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# L'impact sur la main d'oeuvre d'une crise des marchés financiers mondiaux associés à un système d'énergie capitaliste

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*Résumé*

*Cet article examine l'impact de la mondialisation des marchés financiers sur la main d'œuvre quand ceux-ci sont liés à un système d'énergie mondial basé sur les combustibles fossiles. L'accessibilité désormais limitée des combustibles fossiles et l'effet désastreux des émissions de* $CO_2$ *sur l'environnement imposent des limites aux voies de développement dépendantes d'un capitalisme à base de combustibles fossiles. Mais la mondialisation financière se nourrit de croissance sans se soucier de limites aussi organiques. De telles pressions ont provoqué l'effritement des normes de travail décent (telles que définies par l'OIT), ouvrant la voie à la propagation de travail précaire et informel. En réaction, des projets basés sur une économie solidaire (ou morale) émergent en Amérique latine. Dans la plupart des cas, ces projets tendent plus à utiliser des énergies renouvelables que les entreprises du secteur formel, sujettes aux pressions compétitives de la mondialisation et cherchant toujours à accroître leur productivité et à réduire leur main d'œuvre.*

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# The Capitalist Energy System and the Crisis of the Global Financial Markets: the Impact on Labour

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*Abstract*

*The article examines the impact of globalization on labour, when based on a global energy system using fossil fuel combustion. The limited availability of fossil fuels and the disastrous environmental effects of $CO_2$-emissions set limits to a development path reliant on fossil fuel-based capitalism. However, financial globalization requires ongoing growth without considering these natural limits. These pressures have resulted in crumbling standards of decent work (as defined by the ILO) as employers turned to the increased use of informal and precarious labour. In response, projects based on a "solidarity" (or moral) economy are emerging in Latin America. In most cases, these projects use more renewable energy than formal-sector corporations as they are subject to the pressure of global competition, the search for increased productivity and a reduced labour force.*

## Introduction: Money and Labour

Globalization can best be described as an overarching 'compression of time and space' (Harvey, 2003). The compression of time occurs through the acceleration of production, transportation, communication, and consumption. The acceleration allows for more production in a given time span, or the same production in a shorter time span. This acceleration is nothing more than an increase in labour productivity, and has been the goal of free market capitalism since the era of Adam Smith and David Ricardo. It was even applauded by Karl Marx and Friedrich Engels in the 1848 *Communist Manifesto*. Increasing the 'wealth of nations' through productivity growth has meant a widening and deepening of the division of labour, in the factory workplace, on a national and a global scale. This model made the global marketplace possible.

Although it is a long lasting process occurring over centuries, the concept of globalization is of a quite recent origin. It came to the forefront in the 1990s after the collapse of the Berlin wall and the opening of formerly protected markets and societies in Eastern Europe and the former Soviet Union. A global market system and the spread of a formal democratic order and of global rules of 'good governance' are promoted as the fulfilment of human development, as the realization of a divine destiny, comparable to the Leibnizian *Theodizee* of the "best of all possible worlds" on Earth (Leibniz, repr. 1948). This is the philosophical background of the triumphant (and at the same time trivial) statement coined by Margaret Thatcher in 1989 that "there is no alternative" to the ideological predominance of neoliberalism in the globalized world, i.e. to the transformation of the diversities of life into the 'single price-rule' on the world market.

The acceleration in time and the expansion in space follow the logic of money, i.e. the necessity of increasing its quantity. Capitalist societies are based on money (*Geldgesellschaften*), but they are different from pre-capitalist societies in that they succeeded in transforming the abstract monetary necessity of quantitative growth into reality by changing the social and technical conditions of production in order to produce higher surplus value by exploiting living labour. This means that capitalist societies are not only based on money but on labour (*Arbeitsgesellschaften*). The production of a surplus (in Marxian terms: in a material form of use values) requires the massive use of fossil energy and simultaneously the introduction of adequate machinery systems to transform primary fossil fuels into working energy (this has been analyzed in the broader context of Marxist ecological economics by Burkett, 2006). On the one hand, fossil energy is substituting for living labour and thus producing, as Ricardo said, 'redundant labour', or unemployed people. In Marx's understanding, this follows from the capitalist tendencies of relative surplus value production, or from a reduction of labour inputs and a substitution of variable capital ('living labour') by constant capital ('dead labour'; machinery), stimulated by the profit motive.

On the other hand, the acceleration of production and circulation appears as a positive GDP growth rate. Until the beginning of the industrial and fossil era, for centuries, economic growth was absent in the economic reality of reproduction as well as in social and political discourses. The economy was a more or less stationary one, although since the emergence of modern capitalism in the fourteenth century (in Italian cities), absolute surplus value production already fostered economic and social change. But since the industrial revolution at the end of the eighteenth century, GDP growth rates per capita increased to an unprecedented level in the history of mankind, with rates of only 2.2% per annum from 1820 until the end of the twentieth century (Maddison, 2001). The 'wealth of nations', measured as per capita income, doubled from generation to generation and the gap between low and high incomes and fortunes widened. Therefore, inequality also grew to unprecedented levels in human history as an effect of the widening social divide imposed by the class contradictions between capitalists and workers (this is the side of the *Arbeitsgesellschaft*) and between creditors and debtors (this is the other side of capitalism, the *Geldgesellschaft*).

Both sides of the capitalist society triggered profound global change. The transformation of money as a means of payment into credit and the resulting financialization of modern capitalism has produced new and more violent crises which exert a significant impact on the world of labour. Contrary to the benefits promised by free trade, resulting from open financial markets and market-friendly economic policy, the most resounding global problems are more striking than ever before. Unemployment and the informalization of labour and precarious work have increased so that workers' income, for increasing numbers of people, is no longer sufficient to guarantee a decent life.

Moreover, the dependence of capitalist surplus value production and the accumulation of fossil fuels have created a developmental trap. Although monetary and financial logic require *limitless* growth, the more massive use of fossil fuels creates ecological *limits* on the input side of the fossil energy chain as well as on its output side. One limit is the declining availability of oil, gas and coal (and also uranium), a phenomenon which is widely discussed as the "peak oil question". On the output side, the limits of nature are even more acute. It is the threatening climate collapse which makes the reduction of the combustion of fossil fuels a historical imperative. The question which shall briefly be discussed in the following section is: How will labour be impacted in capitalist societies when faced with combined crises in the financial sector, and in peak oil, and when faced with climate collapse?

**A Historically Successful Alliance between Fossil Energy and Capitalist Accumulation**

'Limits of globalization' (Altvater & Mahnkopf, 2007) are especially perspicuous with regard to the provision of energy for capitalist accumulation, within the context of the already mentioned processes of acceleration in time and expansion in space. Since capitalist industrialization in the late eighteenth century, the demand for a steady and secure fossil energy supply grew enormously thereby fuelling productivity increases (in the words of Marx: for the production of relative surplus value). While predominantly agrarian economies are using renewable solar energy (a non-terrestrial, external energy source), in industrial capitalism fossil energies became the main source which stems from the earth itself (coal mines, oil and gas reserves). Therefore, the energy system under modern capitalism is a closed and isolated one. It is not as open as the energy systems in human history before capitalism. The sun provides, in less than six hours, the energy used by mankind in a whole year. However, solar energy lacks some advantages for capitalist accumulation which fossil energy does not. Fossil energy and capitalist accumulation, in this way, connected and entered into an historical alliance.

Fossil fuels are a 'thick energy' with a comparably high energy return on energy input. Fossil fuel energy can be used independently in time and space; it therefore is compatible with the capitalist tendencies of time and space compression or the annihilation of space by time and of time by space, respectively. Fossil energy can simply be stored and it is easy to transport the fuel over large distances from the 'global gas-stations' to the energy consuming industrialized countries. Moreover, it is possible to concentrate and centralize fossil energy much easier than solar energy (biomass, wind, water, photovoltaic energy etc.) and thus comply with the accumulation dynamics of the capitalist system. It can be used 24 hours a day, 365 days a year, where it is needed, in a flexible manner and as concentrated as it is required by economic decision makers (see Altvater, 2005).

Of the new technical devices created after the industrial revolution, nearly 100% have been fuelled by fossil energy. The increase of productivity only succeeded due to the availability of modern machinery and fossil fuels, and it deeply changed the human and social geography and cultures in all regions of the world.

During these structural changes the conditions of labour also radically changed. The creation of 'value-added-chains' between simple production where labour is not qualified and cheap and high-tech production where labour is expensive and highly qualified has been facilitated by efficient transportation systems based on a cheap and secure energy supply. The globalization of the late twentieth and early twenty-first century and its effects on working and living conditions would have been impossible without the provision of fossil fuels.

The most striking feature of capitalism since its emergence in the so called "long 16th century" (Braudel, 1986) is its spatial expansion, and it's political consequences are radical and on-going. The world market came into existence through world trade and foreign direct investment by the early transnational corporations of the imperialist powers of Europe and by massive migration of settlers from Europe and the founding of settlers colonies in the "New World", in Africa and Australia. Global commodity and production chains, since then, expanded throughout the continents. The economic system of capitalism spread across the world without acknowledging any political and social boundaries: national tolls and customs gave way to global market rules of free exchange. Hindrances to the free movements of capital are dismantled, either by coordinated action or by pressures exerted by the most powerful nations in the world. It is worthwhile to read Rosa Luxemburg's *The Accumulation of Capital* in order to get an impression of the political and military pressures and violence applied in opening markets for capitalists of the most powerful nations (Luxemburg, 1966; Bond, Chitonge and Hopfmann, 2006). The economic expansion also has an enormous impact on nature, which is considered nothing less than ecological imperialism (Crosby, 1986).

It is obvious that the alliance between fossil fuels and capitalism also has a certain political outcome. The system of nation states is a bounded system. It is based, first, on the establishment of political definitions of citizenship and it sets up rules of inclusion and exclusion. The modern contemporary European policy *vis-á-vis* migrants is an especially sinister expression of these general characteristics. Second, the territory of nation states must be defined; without a clear und uncontested border there is no sovereignty of the nation state. This is the tragic experience of the Palestinians because of the difficulties in defining a coherent territory against the obstructive policy of other settlements. Third, the relative (and in the words of Susan Strange (1988), relational) power of states must be balanced in a concerted system to avoid or to reconcile conflicts. The paradox of a borderless economic space and the protected borders of nation states (and the formation of an international order) requires an explication. The capitalist economy overcomes all borders and boundaries, whereas politics is defined as a sphere of setting rules, regulations und thus boundaries for individual and collective actors. The state, therefore, is an autonomous political institution vis-à-vis the capitalist economic system. This is a decisive pre-condition for fulfilling the function of the capitalist state as a representation of the divergent interests of all, and not only of one faction of the capitalist class. Therefore, many actors, namely NGOs, private corporations, international organizations etc., and not only nation-states and international organizations are present in the global political arena. They are often included into the process of political regulation of boundaries or interfere in the decision-making process.

This is conceived of as 'global governance' which builds on multi-level (from the local to the global) and multilateral processes (of orderly negotiations), and not on a top-down approach from the global level to the local community. It prefers 'soft power' instead of 'hard power' and requires multilateral rules instead of unilateral or 'monopolar' power politics. The rules of 'good governance' at the different levels from national to the local must be observed by weak governments in order to be eligible for development assistance or for acceptance by the 'international community'. They explicitly exclude (national) political control over markets and particularly that over foreign investment flows and over financial investment funds (Söderberg (2006) calls this kind of 'good governance' 'preemptive development'). By forcing all governments to open national economies the world is transformed into a global marketplace. Therefore, the powerful actors, such as transnational corporations, banks, and multilateral organizations have a powerful voice. The majority of people in the world have no voice in the market because they have no or a limited amount of monetary purchasing power, and hence they are excluded from determining their economic and social development. Globalization, therefore, jeopardizes the most important achievement of the English and French revolutions: citizenship and the individual and collective rights derived from it. Democratic equality is sacrificed in favour of a new global financial oligarchy (Canfora, 2006). Global governance is no remedy against the tendencies of marginalization.

Globalization, therefore, is a contradictory process of simultaneously dismantling borders which hamper economic activities and of establishing borders of nation states vis-à-vis other nation states and unwanted human beings. Both tendencies are fuelled by the globalized use of fossil energy. On the one hand, they are powerful vehicles of acceleration. On the other, they help to empower nation states and other political bodies to set and protect new boundaries.

**The Limits of Fossil Fuels: Peak Oil and the Climate Crisis**

There are many disadvantages related to the use of fossil energy, industrialization and thus the 'westernization' of the world. First of all, the supply of fossil fuels is limited, as the debate on *Peak oil* clearly shows. It is likely that oil production will peak on a global scale in the course of this decade as it did in the US at the beginning of the 1970s. Then there still is oil, but the supply curve of oil gets a negative slope while the demand curve inevitably rises due to the constraints of increasing the competitiveness of the (national or local) economy and keeping up with the forerunners in global competition. It is more than likely that under these circumstances the oil price would increase and remain on a high level. This has serious consequences for oil-importing countries in an obviously unequal and uneven manner. It is, therefore, likely that inequality in the world would grow further. In times of energy shortages, energy security is one of the main concerns of global governance in the world. Many nation states, but also NATO and the EU have set up energy security concepts as part of national security strategies. The interests of suppliers of fossil energy, particularly of oil (OPEC and other regulatory bodies), and demanders make energy governance on a global scale highly conflict-prone.

Moreover, there is a second and probably much more serious disadvantage of hydrocarbons, as the combustion of fossil fuels produces $CO_2$-emissions with their well-known effect on the global climate. The greenhouse effect clearly demonstrates that globalization today is reaching and even trespassing the limits of the carrying capacity of the planet. The conclusion is harsh: the dependence of the global capitalist economy on fossil fuels must be reduced because of the limits of supply of oil, gas, coal and uranium and because of the negative effects of combustion on the environment and the impact on life on earth and also on the economy, for the climate crisis is expensive, as the Stern-Review convincingly calculates (Stern, 2006). Up to 20 per cent of global GDP in the coming decades will very likely be lost due to global warming. It is an indicator of the prevalence of money in modern capitalist societies that only the translation of ecological destruction into monetary units is waking up the global public and triggering discourses on how and at what costs the greenhouse effect can be stopped. The avoidance of the costs of the expected climate crisis inevitably requires investments (of up to 1 per cent of global GDP p.a. as the Stern report predicts) and a change of the trajectory of globalization in the course of the next 15 years, as the IPCC (Intergovernmental Panel on Climate Change) warns (IPCC, 2007). It is evident, therefore, that the ecological constraint of the fossil energy system exerts pressures on employment, wages and labour conditions.

The unleashed market forces which enforced the previously mentioned acceleration of all processes were the focus of Karl Polanyi (1978) who, for the eighteenth and nineteenth century in Great Britain, described them as a "disembedding" of markets out of society (and we may add: out of natural limitations). In human history, he argued, markets always have been embedded into society – until the eighteenth century. Since the emergence of modern industrial capitalism, markets have ruled the social system with disastrous impacts, especially on labour power, human living conditions and the health system. Markets also negatively affect nature and money, they are working like "satanic mills" (Polanyi, 1978). The corresponding markets for these commodities are destroying the natural environment and the social fabric of any given society. A healthy natural environment and a functioning social fabric, however, are a decisive precondition of development in the same manner that "structural heterogeneity, analyzed by 'theories of underdevelopment" (Guillen, 2004), is a hindrance to it.

**Financial Pressures and Informal Labour**

The globalization of commodity chains triggered the globalization of finance. The liberalization of financial markets since the 1970s is the most significant event in the global economy during the last few decades. It is even more impressive than the fall of the Berlin Wall at the end of the 1980s because the latter, at least in part, can be explained as a consequence of financial liberalization, as it resulted in the growing indebtedness of Third World and of socialist countries of the Second World vis-à-vis creditors of the First (western) world. A very powerful vehicle in dividing the world into creditors in the Northern countries and debtors in the global South was the first oil price-shock of 1973 and the ways in which *"petrodollars"* have been recycled. In the years after the shock, this occurred at low real interest rates. But at the beginning of the 1980s, real interest rates exploded because of the attempts of the Reagan government to stabilize the weak US dollar by increasing its attractiveness for financial investors from all parts of the world. Interest rates skyrocketed, and prices of commodities, the main export products of indebted countries, fell so that the terms of trade of indebted countries deteriorated. Debt service since the beginning of the 1980s undermined the regulatory capacity of nation states, particularly of the planning systems in actually existing socialist countries and of the developmental state in Latin America and Africa. The Bretton Woods institutions, under the leadership of the US, enforced the opening of the formerly protected economies for global trade and investment and simultaneously their submission under the 'rules of the game', under the American system of hegemony which has been transformed more and more into a "predatory" system, as Susan Strange (1988) argues. Therefore, strategies aiming at self-reliance and autonomous development had to fail, and so they did. Since then, globalization at "the end of history" follows the "pensée unique" (Pierre Bourdieu) of 'autistic' neoliberal ideology. Yet, the negative impact of liberalized financial markets on society, on nature, and last but not least on the real economy and the world of work is enormous, and it is destructive.

The main cause is the specific functions of competition between financial places in global financial markets. In commodity markets the competition of corporations results in lower prices and better quality of products and services, so long as competition is working and not brought to a standstill by interventions of powerful private monopolies or oligopolies. In financial markets, however, global competition results in higher yields, interest rates or returns on invested capital because financial centres compete against each other with comparatively attractive investment opportunities for globally active financial investors. This is the reason why the central banks of nation states (or of currency unions like the Euro system) cannot reduce interest rates under the level set by competing financial centres. They have to prevent capital flight, a subsequent devaluation of the currency and inflationary tendencies.

Therefore, the political options of regulatory institutions are asymmetrical. They are only able to increase interest rates and not to reduce them, so long as there is no coordinated action by powerful central banks and other financial institutions to cap interest rates. Interest caps as well as target zones for exchange rates since the 1990s have been refused by the governments of the G7 countries, by big financial players and by mainstream neoclassical economists. So it was and it is possible for internationally operating banks, funds and TNCs to profit from volatile exchange rates and high interest rates to the disadvantage of small and medium firms and of poorer countries in the world. The pressures to stabilize the exchange rate in order to avoid inflationary tendencies are a very powerful vehicle of income redistribution in favour of monetary wealth-owners and against those dependent on wages or transfer incomes.

It is not uniformly understood that high yields enforced by financial markets have to be produced in the real economy and that high interest rates require high productivity growth rates. This is only possible in so far as the supply of fossil fuel, particularly of oil, is secured; finance and fossil fuel thus form a very special unity. But the burden of financial service tends to exceed the limits of the social and natural carrying capacity of a society. In this case, modern high-tech-capitalism falls back into the predominant mode of absolute surplus value production (Marx) or into a mode of ‘accumulation by dispossession’ (Harvey, 2003; Altvater 2005 and others); into a global process of redistribution of resources and of income in favour of big and powerful monetary wealth-owners in the rich countries. The lesson to be learned is that globalization is not only a process of technical progress and of growing incomes (even when inequality also increases) but also a process of new forms of exploitation in order to meet the requirements of financial asset holders.

Financial markets also exert pressures on the labour market and on the welfare state via the channel of investment and trade in the real economy. Here the Keynesian hierarchy of markets comes in. On the top there are financial markets where the interest rate is formed. This is followed by commodity markets with commodity prices allowing a certain profitability ('marginal efficiency of capital', in Keynesian terminology), which is compared with the given market interest rates. On the bottom of the hierarchy of markets there are labour markets where demand is determined by interest rates on financial markets, commodity prices formed on world markets and unit labour costs (i.e. wages and labour productivity) determined on a national scale. In order to increase profitability under market conditions (global financial and commodity markets), pressures on wages and labour conditions increase because they remain the only variables which can be influenced by national governments and local business. This is also the framework of action for trade unions. They can influence wage formation, working conditions and partly influence the rules of the welfare state. However, their power to influence commodity-prices and oil prices on world markets and the formation of interest rates and of shareholder values on the financial market is more than limited.

High yields on the capital of monetary wealth owners can only be realized by re-distributing flows of income from labour and other social classes and strata to capital, especially to financial capital. Therefore, the downstream pressures directed toward a redistribution of revenue flows for the benefit of financial investors are extremely high – and successful, as distribution statistics exhibit. The IMF in the "World Economic Outlook" of April 2007 (IMF, 2007) shows that labour's share in national income in all developed countries in the last two decades decreased remarkably, by up to 10 per cent.

This is one of the reasons why the number of 'working poor' has grown. This development is not reserved to the American labour market, but is a widespread feature of European labour markets too, and is present in most developing countries. The most important feature of labour markets is exclusion of what Ricardo refers to as the 'redundant population', which is the seamy side of productivity increases. The expectation of compensation of lost working places was only realistic during the "golden years" of capital accumulation in the 1950s and 1960s in Europe. Since then, the 'redundant population' is visible on the streets of the downtown areas in all capitalist countries.

The 'redundant population' also is a major cause of migration and constitutes the so-called informal economy. The informal economy is characterized by low-paid jobs, weak representation and protection of labour on the shop floor, low technical standards and absence of labour regulation and other dimensions of socio-economic security. This is the reason why it is necessary to consider the "globalization of insecurity" (Altvater and Mahnkopf, 2002) as an important aspect of modern globalization. The informalization of labour (and of money and politics, which cannot be analyzed here) is an expression of the all-embracing erosion of economic, social and political forms which have structured the process of development and the mode of regulation in the decades since the end of the Second World War.

The informalization of labour has different features in different regions of the world, but also has some common characteristics. The informal economy can be interpreted as a space in which the excluded workers from the formal economy try to reorganize the world of work and of their daily lives beyond the broken forms of formal labour. On the one hand, it is a world with its own rules, or it uses the rules of the formal world, but in an incomplete and to the necessities of the informal world adapted manner. They respond with a so-called 'neoliberalism from below' to the challenges of the 'neoliberalism from above', of the formal economy and its representatives. On the other hand, the informalization of labour very often reaches into the realm of illegitimate economic practices and even into the criminal sphere. This is one of the most important consequences of the globalization of organized crime, of the emergence of transnational criminal networks, which are obviously very important in the contemporary world. The IMF calculates that up to 5 per cent of global GDP is passed through the channels of money laundering. In most cases it is not well understood that these networks have their roots in tendencies of informalization of labour and of money, but behind the formal world market the hidden economy is growing. One of the paradoxical consequences of neoliberal- inspired deregulation is the creation of wider spaces of unregulated activities, of a shadowy world of organized crime – which then is fought by dismantling civil rights of citizens by those political actors who always follow the 'neoliberal trumpet'. The consequence is the politically arbitrary exclusion of peoples who have already been economically marginalized.

**Conclusion: Beyond 'Financialization' and the Dependence on Fossil Fuels — A 'Solidarity Economy'?**

Is there an alternate exit strategy from the collapse of neoliberalism? The concept of new (compared to the old) cooperatives, of a 'solidarity economy' (*economia solidária*) arose in the aftermath of the debt crises of the 1980s and the financial crises of the 1990s, particularly in Latin America.[2] It was a response to the threat against survival in a deep economic and social crisis. The old experiments of cooperatives in many countries since the beginning of capitalist industrialization experienced a revival; the 'moral economy', as analyzed by E.P. Thompson (1971), resurfaced. The community economy, (e.g. the Russian "*mir*") a specific village type community which was discussed by Marx in his correspondence with Vera Sassulitch, appears to be an alternative to a capitalist global market economy. In the countries of the OECD, more than 29 million people work in the 'third' non-profit sector (OECD, 2003), mostly under precarious working conditions as a result of the dismantling of the welfare state. But at times an emancipatory trajectory of a solidarity economy, based on cooperatives, has come to existence. In Brazil and Venezuela, the governments appointed special secretaries for the solidarity economy in order to support this progressive exit from the informal economy. Moreover, it is possible here to avoid the pressures of global financial markets, to resist the tendencies of dispossession and to avoid the regressive exit into an illegitimate, and even criminal, economy. The world of labour becomes important again in regional and local markets and places.

A more local and regional solidarity economy is a precondition for the transition to an economy based on renewable energy, because the pressure of global competition is lower than in the formal, open sectors, which always have to increase their local competitiveness in global competition (thus, remaining necessarily dependent on the use of fossil fuels). This is the reason why a 'solar' society based on the use of renewable energy is only feasible by promoting a solidarity economy. Who are the political subjects that will pursue the transition to solidarity and sustainable forms of economic activities? The answer is trade unions and other workers' organizations together with social movements of civil society trying to reappropriate their living and working locations. This broad grouping would include squatters, *fabricas recuperadas*, occupiers of land, those who reappropriate public spaces and mineral and fossil resources, united in seeking improvements in working conditions and more distributive justice against the dominant tendencies of the world market. These are, as we have seen, the crisis tendencies of financialization and financial repression as well as the obvious insufficiencies of the fossil energy chain for future economic reproduction, social consensus and political stability and peace.

**Endnotes**

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2. This is the reason why the term 'economía solidária' is widely used in all Latin American countries. In Brazil, the Lula government established after the elections of 2002 a subsecretary of the labour minister for the 'economia solidária' (Paul Singer). In other countries the popular movements, the squatters or new cooperatives are scientifically as well as politically defined as parts of the 'economia solidária'. Also in Germany the concept of a 'solidarische Ökonomie' is quite common in academic circles as well as in the labour movement and in the anti-globalization movements. The 'solidarity economy' is understood as a realization of TATA (There are thousand alternatives) against (TINA (There is no alternative). The movement is comprising "old" cooperatives, new social movements and initiatives of self-assistance, mutuality or neighbourhood organizations. The solidarische Ökonomie thus is part of the much larger 'third, non-profit sector', which in the OECD-countries resembles approximately 30 million workers (OECD, 2003). Even in Russia the term "solidarity economy" is used by popular movements.

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