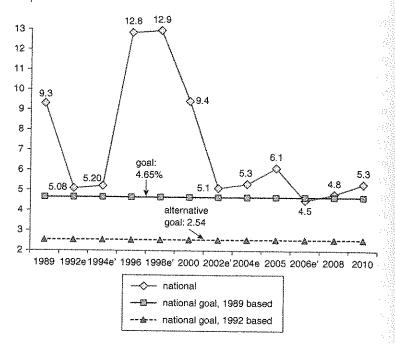
Several authors have criticized the denial, in different disciplines, of the existence of universal human needs (see Doyal and Gough 1991;

Wiggins 1987; Boltvinik 2005). Wiggins (1987) states that the irreplaceable character of the term 'need' in the political-administrative process forces one to capture the special content from which it derives its strength. If in the phrases formulating claims of need we try to replace 'needing' by 'wanting', 'desiring' or 'preferring' the result lacks not only the rhetorical force of the original, but even its particular meaning, its consistency and its logical argument. Wiggins defines necessities (the objects needed) as follows: 'a person needs X [absolutely] if and only if, whatever the moral and socially acceptable changes that can be envisaged (economic, technological, political, historical ...) occurring in the relevant period, he/she will be damaged if she/he lacks X' (ibid.: 10). Avoiding harm to human beings is what gives strength to the claims of needs.

The WB decides, in its definition, to take food as the sole need, leaving all other needs fully unmet and thus showing its conception of human beings. It implicitly reduces us to the level of animals since the UEPL suffices only to - inadequately - provide for nutritional requirements. Arguing that there is no consensus on what other needs are, the second element in the poverty definition of the World Bank (1990) is sidestepped. This is a crucial controversy. If norms regarding needs are seen not to have an objective social existence, then the concept of poverty would not be appropriate for scientific research, and the measurement of poverty would be a subjective exercise. As Sen has put it, it would be 'unleashing one's personal morals on the statistics of deprivation' (Sen 1981: 17). Sen has assumed the position that what researchers do is to describe existing social prescriptions, which constitutes 'an act of description and not of prescription'. For Sen (ibid.:17-18) there is a considerable degree of social consensus on minimum well-being standards. He quotes Adam Smith, who, speaking about how much an individual needs, says that a worker would be ashamed if he/she had to appear in public without a linen shirt and leather shoes. In the same line of argument, Boltvinik (2005) quotes Marx to show that there is an agreement in every society on the requirements of workers' consumption, which is expressed in real wage levels, the only price that includes, according to Marx, a historical and a moral element.

The irrelevance of MDG1 in the Mexican experience

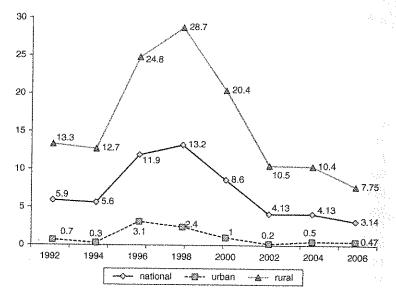
According to the Mexican presidency, in 1989, adopted as base year 9.3 per cent of Mexico's population was ultra-poor, using the \$1.25



8.1 Evolution of Ultra Extreme Poverty incidence (per cent) in Mexico and MDG1 (\$1.25 PPP)

dollar PPP threshold. UEP incidence has evolved as shown in Figure 8.1.3 This is a skewed selection of a base year, since the debt crisis started in 1982 and poverty was at a historical peak in 1989. Thus, MDG1 would require Mexico to reduce its UEP population to 4.65 per cent by 2015. As can be seen in Figure 8.1, if the year 1992 had been selected as a base year, the goal would have been set much more ambitiously, at 2.54 per cent, since UEP incidence in 1992 was lower than in 1989 – at 5.08 per cent. In 2010, UEP was 5.3 per cent, which is close to the minimalist goal of 4.65 per cent. But if 1992 had been the base year, the figure for 2010 (5.3 per cent) would be farther away from the alternative goal (2.54 per cent) than the base-year figure, which was 5.08 per cent. It also shows that the selection of 1989 as base year was a manipulation to ensure that Mexico would 'accomplish' MDG1.

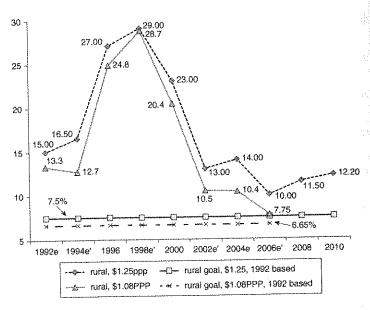
Figure 8.2 shows UEP incidence evolution for the years 1992 to 2006 at the national, urban and rural levels using the \$1.08 PPP threshold. Here we can appreciate that these minimalist thresholds would imply



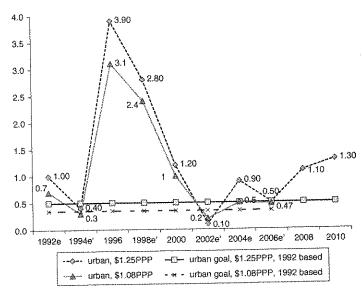
8.2 Evolution of UEP (per cent) in Mexico (national, urban and rural) (UEPL = \$1.08 PPP)

that there is almost no poverty in the urban areas of Mexico: the urban graph starts at 0.7 per cent and ends at 0.47 per cent, providing a paradisiacal view of Mexico as a country that has no poverty in the urban areas and where less than 10 per cent of the rural population is poor. But these series end in 2006; after that year poverty incidence started to increase again, as shown in Figures 8.3 and 8.4. In both, the respective goals using 1992 as base year4 have been added. The first compares the evolution of UEP incidence in rural settlements in a longer series: 1992 to 2010,5 showing that the evolution of rural poverty is quite similar using the two thresholds of \$1.25 PPP and \$1.08 PPP, and adds information about the evolution from 2006 to 2010 using the \$1.25 UEPL. The \$1.25 series shows that Mexico had, by 2010, merely reduced UEP incidence by less than three percentage points in rural settlements, while the goal would have required reducing it by 7.5 points. In 2006, the outcome is better for the \$1.08 UEPL: it lies only 1.1 percentage points above the goal, whereas with the \$1.25 UEPL, the outcome was 2.25 points worse than the goal.

Figure 8.4 presents the evolution of UEP in urban settlements and contrasts it with the two non-official goals. These goals had already



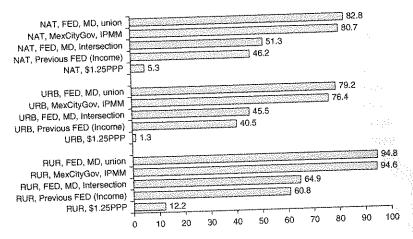
8.3 Evolution of UEP (per cent) in rural settlements with \$1.08 and \$1.25 PPP UEP lines (goals with 1992 as base year)



8.4 Evolution of UEP (per cent) in urban settlements with \$1.08 and \$1.25 PPP UEP lines (goals with 1992 as base year)

been achieved in 1994, and again in 2002. In 2006, one of them had been reached and the other was quite close to attainment. The reader might conclude that whereas MDG1 is set too low for urban areas of Mexico, it might be adequate for rural areas. However, this is not so.

Figure 8.5 shows the acute contrast between poverty incidence levels, using the \$1.25 PPP threshold and Mexican government thresholds. In Mexico, there are currently two official poverty measurement methods: one adopted by the federal government and the other by the government of Mexico City. The current federal method (identified in Figure 8.5 as FED, MD and intersection) shows multidimensional poverty, and replaced the previous income poverty method, which the federal government had introduced in 2002 (identified in the figure as Previous FED Income). The method adopted by the Mexico city government (identified in Figure 8.5 as MexCityGov, IPMM) is the Integrated Poverty Measurement Method, developed by Boltvinik in 1990-92. The figure also includes the reinterpretation of the current official federal-level method, using a union criterion of poverty instead of the official intersection criterion. The responsible agency, Coneval, has interpreted the larger population identified as poor in the union approach, arguing that it identifies the sum of the poor plus the vulnerable. The figure compares poverty incidence by these five methodological options at the national, urban and rural levels.



8.5 The \$1.25 PPP incidence compared with three official poverty measurements and one reinterpretation prevailing in Mexico (per cent)

The contrasts are stark. At the national and urban levels, the \$1.25 PPP line renders one-digit poverty incidence levels (5.3 and 1.3 per cent respectively) whereas the other options show poverty incidences in the range 40-95 per cent. The four alternative indices result in very high multiples of the incidences obtained with the MDG1 lines.

It is obvious that these huge discrepancies in MDG1 estimates of poverty incidence in Mexico vis-à-vis the official estimates make them and the MDG1 goal for 2015 absolutely irrelevant. The issues at hand are what is the purchasing power in Mexico of \$1.25 PPP, what does the UEP mean, and to what did the Mexican government commit itself by committing itself to attain MDG1?

As mentioned, to calculate poverty in 2005, the WB updated the values of the PPP dollars, relative to the currencies of most countries. In May of that year, a dollar PPP was equivalent to 7.13 pesos when the nominal exchange rate was 10.96 pesos per dollar (World Bank 2008: 25). Therefore, the poverty line defined by the WB (\$1.25) was 8.91 pesos per person per day (81 per cent of a current dollar value at that time). The very frugal 'food' line of the federal government recognizes that to acquire the raw food basket to cover nutritional requirements, an income of 19.50 and 26.36 pesos was needed in rural and urban areas, respectively. This means that people who have income equal to the WB's UEPL would be able to acquire only 46 and 34 per cent of the minimum requirements for not being extremely (or food) poor according to federal criteria, in rural and urban areas respectively. This shows that the UEPL of the WB is meaningless for Mexico, as it is well below what even the federal government considered its most extreme poverty threshold.

Two further points need to be made. First, from a methodological point of view, the measurement is statistically meaningless. To measure the incidence of a phenomenon as rare as UEP incidence in urban Mexico (1.3 per cent), one would need sample surveys of orders of magnitude larger than those employed in most countries, including Mexico, to capture its incidence with reasonable confidence intervals. With present sample sizes, the confidence intervals are so large that the results become statistically meaningless. For example, some of the abrupt fluctuations in the incidence of UEP observed in Figure 8.4 might be partially due to sampling errors and the observed changes between observations might be statistically non-significant (confidence intervals may overlap).

Secondly, from a policy point of view too, MDG1 had no relevance. The fact that Mexico committed to the Millennium Development Goals had no influence on its policy to combat extreme poverty. In the year 2000, when the Millennium Declaration was issued, Mexico had already been running the Progresa programme for three years. The programme title was changed in 2001 to Oportunidades. It has continued to grow, and has had a large influence (via the World Bank) on many other countries. It is a CCT (Conditional Cash Transfer) programme consisting of monetary transfers to the extremely poor only, conditional on certain behaviour requirements the beneficiaries have to follow

An impressionistic panorama of theories of capitalist crises

Marxian theory of capitalist crises6 is based, essentially, on the law of the declining rate of profit. This law establishes that labour is the only creator of value (and thus of surplus value). To the extent that the process of production is mechanized and automated - which is something capitalism cannot stop doing - the work process will be provided with more and better means of production. As a consequence, the 'organic composition of capital' - the proportion of constant capital invested in means of production and inputs in total capital - will increase. The rate of profit diminishes accordingly. Hence, the above-mentioned law is a consequence of mechanization and automation. Additionally, Marxist theory of capitalist crises is based on the Law of the Two Faces, which establishes that as a reaction to the first law, capital will do everything necessary (despite the falling rate of profit) to increase the mass of surplus value (which requires the employed workforce to increase), which in turn forces capital to search for the maximum rate of accumulation and to expand geographically. So, both the decrease in the rate of profit and the increase in the absolute amount of surplus value are necessary conditions for the functioning of capitalism. From this, John Strachey (1935) derived the Basic Dilemma of Capitalism, which makes capitalist crises inevitable; it is the dilemma by which wages are both too low and cause an excess supply (as in 1929 and 2007) and too high to diminish the rhythm of accumulation, as was the case in the 1970s.

Keynes' theory of capitalist crises refutes Say's Law ('supply creates its own demand'), contesting two myths of neoclassical theory: the myth of the rate of interest as the price that equates savings and investment, and the myth of wages as the price that equates supply and demand of labour. Keynes replaced these two myths by the thesis that the level of employment depends on effective demand (investment plus consumption) and that investment is determined by profit expectations (the expected rate of profit, which he called the marginal efficiency of capital, should be above the rate of interest so that new investment may proceed). Full employment ceases to be automatic and any level of employment becomes possible. Capitalism is not self-regulated; state intervention is hence indispensable.

Neo-Marxists Foster and Magdoff, in The Great Financial Crisis (2009), characterize the present phase of capitalism as financial monopoly capitalism. They postulate the need of current capitalism for financial bubbles (financialization). Their departure point is the tendency of monopolist capitalism to stagnate, as formulated by Baran and Sweezy (1966). Minsky (1986) had observed the tendency of capitalism to create financial bubbles, which pile debt on debt and will inevitably burst. Financialization has become the main mechanism (displacing military expenditures) to temporarily absorb the gigantic surplus generated and thus keep afloat financial monopoly capitalism. This is a phenomenon which they call the symbiotic embrace between stagnation and financialization, and which we characterize as spontaneous private Keynesianism. There is no possibility for the capitalist system to absorb the enormous surplus through productive investment. As, additionally, the financialization process itself is in crisis, Foster and Magdoff foresee a profound and prolonged stagnation.

Krugman (2008), winner of the Nobel Prize in economics, thinks that the fact that 'the shadow banking system' is unregulated is the cause of the bubble, which will burst inevitably. He argues that when the housing bubble burst, the lack of a replacement bubble led to the widespread crisis, thus acknowledging the need capitalism has of financial bubbles. Krugman stated clearly, even before the current crisis, the impotence of conventional economic theory to face a crisis. The stagnation of Japan in the 1990s would confirm the neo-Marxist thesis of the tendency to stagnation of financial monopoly capitalism.

The biggest difference between Krugman and Foster/Magdoff lies in the policy recommendations. While Krugman sees regulation of the shadow banking system as the solution, Foster and Magdoff think regulation would lead capitalism to chronic stagnation because of their analysis of the need for capitalism to create financial bubbles. In our view, this regulation would be equivalent to suppressing spontaneous private Keynesianism. Capitalist crises magnify the tendency of capitalism to create poverty.

The preceding argument requires an additional perspective to explain the current situation. This additional perspective is the Scientific and Technical Revolution (STR), a long-term process that began after the Second World War, goes beyond cyclical crises, and transforms the character of production as it creates the conditions for full automation. Full automation ushers in the inevitable end of capitalism and anticipates an era of upheaval. This is discussed in the next section. Meanwhile, let's recall Marx's (2000 [1859]: 425) famous Preface: 'At a certain stage of their development, the material productive forces of society come in conflict with the existing relations of production ... From forms of development of the productive forces these relations turn into their fetters. Then begins an epoch of social revolution.'

Automation and the end of the wage-work society

Capitalism, in its relentless search for higher profits, constantly revolutionizes the techniques of production. It has generated at least two industrial revolutions: the eighteenth-century First Industrial Revolution centred on coal and the steam engine and its multiple applications in factories, and in railway and maritime transport; and the twentieth-century Second Industrial Revolution centred on oil, the internal combustion engine, electricity and the telephone. In both revolutions, production in industry, agriculture and mining was greatly transformed. Machines replaced an important proportion of direct human labour. In many branches of industry, workers increasingly became supervisors of automatic machinery. But this machinery was based exclusively on mechanical principles, which have limits.

In contrast, the Scientific and Technical Revolution (STR), starting towards the end of the Second World War, introduced cybernetics, information technology, artificial intelligence and robotics. It unleashed a spiral of technological development that can be termed the Third 'Industrial' Revolution (TIR), covering all human productive activities. These revolutions have led to a gigantic replacement of human labour, first by mechanical machinery, and now by what

Richta et al. (1968) called autonomous production complexes. The stability of capitalism is very easily shaken by decreases in wages and/or employment, which diminish effective demand and lead the system to crises, as output cannot be sold. For the USA, Heilbroner (1995: xii-xiii) reminds us that technological change reduced the proportion of the agricultural labour force from 75 per cent in 1850 to just 3 per cent in 1990, and then reduced employment in industry. between 1960 and 1990, manufacturing output continued to grow while the number of jobs was reduced by half. These reductions were offset by an increase in employment in services, which rose from a to 90 million persons between 1870 and 1990. But as in industry, in services too technology creates jobs with one hand and destroys them with the other. 'We are pushing the relationship between machines and work beyond the difficult adjustments of the last two hundred years,' concludes Heilbroner, 'towards a new relationship about whose configuration we can only say it will be very different from the past' (ibid.: xiii). He refers to an anecdote from the history of economic thought:

In 1817 the famous economist David Ricardo wrote that the amount of employment in an economy was of no consequence as long as rent and profits, out of which flowed its new investment, were undiminished. 'Indeed?' replied Simonde de Sismondi ... 'In truth then, there is nothing more to wish for than the king, remaining alone on the island, by constantly turning a crank, might produce, through automata, all the output of England'. Jeremy Rifkin's mind-opening book is about a world in which corporations have taken the place of kings, turning cranks that set into motion the mechanical, electrical, and electronic automata that provide the goods and services of the nation. (Ibid.: xi)

There are not enough new commodified, profit-driven, labour-intensive activities to create enough new waged jobs to compensate for those that are being lost owing to automation. Although this transformation might take decades to bring about its full consequences, it has been silently contributing to crisis, stagnation, unemployment, underemployment, generalization of precarious employment (the 'precariat', as aptly dubbed by Guy Standing in 2011), poverty and hunger. But the full consequences might come earlier than the moment

when a high percentage of the working-age population has been displaced by automation. As Martin Ford (2009: 108-9) has stated, replicating the type of analysis of expectations Keynes did so well:

As automation begins to eliminate jobs in an increasingly wide range of industries and occupations, its impacts are clearly not going to be kept a secret ... As a growing percentage of the population is exposed to direct evidence of ongoing job losses, many people will begin to experience a greatly heightened level of stress and worry. Facing this, individuals will take the obvious action: they will cut back on consumption, perhaps quite dramatically, and try to save more in anticipation of a very uncertain future ... But what if, at some point in the coming decades, there is a general coalescence of belief that suggests the basic character of the economy has changed to such an extent that jobs may not be available – or at least will be very hard to obtain – in the future? If this were to occur in a critical mass of the consumers ... we could clearly be thrust into a very dark scenario ... a dramatic economic downward spiral would almost certainly be precipitated.

As a result of unstoppable automation progress, capitalism will fall into increasingly severe crises until it becomes completely non-viable. This is what a very distinguished group of scientist led by Robert Oppenheimer, constituted as the Ad Hoc Committee on the Triple Revolution, were pointing at, more than fifty years ago, when they published an open letter to the president of the United States in the *New York Times* which argued that cyber-technologies were forcing a change in the relationship between income and work and urged president and Congress 'to consider guaranteeing to every citizen, as a matter of law, adequate income'. Their text says (at www.marxists.org/history/etol/newspape/isr/vol25/noo3/adhoc.html): 'The continuity of the link between income and employment as the only major distribution system of effective demand – to grant the right to consume – now acts as the main brake of the almost limitless capacity of the cybernetic system of production'.

Compare the phrase in italics with Marx's words (cited above) in the 1859 Preface: 'At a certain stage of development, the material productive forces of society come in conflict with the existing relations of production ... From forms of development of the productive forcesthese relations turn into their fetters.'

In response to the Oppenheimer Committee request, President Kennedy decided to establish a National Commission on Automation. which was created by President Johnson. It published its report in 1965. The Commission argued that technology reduces the number of jobs, not work. Rifkin (1995: 83) comments that this is also the view of the Oppenheimer Committee: if the economy produces work without workers, as both sides suggest, then some form of government intervention would be necessary to provide a source of income, of purchasing power, to the growing number of workers displaced by technology. But ultimately, the presidential commission concluded that the technological displacement of workers was a necessary and temporary condition engendered by progress.

Rifkin (2003: 27) predicted that the twenty-first century would be faced with the end of mass work. 'This is the anthropological point where we are. We have a technological revolution that can create a renaissance or a great social upheaval. We can take a leap forward for the generation of your children or we can have years, decades and generations of instability and unrest,'

The renaissance option relates to texts by Marx and by Richta et al. Marx (1976 [1876]: 532) quotes Aristotle and then Antipater:

'If every tool, when summoned, or even by intelligent anticipation, could do the work that befits it, just as the creations of Daedalus moved of themselves, or the tripods of Hephaestus went of their own accord to their sacred work, if the shuttles were to weave of themselves, then there would be no need either of apprentices for the master craftsmen, or of slaves for the Lords'. Antipater, a Greek poet of the time of Cicero, hailed the water-wheel for grinding corn, that most basic form of all productive machinery, as the liberator of female slaves and the restorer of the golden age!

In Civilisation at Its Crossroads (1968: 35-6, 133-7), Richta et al. argue:

Over the past decades, the impetuous development of science and technology has begun to escape the limits of the industrial revolution ... The work instruments exceed the limits of mechanical machines and assume functions which, in principle, transform them into autonomous production complexes ... the

subjective aspect of production, unchanged for centuries, is amended: the direct production functions performed by simple labour force disappear gradually ... New social productive forces enter the process of production, the main being science and its technical applications ... The originality of the yet incipient development, which ... defines it as scientific and technological revolution, lies in its shaking of the entire elemental structure of production to radically alter the place occupied by man. It ensures the triumph of the automatic principle in the widest sense of the term ... (Ibid.: 35-6)

[While the] predominant type of worker in mechanised industrial production is the worker-operator handling machinery or caught in the mechanism of the assembly line ... [p. 133], complex automation goes increasingly further, freeing man from his direct involvement in the process of production, the role of simple 'gear' in the system of machines and offers him, in return, the role of promoter, creator and director of the technical system of production ... (Ibid .: 135)

We can expect the process of the STR to absorb traditional simple industrial work, which is not an internal need for man, but is imposed by an external necessity. On the other hand, once man ceases to produce the things that things themselves can produce in his place, the possibility to devote himself to a creative activity that mobilizes all his forces, that tend to research new pathways, that expands his capacities, opens up before him ... (Ibid.: 136)

The general diffusion of this type of human activity will in fact mark the overcoming of work. Indeed, once the material forms of human activity give to it the character of active manifestations of self, the external necessity, determined by the need of subsistence, gives way to the inner necessity of man; at that moment, human activity becomes a human need that exists for itself and enriches him; then the abstract contradictions between work and pleasure, between work and leisure wither away: human activity becomes entangled with life. (Ibid.: 136-7)

Rifkin (1995: 84-9), quoting David Noble (1984), posits that with respect to automation, most trade unions capitulated to companies, and this contributed to extinguishing a debate on the effects of automation. Fearful of being labelled modern Luddites and considered obstacles to progress, labour leaders were on the defensive and many embraced labour-saving technology, causing the labour movement to lose the strength it had acquired in the early post-war years. In collective bargaining, the workers relinquished control over technology in exchange for job retraining. Workers could have negotiated collective agreements to ensure a share in productivity gains derived from automation. However, unions grossly overestimated the number of skilled jobs that would be created by the new technologies. As a consequence, they lost members and influence. Eventually, automation destroyed their most powerful weapon: the strike. The new technology allowed management to operate plants with very few staff.

Rifkin (2003) recognized the clothing and electronics industries as the last cheap labour markets responsible for growth in the developing world, but added 'German engineers have automated the seam' and 'we are quickly going to the automated production of electronic components'. He wondered what would happen in the global South when these branches too become automated.

One year before Rifkin published *The End of Work*, Aronowitz and DiFazio published *The Jobless Future* in which they make the following point (1994: xi-xii):

As experts, politicians, and the public become acutely aware of new problems associated with the critical changes in the economy – crime, poverty, homelessness, hunger, education downsizing, loss of tax revenues to pay for public services, and many other social issues – the solution is always the same: jobs, jobs, jobs. The central contention of this book is that if jobs are the solution, we are in big trouble. We argue that the tendency of contemporary global economic life is toward the underpaid and unpaid worker ... Scientifically based technological change in the midst of sharpened internationalization of production means that there are too many workers for too few jobs, and even fewer of them are well paid ... The aim of this work is to suggest political and social solutions that take us in a direction in which it is clear that jobs are no longer the solution, that we must find another way to ensure a just standard of living for all.

They observed (ibid.: 3-4) that, contrary to expectations that the service sector would absorb the unemployment generated in

manufacturing, the new information technologies were also displacing workers. Rifkin (1995: 141-57), recognizing that computers can understand speech, read text and perform tasks previously performed by human beings, forecast a new era in which the services would be increasingly automated. Not only routine personal services, but also more complex services are being taken on by intelligent machines. Retail trade is also being automated. The use of bar codes, by increasing the efficiency of cashiers – the third-largest job in services in the USA (1.5 million) – will eliminate many jobs. Self-service checkouts are appearing in supermarkets, menacing the jobs of cashiers, as has already happened in car parks. Retail trade was the sponge that absorbed unemployment (Rifkin 1995) – this no longer holds true. The exceptions are the education and health sectors, where available data show for the USA that these continue to create jobs.

Rifkin (ibid.: 121) returns to the end of work theme:

Big data, advanced analytics, algorithms, Artificial Intelligence (AI), and robotics are replacing human labor across the manufacturing industries, service industries, and knowledge and entertainment sectors, leading to the very real prospect of liberating hundreds of millions of people from work in the market economy in the first half of the twenty-first century.

He quotes the 4 November 2011 issue of *The Economist*, which cites Rifkin (1995), who had 'argued prophetically that society was entering a new phase – one in which fewer and fewer workers would be needed to produce all the goods and services consumed ... the process has clearly begun'. Rifkin reacts to this text:

It wasn't that I was clairvoyant. The signs were everywhere, but in the growth years, most economists were so attached to conventional economic theory – that supply creates demand and that new technologies, while disruptive, reduce costs, stimulate consumption, spur more production, increase innovation, and open up opportunities for new kinds of jobs – that my message fell largely on deaf ears. Now economists are taking notice. (Rifkin 2014: 122)

He adds:

is the small wave that distracts you. Automation is the big one further out that you don't see coming.'

Brynjolfsson and McAfee (2012, 2014) provide further evidence on the impact of automation on job displacement. For instance, they show clearly that job growth has been de-accelerating constantly since the 1940s.

The population of the United States grew by 30 million in the past decade, so we would need to create 18 million jobs just to keep the same share of the population working as in the year 2000. Instead, we've created virtually none, reducing the employment to population ratio from over 64% to barely 58%. The lack of jobs is not simply a matter of massive layoffs due to the Great Recession. Instead, it reflects deep structural issues that have been worsening for a decade or more. (Ibid.: 35)

In a more radical vein, André Gorz, the great Marxist thinker, begins Reclaiming Work. Beyond the Wage-Based Society (1999: 1) by saying: 'We must dare to break with this society that is dying and will not reborn. We must dare to Exodus. There is nothing to be gained from symptomatic treatment of the "crisis" because there no longer is any crisis. A new system has been installed which is abolishing "work" on a massive scale.'

There is a partial diagnostic agreement between Gorz, Rifkin, Brynjolfsson and McAfee, and Aronowitz and DiFazio. Gorz maintains that 'It is not this abolition we should object to, but its claiming to perpetuate that same work, the norms, dignity and availability of which it is abolishing, as an obligation, as a norm, and as the irreplaceable foundation of the rights and dignity of all' (1999: 1). He concludes:

We must dare to prepare ourselves for the Exodus from 'work-based society': it no longer exists and will not return. We must want this society, which is in its dead-throes, to die, so that another may arise from its ruins. We must learn to make out the contours of that other society beneath the resistances, dysfunctions and impasses which make up the present. 'Work' must lose its centrality in the minds, thoughts and imagination of everyone. We must learn to see it differently: no longer as

Today, near workless factories run by computer programs are increasingly the norm, both in highly industrialized countries and developing nations ... [Many] blame blue-collar job losses on the relocation of manufacturing to cheap labor markets like China. The fact is that something more consequential has taken place. Between 1995 and 2002, 22 million manufacturing jobs were eliminated in the global economy while global production increased by more than 30 percent worldwide ... Manufacturers that have long relied on cheap labor in their Chinese production facilities are bringing production back home with advanced robotics that are cheaper and more efficient than their Chinese workforces ... (Ibid.:123)

As Rifkin acknowledges (ibid.: 128), after the Great Financial Crisis there has been a boom in publications 'warning about automation's impact on jobs ... and their message of a coming workerless world began to gain attention in social media outlets, even attracting some comments from policy makers, think tank researchers, economists, and President Barack Obama'.

Martin Ford links the advancing technology with the current crisis (2009: 6), and is concerned that economists reject the idea that technology displaces human labour and dismiss those raising concerns regarding technological unemployment as 'neo-Luddites', coining the term *Luddite-fallacy* (ibid.: 47-8). He is very clear on the role of the labour market in capitalism:

The reality is that the free market economy, as we understand it today, simply cannot work without available labor market. Jobs are the primary mechanism through which income – and therefore purchasing power – is distributed to the people who consume everything the economy produces. If at some point machines are likely to permanently take over a great deal of the work now performed by human beings, then that will be a threat to the very foundation of our economic system. This is not something that will just work itself out. (Ibid.: 5)

He perceives, correctly in our opinion, that 'off-shoring is a prelude to automation' (ibid.: 56-7): '... many jobs that are currently being off-shored will, in the future, end up being fully automated'; 'Off-shoring

something we have – or do not have – but as what we do. We must be bold enough to regain control of the work we do.

(Ibid.: 1, emphasis in original)

Gorz also discusses the nature of the work that is being eliminated: 'it is what everyone calls work, but not work in the philosophical or the anthropological sense, nor the work of giving birth to a child, nor the work of the sculptor or poet'.

It is not work as the 'autonomous activity of transforming matter', nor as the 'practico-sensory activity' by which the subject exteriorizes him/herself by producing an object which bears his/her imprint. It is unambiguously, the specific 'work' peculiar to industrial capitalism, the work we are referring when we say 'she doesn't work' of a woman who devotes her time to bringing up her own children, but 'she works' of one who gives even some small part of her time to bringing up other people's children ... (Ibid.: 2)

From the above analyses, we conclude that the development of productive forces compatible with capitalism appears to be coming to an end. Globalization and industrial expansion to capture the very cheap and docile labour of the global South appear as temporary steps before the full automation of production.

What can be done within capitalism? Universal, Sufficient and Unconditional Citizen's Income

Earn your bread by the sweat of your brow, says the Bible, and we may add: 'and by the humiliation of your spirit'. Maslow (1987 [1954]: 27) wrote that the experience can reassess more pre-potent needs (the physiological): 'a man who has quit his job to keep self-respect, and lives hungry for six months, may be willing to return to work even at the price of losing his self-respect'. Heilbroner (1963) has shown that in the history of mankind there are three ways to solve the fundamental economic problem, defined as the mobilization of human energy to work: tradition, coercion or literal whip, and the metaphorical whip of hunger. Despite the monotonous nature of work and the humiliations imposed, the proletarian cannot quit her job because she is dominated by the whip of hunger.

The growing contradiction between automation and the wage-based society, which heralds the end of capitalism, has stimulated different proposals to solve a challenge, which could result in a global apocalypse. Rifkin (1995) offered a proposal: a reduction of the work week and the promotion of non-profit-oriented activities, in a third sector or social economy, beyond the market and the public sector, providing community and social services. This sector would be promoted through tax incentives and by the government paying a social wage to those 'holding a job' in it. This can be interpreted as an attempt to save capitalism, although Rifkin posits that capitalism will constitute a declining proportion of the future economy, while the third sector would increase. Rifkin's proposal is not in the line of a Basic Income approach, which he discusses but does not incorporate into his proposal.

Martin Ford has also offered solutions to this blind alley seeking to save capitalism. He acknowledges, 'in order to preserve the mass market in a largely automated economy, we need to provide an alternative to jobs. We need a mechanism that can get a reliable income stream into the hands of consumers. This, of course, is a proposition that will be very difficult for most of us to accept; the idea that we must work for a living is one of our most basic core values' (2009: 159). He adds (ibid.: 160), 'there is simply no way to envision how the private sector can solve this problem. There is simply no real alternative except for the government to provide some type of income mechanism for consumers.' To fund this income-providing mechanism, Ford (ibid.:162-79) proposes to recoup wages lost as a consequence of automation via taxation. Incomes would be unequal and would depend on three factors: level of education, participation in community and civic activities, and positive behaviour towards the environment. He sums up his proposal (ibid.: 195) as follows: 'By offering unequal incentive-based income to consumers, we not only sustain consumer demand, but also drive people to act in ways that benefit us all ... It could be called a conditional basic income, which apparently would not be universal but targeted at those directly affected by automation.

The great aspiration to overcome scarcity and alienation, achievable from the point of view of the productive forces for the past fifty years (Richta et al. 1968), is, in our assessment, unattainable within capitalism. The intensified contradiction between the forces of production and the rules of income distribution in capitalism was observed, from

the 1960s, by persons who were more interested in saving capitalism than in overcoming it.

Oppenheimer and the group of scientists he led, which included Robert Theobald, proposed a Universal Citizen's Unconditional Income (UCUI). Theobald coordinated one of the first publications on a 'Guaranteed Income' (Theobald 1965). In his contribution to that volume, Fromm argued that the UCUI could, for the first time. free the individual from the threat of starvation, from economic threats. Nobody would have to accept conditions of work merely because he otherwise would be afraid of starving ... the woman could leave her husband, the teenager his family (Fromm 1965: 176).

In another approach, with a view to transcending rather than saving capitalism, André Gorz made the case that, with automation, the labour society, the wage society, was coming to an end. It was therefore time to distinguish between 'the imperative need for a sufficient, regular income' and 'the need to act, to strive, to test oneself against others. and be appreciated by them' (Gorz 1999: 72). The right to a sufficient, regular income will no longer have to depend on the permanent occupation of a steady job. The need to act, strive and be appreciated by others will no longer have to take the form of paid work done to order ... 'Working time would no longer be the dominant social time.' These are the outlines of a new civilization 'which is struggling to be born beyond the wage-based society ... They correspond to the aspiration for a multi-active life ...' and personal autonomy (ibid.: 73, italics in original).

Discussing his proposal of a guaranteed income for life, Gorz argued that it must meet two conditions: it needs to be sufficient to avoid poverty, and it needs to be unconditional. One could therefore call it a Universal, Sufficient and Unconditional Citizen's Income (USUCI). A USUCI would allow people to refuse non-dignified working conditions (ibid.: 82-3). USUCI is intended to 'enable people to reject inhuman working conditions. It must be part of a social environment which enables all citizens to decide on an ongoing basis between the use value of their time and its exchange value, that is to say between the 'utilities' they can acquire by selling their working time and those they can 'self-provide' by using that time themselves' (ibid: 83). The aim of USUCI is 'not to enable people not to work at all, but rather to give genuine effect to the right to work: not the right to that work you are "employed" to do, but to the concrete work you do without having to be paid for it'. In this sense, work represents a mastery of self and of the surrounding world which is necessary for the development of human capacities. 'As the need for "work" diminishes, fairness requires that it should diminish in everyone's life and that the burden of work should be equitably distributed' (ibid.: 84).

USUCI differs fundamentally from the guarantee of an income below the poverty line proposed by neoliberals, which seeks to force the unemployed to accept reduced pay and thus make profitable otherwise unprofitable jobs, creating a lumpen labour market (ibid.: 81).

According to Gorz, free time allows individuals to develop their capacities for invention, creation, conception. The consequence - but not the purpose - of this is unlimited productivity. It allows converting production into an ancillary activity and enables the maximization of available time to become the inherent meaning and purpose of economic reason. It replaces work - as the dominant form of activity - with personal activity.

To replace the society of work with the society of multi-activity, the USUCI must be accompanied by the redistribution of work, and new modes of cooperation and exchange (ibid.: 93-100). There is only one way to distribute a decreasing volume of work among a growing number of people: to work increasingly in a discontinuous way and allow people the choice between various forms of discontinuity, thereby transforming it into a new freedom: the right to work intermittently and lead a multi-active life.

Gorz finds one concrete example for this approach in Denmark. There, non-work is subsidized. Its principles give equal importance to the right to work and to the right not to work and the links between them; the right to work discontinuously with a continuous income. Payment when not working is 63 per cent of normal salary; thus someone who works half-time receives a salary equal to 81.5 per cent of a full-time salary. The limit of the Danish formula lies in the fact that it guarantees a conditional social income that not everyone can achieve. But as a transitional formula it is particularly interesting, Gorz concludes (ibid.: 96-8).

The issue of funding as an objection to USUCI 'comes to encapsulate the problem of the system as a whole': although working time is no longer the measure of created wealth, it still remains the basis for the distribution of incomes. Wassily Leontief (quoted by Gorz) puts it as

follows: 'When wealth creation depends no longer on work, men will die of hunger at the gates of paradise, unless a new income policy is established as a response' (Gorz 1998: 100). As an important financial source for USUCI and decommodification, two lines of action should be gradually implemented. First, land rent should be appropriated by the state, by way of very high and progressive property taxes on commercial land use. A second source would come from a tax on financial transactions and on foreign currency transactions, and a capital gains tax.

A USUCI would eliminate poverty radically and at the same time solve the contradiction between gigantic levels of actual and potential production and shrinking consumer demand as a result of wage loss due to automation. It would save capitalism, but plant in it the seed of its transformation by eliminating the whip of hunger and thus liberating people.

Final reflections

If capitalist crises and automation are the two basic forces determining the trends of global poverty, then it is logical to conclude that the adoption of poverty reduction goals is a somewhat futile exercise, unless this exercise examines the causes of global poverty trends and establishes the changes required to modify those trends. The chapter has argued that capitalism is coming to an end because automation continuously decreases the jobs required to produce a potentially increasing amount of goods and services. When jobs decrease, the income in the hands of the vast majority of consumers also decreases, making the sale of goods produced impossible. This growing contradiction can bring to an end a society that distributes income mainly by wages.

The conclusion is straightforward: the global community must discuss how to design and implement a mechanism that could decouple income from paid jobs, if it wants to avoid the social chaos that could be coming soon, both in developed and in developing countries, if it continuous pretending that fixing poverty reduction goals is all it has to do.

USUCI, or something equivalent to it, prevents the coming social chaos as it decouples income from declining jobs and allows for the capitalist system to continue functioning. Not only extreme poverty - all poverty is eliminated completely and permanently. The barriers that social relations of production pose to the further development of productive forces are eliminated.

On the other hand, the adoption of ultra-extreme poverty reduction goals does not respond to the social chaos threat. These goals have led many countries to the adoption of CCTs (Conditional Cash Transfer) targeted at ultra-extreme poor households, following recommendations by the World Bank to achieve the goals. But CCTs result in a lumpen proletariat labour market, promoting the growth of the 'precariat' (Standing 2011), and do not reduce poverty significantly, as transfers are very low and the causes of poverty trends are not taken care of.

Notes

- 1 Unless otherwise stated, emphasis in quoted material is the authors'.
- 2 The official poverty measurement method used by the Government of Mexico City is the Integrated Poverty Measurement Method (IPMM), a multidimensional method developed by Boltvinik in the early 1990s. The other is a reinterpretation of Coneval's official poverty measurement method, conceiving as poor all households/ persons belonging to each of two sets: those below the poverty line and showing one or more 'social lacks' (i.e. deprivation in direct indicators), instead of using an intersection, as does Coneval.
- 3 In the figure the years that show an e have been estimated from a graph in on the Mexico presidency's web page and also using previous and more detailed information from INEGI which includes

- all the years since 1989 where information is available and which separates rural and urban figures on UEP incidence.
- 4 The year 1989 cannot be used as baseline as there is no comparable information for that year to identify urban and rural settlements.
- 5 National poverty data for 1989 cannot be disaggregated by rural and urban areas because the corresponding 1989 survey used a very odd rural-urban definition.
- 6 Marx did not formulate systematically a theory of capitalist crises, but wrote a lot about them in dispersed passages of his main economic writings: Capital, Grundrisse and Theories of Surplus Value, John Strachev (1935) was one of the first to systematize his thought on this topic, together with Paul Sweezy (1970 [1942]).

References

- Aronowitz, S. and W. DiFazio (1994) The lobless Future: Sci-Tech and the Dogma of Work, Minneapolis and London: University of Minnesota Press.
- Baran, P. A. and P. Sweezy (1966) Monopoly Capital, Monthly Review Press.
- Boltvinik, J. (2005) 'Ampliar la Mirada. Un Nuevo enfoque de la pobreza y el florecimiento humano',
- PhD dissertation, Centro de Investigación y Estudios Superiores en Antropología Social, Occidente, Guadalajara, Mexico.
- Brynjolfsson, E. and A. McAfee (2012) Race against the Machine, New York: Norton.
- (2014) The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies, New York; Norton.

- Doyal, L. and I. Gough (1991) A Theory of Human Need, London: Macmillan.
- Ford, M. (2009) The Lights in the Tunnel. Automation, Accelerating Technology and the Economy of the Future, San Bernardino, CA: Acculant Publishing.
- Foster, J. B. and F. Magdoff (2009) The Great Financial Crisis: Causes and Cansequences, New York: Monthly Review Press.
- Fromm, E. (1965) 'The psychological aspects of the Guaranteed Income', in R. Theobald, *The Guaranteed Income.*Next Step in Economic Evolution, New York: Doubleday, pp. 175–84.
- Gorz, A. (1998) Miserias del presente: Riqueza de lo posible, Buenos Aires: Paidós.
- (1999) Reclaiming Work: Beyond the Wage-Based Society, Cambridge: Polity Press.
- Heilbroner, R. (1963) The Making of Economic Society, Prentice Hall.
- (1995) 'Foreword', in J. Rifkin, *The End of Work*, New York: Putnam, pp. xi-xiii.
- Krugman, P. (2008) The Return of Depression Economics and the Crisis of 2008, New York; Norton.
- Marx, K. (1976 [1867]) Capital: A Critique of Political Economy, vol. 1, London: Penguin.
- (2000 [1859]) Preface to A Critique of Political Economy, in D. McLellan (ed.), Karl Marx: Selected Writings, Oxford: Oxford University Press.
- Maslow, A. (1987 [1954]) Motivation and Personality, 3rd edn, New York: Addison-Wesley Longman.
- Minsky, H. (1986) Stabilizing an Unstable Economy, Yale University Press.
- Noble, D. (1984) Forces of Production: A Social History of Industrial Automation, New York: Knopf.
- Pogge, T. and S. Reddy (2010) 'How not to count the poor', in S. Anand, P. Segal and J. Stiglitz, Debates on the Measurement of Global Poverty,

- Oxford: Oxford University Press, pp. 42-85.
- Putnam, H. (2002) The Collapse of the Fact/Value Dichotomy and Other Essays, Cambridge, MA: Harvard University Press.
- Richta, R. et al. (1968) La civilización en la encrucijada, Madrid: Artiach.
- Rifkin, J. (1995) The End of Work, New York: Putnam.
- (2003), 'Tiempo libre para disfrutarlo o hacer filas de desempleados', in L. J. Alvarez, Un mundo sin trabajo, Mexico City: Editorial Dríada, pp. 15-49.
- (2014) The Zero Marginal Cost Society,
 New York: Palgrave Macmillan,
- Sen, A. K. (1981) Poverty and Famines: An Essay on Entitlements and Deprivation, Oxford: Clarendon Press.
- Standing, G. (2009) Work after Globalization: Building Occupational Citizenship, Cheltenham: Edward Elgar.
- (2011) The Precariat: The New Dangerous Class, London: Bloomsbury.
- Strachey, J. (1935) *The Nature of Capitalist Crisis*, New York: Covici Friede Publishers.
- Sweezy, P. (1970 [1942]) The Theory of Capitalist Development, New York: Monthly Review Press.
- Theobald, R. (1965) The Guaranteed Income: Next Step in Economic Evolution, New York: Doubleday.
- Wiggins, D. (1987) Needs, Values, Truth: Essays in the Philosophy of Value, Oxford: Clarendon Press.
- World Bank (1990) World Development Report 1990: Poverty, Washington, DC: World Bank.
- (2008) Global Purchasing Power,
 Parities and Real Expenditures, 2005,
 Washington, DC: International
 Comparison Program, World Bank,
- (2009) Global Monitoring Report
 2009, A Development Emergency,
 Washington, DC: World Bank.

9 | SOCIAL SOLIDARITY MUST REPLACE POVERTY ERADICATION IN THE UN'S POST-2015 DEVELOPMENT AGENDA

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Introduction and overview

This chapter does the following. It

- reviews the beginnings of the discussion within and around the UN regarding what should be the UN development agenda after 2015. It suggests that while the initial outcomes of the review held out the possibility that the post-2015 agenda might shift from a targeted and technical residual approach to alleviating poverty to an approach which is more concerned with policy and process focused in part upon overcoming social structural inequity both within and between countries, this agenda a) became complicated by the injection of sustainability concerns into it and moreover b) by the time of the publication in late 2014 of the Open Working Group's outcome document the focus on social policies that might address structural inequality was lost.
- argues, and presents support for the case, that the continuing global
 politics of poverty alleviation and eradication should indeed shift
 towards a new global politics of building social solidarity and include a
 focus as much on the welfare needs of middle-class state builders as
 on the poor in order to create those solidarities.
- reviews several global policy responses that have been concerned with poverty issues consequent upon the global economic crisis of 2008. These include a) affording more resources to the IMF, b) the development of the UN-wide Social Protection Floor initiative, c) the increased attention given to the concept of freedom from poverty as a human right and d) a renewed focus on state-lead development.
- asks which if any of these approaches might both address the issue of building solidarities and of being likely to be embedded in the post-2015 agenda.