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### The crisis of capitalism in the 21st Century<sup>1</sup>

#### Abstract

As the world economy enters its third decade of the 21<sup>st</sup> century, the Long Depression in investment, output, and income growth seems set to continue as the profitability of capital remains near historic lows. There are some key challenges over the next 20 years: climate change and global warming, and huge inequalities which create enormous social tensions. All these factors threaten the ability of the US to maintain its hegemonic position. The rivalries between the big capitalist powers will increase, particularly between the US and China. A new globalizing wave is likely to take place, since there are still enormous human masses which can be expropriated and socially made available for the sale of labor force; and new technological innovations will always arise, providing new cycles for the expansion of value and surplus value. So, capitalism could get a further kick forward. However, imperialism is faced with two major weaknesses. The first is the tendency for the profit rate to fall, which imposes an increase in rivalry on the world market and even dangerous wars. The second is the global proletariat, which continues to grow throughout the world. Crises will reoccur at regular intervals with the accumulation of capital, and the longer capital accumulates, the more difficult it will be for it to deliver the needs and desires of humanity.

Keywords: Crises. Imperialism. Globalisation. Profitability.

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<sup>&</sup>lt;sup>1</sup> Revisão de Jussara Lourdes Carneiro Ungari.

## La crisis del capitalismo en el siglo XXI

#### Resumen

Con la economía mundial entrando en su tercera década del siglo XXI, la Larga Depresión en inversiones, en el crecimiento de la producción y en las finanzas parece persistir ya que la rentabilidad del capital se mantiene cerca de sus mínimos históricos. Además, existen algunos desafíos claves que deberán ser enfrentados en los próximos 20 años: el cambio climático y el calentamiento global y las enormes desigualdades que crean enormes tensiones sociales. Todos estos factores amenazan la capacidad de los Estados Unidos de mantener su posición hegemónica. Las rivalidades entre las grandes potencias capitalistas aumentarán, particularmente entre los Estados Unidos y China. Es posible una nueva ola de globalización. Existen todavía muchos seres humanos disponibles en el mundo para explorar y siempre hay nuevas innovaciones tecnológicas que pueden proporcionar un nuevo ciclo para la expansión del valor y más valor. Hay enormes reservas de trabajo aún no exploradas. Por lo tanto, el capitalismo aún puede impulsar esta situación durante algún tiempo. Sin embargo, el imperialismo tiene dos talones de Aquiles. El primero es la tendencia de la tasa de ganancia a caer en la medida en que el capital se acumula, creando rivalidades crecientes e incluso produciendo guerras nocivas y destructivas. El segundo es el proletariado global – los sepultureros del capitalismo – que aún están creciendo en tamaño en todo el mundo. Las crisis volverán a ocurrir con intervalos regulares con la acumulación de capital y cuanto más capital se acumule, más difícil será para él satisfacer las necesidades y los deseos de la humanidad.

**Palabras clave:** Crisis. Imperialismo. Globalización. Lucro.

### A crise do capitalismo no século XXI

#### Resumo

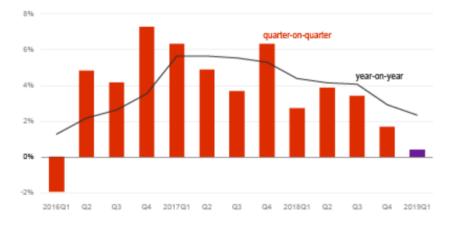
Conforme a economia mundial entra em sua terceira década do século XXI, a Longa Depressão no crescimento da produção e nos investimentos parece persistir uma vez que a lucratividade do capital permanece próxima de suas mínimas históricas. Além disso, existem alguns desafios chaves que deverão ser enfrentados nos próximos 20 anos: mudanças climáticas, aquecimento global e as enormes desigualdades que criam enormes tensões sociais. Todos estes fatores ameaçam a capacidade dos EUA de manter a sua posição hegemônica. As rivalidades entre as grandes potências capitalistas vão aumentar, particularmente entre os EUA e a China. Uma nova onda de globalização é possível. Ainda existem mais seres humanos disponíveis no mundo para serem explorados e sempre há inovações tecnológicas que podem prover um novo ciclo de expansão do valor e do mais-valor. Há enormes reservas de trabalho ainda não exploradas. Portanto, o capitalismo ainda pode empurrar essa situação adiante por mais algum tempo. O imperialismo tem, contudo, dois calcanhares de Aquiles. O primeiro é a tendência à queda da taxa de lucro à medida que o capital se acumula, criando rivalidades crescentes e até produzindo guerras mesmo danosas e destrutivas. O segundo é o proletariado global os coveiros do capitalismo – que ainda estão crescendo em tamanho por todo o mundo. As crises voltarão a ocorrer em intervalos regulares com a acumulação de capital e quanto mais o capital se acumular, mais difícil será para satisfazer as necessidades e os desejos da humanidade.

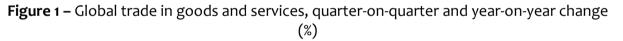
Palavras-chave:Crises.Imperialismo.Globalização. Lucro.

The first two decades of this century witnessed a huge credit boom and further globalization of trade and investment; and then the biggest global financial crash since 1929, followed by a deep slump in capitalist investment and production, subsequently called the Great Recession. That was in the first decade.

In the second, the major capitalist economies suffered a lengthy period of low economic growth, while the so-called 'developing' or 'emerging' economies have experienced several financial crises. This period can be characterized as a Long Depression, similar to that of the late 19<sup>th</sup> century between 1873-1895. In this Long Depression, real *gross domestic product* (GDP) and investment growth have been well below long-term averages, while world trade growth has stuttered to a halt.

As we enter the third decade of the 21<sup>st</sup> century, the depression continues, but with heightened tension between the US and the next major economic power, China. Commodity prices (oil, agricultural and industrial material products) have subsided, making it increasingly difficult for the commodity-based economies of the 'global south', while corporate and sovereign debt continue to rise to record highs.





Source: OECD Economic Outlook (OECD, 2019).

How could we explain the collapse of what appeared to be steady and successful expansion of most capitalist economies in production, investment, and trade during the 1980s and 1990s, a period called the Great Moderation?<sup>2</sup>

#### The cause of crises: the mainstream explanations

Mainstream economics has had no real explanation. Built around an economic theory that modern economies tend towards harmonious expansion which can only be disturbed by unexpected 'shocks' to a general equilibrium, mainstream economics did not forecast the credit crunch or the global financial downturn and then, the great international recession that followed it. Nor could they explain it after the event. Also, they remain puzzled by the failure of most economies to recover to the previous trajectory of expansion.

According to Roberts (2010), it is interesting to say that until 2007, none of the great political economists responsible for the strategies of the world's largest economies had foreseen any crisis. US Fed (Federal Reserve) chairman at the time, Alan Greenspan, in 2004, stated that "a national severe price distortion is most unlikely in real estate." When it happened, he was shocked. For Greenspan, it was chance, a one-hundred-year event. "The disasters were the results of massive natural force and they did constitute a perfect storm." This idea was reiterated by the US Treasury secretary Hank Paulson: this sort of thing happens "only once or twice" in a hundred years. As economist Daniel Gross commented on the "chance explanation" of the crisis: what's the difference between once or twice? "In this instance, several trillion dollars in losses" (GROS, 2009, p. 11).

Ben Bernanke was the Fed chairman who presided over the Great Recession. He is an economist who specialized in the Great Depression. If at any time there was an economist who dedicated himself to depression economics, to use the expression of

<sup>&</sup>lt;sup>2</sup> During the mid-1980s the U.S. macroeconomic volatility was largely reduced. This phenomenon was called a "great moderation" by James Stock and Mark Watson in their 2002 paper, "Has the Business Cycle Changed and Why?" It was brought to the attention of the wider public by Ben Bernanke (then member and later chairman of the Board of Governors of the Federal Reserve) in a speech at the 2004 meetings of the Eastern Economic Association.

Keynesian economist Paul Krugman, it was Bernanke: "Mr. Bernanke, the former head of Princeton University economics department, knows all there is to know about a depression, except what causes them" (BONNER, 2010, p. 1).

Like Greenspan, Bernanke did not see the crunch coming nor predicted its damage. Thus, in May 2007, he said, "We do not expect significant spillover from the subprime market to the rest of the economy from the financial system." (BERNANKE, 2007, p. 1). By June, he was saying the losses would be minimal, "between \$50–100bn" at most. The losses in the global financial system eventually reached \$3–7 trillion, depending on what you include.

As Roberts (2011) pointed out, Eugene Fama, a Nobel Prize winner and founding exponent of the efficient market hypothesis, argues that free markets will ensure that capitalist production will grow smoothly and without struggles if left alone. When asked about the cause of the crisis, Fama responded: "We don't know what causes recessions. I'm not a macroeconomist so I don't feel bad about that! We've never known. Debates go on to this day about what caused the Great Depression. Economics is not very good at explaining swings in economic activity." (CASSIDY, 2010, p. 1). When questioned about the legacy of the financial crisis in the mainstream neoclassical economy, he said: "I don't see any. Which way is it going to go? If I could have predicted the crisis, I would have. I don't see it. I'd love to know more what causes business cycles." Can the market economy still be considered "efficient" after this crisis? "Yes. And if it isn't, then it's going to be impossible to tell." And that is how the great reference for the neoclassical economy synthesized the contributions of its economic school on the subject. (GRIM, 2013).

Greg Mankiw is a Harvard University economics professor and author of a main economic textbook used at universities. Looking back at the Great Recession in 2011, he wrote: "After more than a quarter-century as a professional economist, I have a confession to make: there is a lot I don't know about the economy. Indeed, the area of economics where I have devoted most of my energy and attention – the ups and downs of the business cycle – is where I find myself most often confronting important questions without obvious answers." (GRIM, 2013, s. p.). The Keynesian explanation for the 2008-2009 crisis was that there was a sudden lack of "effective demand." Households stopped buying, so many goods and companies sharply cut back on investment. Suddenly, everybody wanted to hold cash rather than buy goods. Even if interest rates for holding cash or borrowing to invest are reduced to zero, people may still hoard cash. There was a liquidity trap. There was a change in what Keynesians call 'animal spirits': uncertainty about the future suddenly sets in (there is a "lack of confidence," as we hear it put every day by the business experts in the media).

According to the leading Keynesian and Nobel prize winner, Paul Krugman, crises in modern economies are not caused by any fundamental flaw in the capitalist mode of production (KRUGMAN, 2012)<sup>3</sup>. It is, as Keynes once put it, like a magneto problem in a car: "the point is that the problem is not with the economic engine, which is as powerful as ever. Instead, we are talking about what is basically a technical problem, a problem of organization and coordination – a 'colossal muddle' as Keynes described it. Solve this technical problem and the economy will roar back into life" (KRUGMAN, 2012). Krugman is convinced that the capitalist mode of production is going well: all it needs is a new electric part and not an entirely new engine. And, without his faith, he believes that the new parts needed by the system are just not being delivered because of the colossal political confusion in which economists and politicians have been involved.

The theory of crises presented by a radical follower of Keynes, Hyman Minsky, was largely ignored until the Great Recession. But in the aftermath, his ideas were brought back to prominence – "we are all Minskyites now" (KRUGMAN, 2019). According to Minsky, Keynes has sufficiently demonstrated that capitalism is inherently prone to collapse: "instability is an inherent and inescapable flaw of capitalism." This instability was to be found in the financial sector. Again, like Keynes, for Minsky, there is no flaw in the capitalist production process – the real economy – but only in the "veil of money" and financial intermediation between production and consumption. As debt accumulates, it brings uncertainty and instability into the process (ROBERTS, 2014).

<sup>&</sup>lt;sup>3</sup> Some of these arguments were exposed in Roberts (2015).

Numerous left-wing economists, and some who are even part of what we may call as the economic mainstream, consider the income constriction of the poorest part as the cause of the Great Recession, since consumption and "effective demand" would be the main factor which weakened the purchasing capacity of families and then led them to incur more debt to compensate for the fall in wages. (KUMHOF; RANCIÈRE, 2010, p. 28-31)<sup>4</sup>.

According to post-Keynesian economist James Galbraith (2012), son of the famous "New Deal" Keynesian economist J. K. Galbraith, "As Wall Street rose to dominate the U.S. economy, income and pay inequalities in America came to dance to the tune of the credit cycle." He contends that the rise of the finance sector was the transmission shaft which linked inequality to economic instability.

Nobel prize winner Joseph Stiglitz takes the same position: "growing inequality in most countries of the world has meant that money has gone from those who would spend it to those who are so well off that, try as they might, they can't spend it all." This flood of liquidity then "contributed to the reckless leverage and risk-taking which underlay this crisis."

The evidence for this thesis remains questionable, though. As Krugman (2012) remarks, "there is no reason to assume that extreme inequality would necessarily lead to economic disaster." Michael Bordo and Christopher Meissner (Bank of International Settlements) analyzed the data and concluded that inequality does not seem to be the reason for a crisis (BORDO; MEISSNER, 2010). Credit booms mostly lead to financial crises, but inequality does not necessarily lead to credit booms.<sup>5</sup> The British think-tank Resolution Foundation published a study by Paolo Lucchino and Salvatore Morelli which looked at all the empirical evidence on this issue (ROBERTS, 2016). They concluded that "efforts to validate empirically the posited relationship between inequality and crisis have so far been inconclusive." (LUCCHINO; MORELLI, 2012, s. p.). It is one thing to recognize that inequality has increased in the past thirty years and could have damaged growth (or at least that

<sup>&</sup>lt;sup>4</sup> The reader can find this discussion in Roberts (2016).

<sup>&</sup>lt;sup>5</sup> "Using data from a panel of 14 countries for over 120 years, we find strong evidence linking credit booms to banking crises, but no evidence that rising income concentration was a significant determinant of credit booms. Narrative evidence on the US experience in the 1920s, and that of other countries, casts further doubt on the role of rising inequality" (BORDO; MEISSNER, 2012, p. 20).

reducing inequality will not). It is quite another to claim that this explains the credit crunch and the Great Recession.

As questioned by Roberts (2012), this argument mistakenly assumes, as the Keynesians do, that the fundamental weakness of capitalism as lying on the demand side of the economy (ROBERTS, 2016). If the problem is located on the supply side, radically different conclusions follow. After all, nobody claimed that the slumps of the 1970s and 1980s were caused by rising income or wealth inequality. Certainly, many mainstream and heterodox economists argued the opposite: that it was caused by wages rising to squeeze profits in overall national income.<sup>6</sup> Perhaps that means that the underlying causes of the capitalist crisis can vary. The problem with this eclectic approach is that it becomes unclear what the cause of capitalist crises is: is it wages squeezing profits as in the 1970s, or is it the low wages leading to excessive credit in the 2000s and then a collapse of demand in 2008?

#### The Marxist explanation

None of these arguments explain why there have been regular and recurring crises of credit, investment, production and employment in the major economies of the world since industrial capitalism became the dominant mode of production. This is where Marx and Engels started. Marx argued that these crises were endemic to capitalism and could not be avoided while the capitalist mode of production remained.<sup>7</sup>

What is missing from all the mainstream and Keynesian arguments is any role for profit and profitability of capital, and yet, capitalism is a mode of production for profit (ROBERTS, 2013). Surely, does the movement of profit has to be central to the health of capitalist production? For Keynes, Minsky and others, profit and where it comes from is irrelevant to crises. Marx's value theory, based on profit as the unpaid labor of the working

<sup>&</sup>lt;sup>6</sup> See chapter 20 in Roberts (2009).

<sup>&</sup>lt;sup>7</sup> As he said in 1858 during the first great international crisis of the 19<sup>th</sup> century: "What are the social circumstances reproducing, almost regularly, these seasons of general self-delusion, of over-speculation and fictitious credit? If they were once traced out, we should arrive at a very plain alternative. Either they may be controlled by society, or they are inherent in the present system of production. In the first case, society may avert crises; in the second, so long as the system lasts, they must be borne with, like the natural changes of the seasons" (MARX, 2008, p. 201).

class, as Keynes put it (to his student Michael Straight): "was even lower than social credit as an economic concept. It was complicated hocus-pocus." (SKIDELSKY, 1992, p. 523) But for Marx it was the litmus test for the scientific analysis of crises.

In Marx's view, the most important law of political economy was the tendency of the average rate of profit of capital to fall.<sup>8</sup> When presenting this argument, he posits the ultimate cause of capitalist crises in the capitalist production process, specifically in production for profit<sup>9</sup>.

Marx's law is framed in terms of tendencies and countertendencies. Aiming at increasing their profitability, capitalists must increase their laborers' productivity. The way to do this is by introducing new means of production, which in order to increase productivity will usually shed labor. So, the general tendency is a labor-saving bias in capitalist investment, or to use Marxist categories, for the organic composition of capital to rise.

This rising organic composition of capital must lead to a fall in the rate of profit, unless countertendencies to the law intervene. Besides, there are powerful countertendencies to Marx's law. Such countertendencies can temporarily decrease or reverse the tendency of the rate of profit to fall. In particular, Marx mentions five countertendencies: (1) the increasing intensity of exploitation of labor, which could increase the rate of exploitation; (2) the relative cheapening of the elements of constant

<sup>&</sup>lt;sup>8</sup> "The declining profit rate is in every respect the most important law of modern political economy, and the most essential for understanding the most difficult relations. It is the most important from the historical standpoint [...] Beyond a certain point, the development of the powers of production become a barrier for capital; hence the capital relation a barrier for the development of the productive powers of labor. When it has reached this point, capital, i.e., wage labor, enters into the same relation towards the development of the social wealth and of the forces of production as the guild system, serfdom, slavery, and is necessarily stripped off as a fetter. The last form of servitude assumed by human activity, that of wage-labor on one side, capital on the other, is thereby cast off like a skin, and this casting-off itself is the result of the mode of production corresponding to capital; the material and mental conditions of the negation of wage labor and of capital, themselves already the negation of earlier forms of unfree social production, are themselves results of its production process. The growing incompatibility between the productive development of society and its hitherto existing relations of production expresses itself in bitter contradictions, crises, spasms. The violent destruction of capital not by relations external to it, but rather as a condition of its self-preservation, is the most striking form in which advice is given it to be gone and to give room to a higher state of social production." (MARX, 1973, s. p.)

<sup>&</sup>lt;sup>9</sup> Roberts exposed this discussion in a detailed way in his book *The Long Depression* (ROBERTS, 2016).

capital (machinery and raw materials); (3) the deviation of the wage rate from the value of labor power (very low wages); (4) the existence and increase of a relative surplus population (cheap labor); and (5) the cheapening of consumption and capital goods through imports (foreign trade) (BASU; MANOLAKOS, 2012).

These countertendencies introduce cyclical trends on the long-term trend of the downward rate of profit: "The operation of these counter-tendencies transforms the breakdown into a temporary crisis, so that the accumulation process is not something continuous but takes the form of periodic cycles" (ROBERTS, 2018b, s. p.).

The profitability of capitalist production does not stay stable but is subject to inexorable downward pressure (or tendency), which eventually leads to capitalists overinvesting (over-accumulating) relative to the profits they get out of the workers. At a certain point, over-accumulation relative to profit (i.e. a falling rate of profit) leads to the total or mass of profit no longer rising. Then, capitalists stop investing and producing and we have overproduction, or a capitalist crisis. So, the falling rate of profit (and falling profits) causes overproduction, not vice -versa<sup>10</sup>.

A crisis or slump in production is necessary in order to correct and reverse the fall in the rate and eventually, the mass of profit. In the period of slump or through it, some capitalists close down, while others fill the economic space left. However, other capitalists buy the means of production, raw materials, semi-finished products of the bankrupt capitalists at deflated prices. So, the numerator of the organic composition (machinery and raw materials) falls. Increased production with unchanged efficiency implies greater employment. Therefore, the denominator of the organic composition rises (wages bill). The organic composition falls on both accounts, and so, following Marx's law, the rate of profit rises. Also, rising employment increases labor's purchasing power and rising profitability increases that of capital. Both factors facilitate the realization of the greater output. The upward profitability cycle generates from within itself the downward cycle.

<sup>&</sup>lt;sup>10</sup> This argument was elaborated in Roberts (2010b).

This latter, in its turn, generates from within itself the next upward profit cycle. The cycles of boom and slump in capitalism are explained<sup>11</sup>.

It's one thing to have a theory; it's another to have empirical evidence to support it. In the case of Marx's law of profitability, there is now a weight of evidence both from work by Marxists and by mainstream economists – and from all around the globe. The rate of profit on capital falling over the long term has been shown in the US, Canada, UK, Japan, China, Mexico, Brazil, Argentina, Greece, and Spain (see Roberts and Guglielmo, 2018). And we now have convincing measures of a decline in the average rate of profit globally (MAITO, 2018).

In the latest Penn World Tables (9.1), there is a time series of the internal rate of return for nearly every country. So, we can calculate a rate of return on capital which is similar to Marx's rate of profit. The average rate of return for the G7 economies shows a secular decline from 1950 to 2017. But there are periods when the counteracting factors overcome the tendency of the rate of profit to fall – namely the so-called neo-liberal period from the 1980s. Those counteracting factors were an increased rate of exploitation (achieved through privatizations, anti-trade union laws, temporary and part-time work, higher unemployment from slumps, etc.), the cheapening of technology (hi-tech revolution), and globalization (cheaper imports, foreign trade profits). The neo-liberal period achieved modest reversal of the collapse in profitability from the late 1960s to the early 1980s. From the late 1990s, these counteracting factors waned and Marx's law became dominant, though. The rate of return fell with only a modest recovery in the credit boom of the early 2000s, before crashing in the Great Recession. The last ten years have seen no more than stabilization of profitability near the lows of the early 1980s.

<sup>&</sup>lt;sup>11</sup> This argument in presented on Carchedi and Roberts (2013).

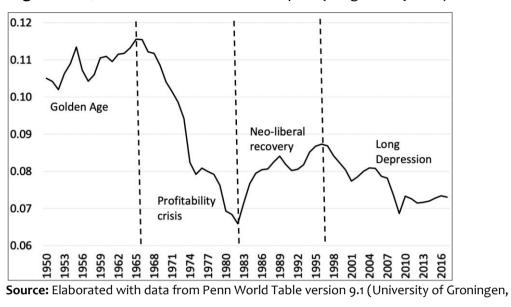


Figure 2 – G7 internal rate of return on capital (weighted by GDP)

2019).

The slowdown in real GDP growth in the major economies mirrors the secular fall in global profitability (FREEMAN, 2019). And there is good evidence that a fall in the rate of profit eventually leads to a fall or slowdown in the growth in total profits, which generates a crisis (CARCHEDI; ROBERTS 2014; TAPIA, 2018; TSOULFIDIS, 2017; BAKIR, 2019). Then, a boom and slump cycle driven by the movement in the profitability of capital is the most compelling explanation of crises in capitalist production.

While the underlying cause of crises is to be found in the general law of accumulation and the law of tendency of the rate of profit to fall (in what happens to capital in general in the production of surplus value), the actuality of crises can "only be deduced from the real movement of capitalist production, competition and crises" (MARX, 1996, p. 244).

Marx recognized the possibility of breakdown in the circulation of capital was inherent in commodity production. The possibility of crises existed in the separation of sale and purchase in commodity circulation and in the role of money as means of payment. But this only raised the possibility of crises, not their regular cause. That was the barrier set up by "capitalist profit, which was the basis of modern overproduction." According to Roberts (2017), it does not mean that the financial sector (and particularly the size and movement of credit) does not play any role in capitalist crisis. On the contrary, Marx argues that the growth of credit and speculative investment in stocks, bonds, and other forms of money assets (fictitious capital), appears to function as a compensating mechanism for the downward pressure on profitability in the accumulation of real capital.

A fall in the rate of profit inevitably promotes speculation, that is, trying to make money by betting on the stock exchange or buying other financial instruments. If capitalists cannot make enough profit producing commodities, they will try making money betting on the stock exchange or buying several other financial instruments. Capitalists experience the falling rate of profit almost simultaneously, so they start to buy these stocks and assets at the same time, driving prices up. When stock and other financial asset prices are rising, everybody wants to buy them – this is the beginning of a 'bubble'. Such credit bubbles have been part and parcel of speculative investment, going back as far as the very beginning of capital markets (ROBERTS, 2016).

If, for example, the speculation takes place in housing, this creates an option for workers to borrow (mortgages) and spend more than they earn (more than the capitalists have laid out as variable capital), and in this way the "realization problem" (sufficient money to buy all the goods produced) is solved. But sooner or later, such bubbles burst when investors find that the assets (mortgage bonds) are not worth what they are paying for them. Because fictitious capital is unproductive (i.e. it does not create any new value), fictitious profits are a deduction from real profits, which becomes clear when they are cashed in. Then, the compensating mechanism of speculation fails and the result is even greater overproduction than was avoided before by the credit boom (ROBERTS, 2016).

Credit takes the accumulation of capital to its limit: "if the credit system appears as the principal lever of overproduction and excessive speculation in commerce, this is simply because the reproduction process, which is elastic by nature, is now forced to its most extreme limit." (MARX, 1996, p. 572). Thus, "a crisis must evidently break out if credit is suddenly withdrawn and only cash payment is accepted... at first glance, the entire crisis presents itself as simply a credit and monetary crisis" (MARX, 1996, p. 621-622).

Moreover, each crisis of capitalism does have its own characteristics. The trigger in 2008 was the huge expansion of 'fictitious capital' which eventually collapsed when real value expansion could no longer sustain it, as the ratio of house prices to household income reached extremes. However, such triggers are not causes. Behind them is a general cause of crisis: the law of the tendency of the rate of profit to fall (ROBERTS, 2018).

#### **Recessions and depressions**

There is a difference between regular and recurring booms and slumps in capitalism and depressions. Think of it schematically. A recession and the ensuing recovery can be Vshaped, as typically in 1974–75; or maybe U-shaped; or even W-shaped as in the double-dip recession of 1980–1982. But a depression is really more like a reverse square-root sign, which starts with a trend growth rate, drops in the initial deep slump, then makes what looks like a V-shaped recovery, this time it levels off on a line which is below the previous trend line (ROBERTS, 2016, p. 12).

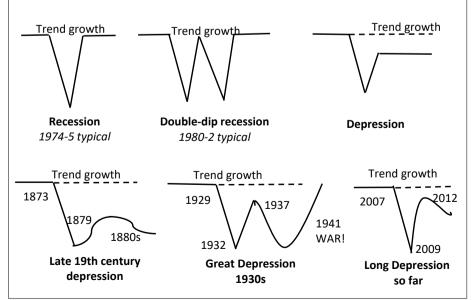


Figure 3 - A Schematic View of Recessions and Depressions

Source: Elaborated by the author (ROBERTS, 2016, p. 12).

As Roberts (2016; 2019) states, in a depression, pre-crisis trend growth is not restored for up to ten to fifteen or even twenty years. It happened in the late 19<sup>th</sup> century and in the 1930s and it has been the case since the end of the Great Recession in the 21<sup>st</sup> century. The US economy recently set a new record for length of expansion without recession, now over a decade. However, the expansion is also the weakest since 1945. Thus, the state of the US economy is more like uninterrupted stagnation. Real GDP growth in most economies has been well below the post-1945 average in the second decade of the 21<sup>st</sup> century. So, while the decade of 2010s was the longest period without a slump in the major economies since 1945, it was also the weakest recovery from any recession in the same period.

What are the factors for the slowdown and what are the factors which have enabled the major capitalist economies to avoid the major slump that cycle theory predicts should have happened by now?<sup>12</sup> On the negative side, slow real GDP growth (of 1-2% a year in the G7 economies) has been driven by continued low investment rates. In its recent global outlook, the IMF highlighted that "firms turned cautious on long-range spending, and global purchases of machinery and equipment decelerated".<sup>13</sup>

According to the US Conference Board, globally, growth in output per worker has fallen from an average annual rate of 2.9% between 2000-2007, to 2.3% percent between 2010-2017. The Conference Board summarizes: "Overall, we have arrived in a world of stagnating growth. While no widespread global recession has occurred in the last decade, global growth has now dropped below its long-term trend of around 2.7 percent. The fact that global GDP growth has not declined even more in recent years is mainly due to solid consumer spending and strong labor markets in most large economies around the world." (IMF, 2019a, s. p.)

Roberts (2019c) explains that the reason for low real GDP and productivity growth lies with weak investment in productive sectors compared to investment or speculation in financial assets (what Marx called 'fictitious capital' because stocks and bonds are really

<sup>&</sup>lt;sup>12</sup> I recommend reading Roberts' text (2019b) on this subject.

<sup>&</sup>lt;sup>13</sup> See International Monetary Fund – IMF (2019a) and Gopinath; Milesi-Ferretti; Nabar (2019).

just titles of ownership to any profits (dividends) or interest appropriated from productive investment in 'real' capital). Business investment everywhere is weak. As a share of GDP, investment in the major economies is some 25-30% lower than before the Great Recession.

The ongoing trade war between the US and China, along with trade frictions with the EU, played an important part in the slowdown in technology spending. Global trade – which is intensive in durable final goods and the components used to produce them – slowed to a standstill (ROBERTS, 2019). In fact, since the end of the Great Recession, globalization and the so-called 'free trade' have increasingly given way to protectionist measures, as happened in the 1930s (EVENETT; FRITZ, 2019).

Roberts (2011b) claimed that there are two main reasons why the world capitalist economy has subsided into this Long Depression. First, the profitability of the accumulated capital in the major economies has been in secular decline and has not been restored to the level reached before the Great Recession of 2008-2009. Certainly, in the US, the total level of profits has surpassed the previous pre-crisis peak, but not the rate of profit. Besides, in many other advanced capitalist economies, even the mass of profit has not reached the previous peak. We don't have to look for uncertain and 'unexpected negative shocks' or 'government interference in the market's pricing of labor and capital' to explain the stagnation. There is not enough profit to get capitalists to invest at previous levels (ROBERTS, 2011b).

That leads to the second reason for the depression. The recovery after the great slump has been hampered and curbed by the dead weight of excessive debt built up in the so-called neo-liberal period after the early 1980s, and particularly during the credit and property bubble from 2002 (ROBERTS, 2011b). The 'normal' way which capitalism resumes a period of expansion in the cycle of boom and slump is for dead and unprofitable capital to be devalued or even liquidated in a slump through bankruptcies, takeovers, and higher unemployment (lower wage bills). Profitability is then restored and expansion resumes. However, in this Long Depression, the level of debt (what Marx called fictitious capital) circulating is still so large that it is takes a very long time to 'deleverage' and reduce the burden of debt against profit.

In its latest Global Financial Stability report, the IMF expressed its worry that: "corporations in eight major economies are taking on more debt, and their ability to service it is weakening. We look at the potential impact of a material economic slowdown – one which is as half as severe as the global financial crisis of 2007-08, and our conclusion is sobering: debt owed by firms unable to cover interest expenses with earnings, which we call corporate debt-at-risk, could rise to \$19 trillion. That is almost 40 percent of total corporate debt in the economies we studied, which include the United States, China, and some European economies (IMF, 2019b)" (ROBERTS, 2019d).

Also, in emerging markets, "external debt is rising among emerging and frontier economies as they attract capital flows from advanced economies, where interest rates are lower. Median external debt has risen to 160% of exports from 100% in 2008 among emerging market economies. A sharp tightening in financial conditions and higher borrowing costs would make it harder for them to service their debts." (ADRIAN; NATALUCCI, 2019, p. 5).

The level of debt in the world economy has not fallen despite the Great Recession, the banking crash and bailouts. Deleveraging is not really happening, at least not to any great extent. Non-financial sector debt includes all the debt held by governments, households and corporations. It excludes financial sector debt. Non-financial sector global is now over 322% of GDP compared to 200% at the start of the Great Recession (ROBERTS, 2013b).

Roberts (2019b) claims that the major capitalist economies are now in a fantasy world where the stock and bond markets ('fictitious capital') are saying that world capitalism has never had it so good, while the 'real economy' is stagnating in output, trade, profits, and investment.

The other counteracting factor enabling the capitalist economies to avoid a new slump in the 2010s has been the rise in employment and the fall in unemployment. Instead of investing heavily in new technology and shedding labor, companies have sucked up available cheap labor from the reserve army of unemployed created in the Great Recession and from immigration. According to the International Labor Organization, the global

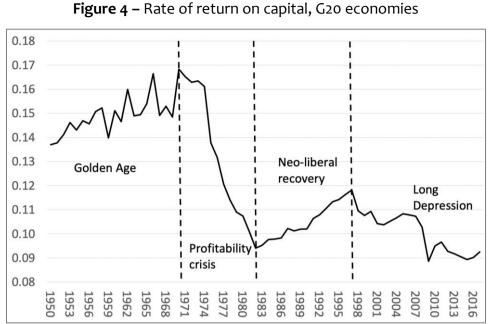
unemployment rate has dropped to just 5%, its lowest level in almost 40 years (ROBERTS, 2019b).

This did not happen in the 1930s Great Depression. Then, unemployment rates stayed high until the arms race and impending world war militarized the workforce. In the 2010s, it seems that companies, rather than reducing their costs in the face of recession and low profitability by sacking the workforce and introducing labor-saving technology, opted to take on labor at low wage rates and with 'precarious' conditions (no pensions, zero hours, temporary contracts, etc.). As a result, there has been a sharp increase in what are called 'zombie companies', which make only just enough money to pay a low-wage workforce and service their debts, but not enough to expand at all (ROBERTS, 2019b, 2019e).

High employment and low real GDP growth means low productivity growth, which over time means stagnating economies – a vicious circle. The great AI/robot revolution in industry has not (yet) materialized. Globally, the annual growth in output per worker has been hovering around 2% for the past few years, compared with an annual average rate of 2.9% between 2000 and 2007 (ROBERTS, 2019b).

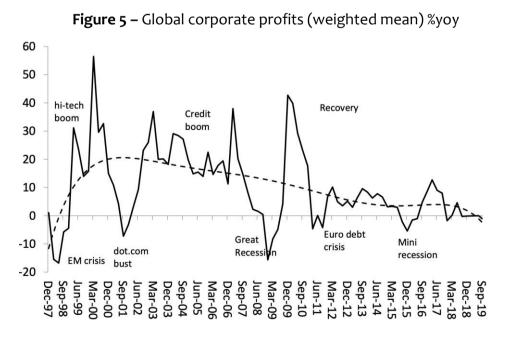
These counteracting factors have extended the period without a new slump, although they can only delay it. The most important factor for analyzing the health of the capitalist economy remains the profitability of the capitalist sector and the movement in profits globally. That decides whether investment and production will continue. Neither average profitability of capital nor the mass of profits is rising in the major economies. According to the latest data on the net return on capital provided by the EU's AMECO database, profitability in 2020 will be 4% lower than the peak of 2017 in Europe and the UK; 8% down in Japan; and flat in the US. And profitability will be lower than in 2007, except in the US and Japan. Calculating the rate of return on capital for the G20 economies, which include the G7 and the major 'developing' economies like China, India, Brazil, Indonesia, etc., the rate of profit is at historic lows<sup>14</sup>.

<sup>&</sup>lt;sup>14</sup> We recommend reading Roberts (2019b, 2019e), where the author approaches these subjects in a comprehensive way.



Source: Elaborated by the author.

Globally, the mass of profits also reveals, at best, stagnation. Japanese corporate profits are currently down 5% yoy (year over year), the US down 3%, and Germany down 9%. Below is the author's calculation of global corporate profits growth using an average of national statistics.



Source: Elaborated by the author.

#### Impact on emerging economies

The global trade and investment slowdown have particularly hit the so-called emerging economies, several of which have slipped into outright slumps. Emerging markets face a serious "secular stagnation" problem. Growth in almost all cases has been far lower in the last 6 years than in the 6 years leading up to the Great Recession. Besides, in Argentina, Brazil, Russia, South Africa and Ukraine, there has been no growth at all. Emerging markets (EMs) that in 2019 grew less than developed markets are: Brazil, Uruguay, Turkey, South Africa, Ecuador, Mexico, Saudi Arabia and Argentina. EMs which barely outgrew developed markets are Russia, Nigeria and Thailand.

Latin America has particularly suffered in this Long Depression. The average rate of return on capital for four Latin American economies (Brazil, Argentina, Mexico and Chile) is some 25% below 2007 levels.



Figure 6 – Top four Latin american countries IRR

Brazilian economic growth is stagnating at best. Unemployment is near post-global crash highs. Wealthy people in Brazil do not pay taxes, inequality of income and wealth is one of the highest in the world, and the government does not raise enough revenue to avoid huge annual deficits. As a result, the public sector in Brazil runs the largest debt to GDP among all emerging economies. At the same time, more than half of the Brazilian population remains below a monthly income per head of R\$560. Cutting this level of poverty to under 25% would require productivity four times as fast as the current rate (ROBERTS, 2018a).

And there is no prospect of that under capitalism in Brazil. That's because the profitability of Brazilian capital is low and continues to stay low. The profitability of dominant capitalist sector in Brazil had been in secular decline, imposing continual downward pressure on investment and growth. Brazilian capitalism will be immobilized in a low growth, low profitability future, with continuing political and economic paralysis (ROBERTS, 2018c). And that is without a new global recession coming over the horizon.

The same happens in Mexico, one of the most unequal societies in the world in the 21st century. Recently, the US Brookings Institution adjusted the standard measure of inequality in a country, the gini coefficient. The nearer the gini is to 1, the higher the level of inequality. On its new estimates, Mexican gini coefficient for 2014 rises from an already high 0.49 to a mega 0.69, close to that of South Africa, the world's most unequal country (ROBERTS, 2018b).

As asserted by Roberts (2018d), behind the shocking story of violence, corruption and inequality lies the stagnant state of the Mexican economy. It's the 15th largest in the world as measured by GDP and the second largest in Latin America. It is sufficiently advanced to be included in the top 30 OECD economies and yet, it is in an awful state. The inequality is not just between rich and poor but also in the uneven development of the economy under capitalism. Cumulative economic growth in the best-performing Mexican states reached 32% between 2007 and 2016, about double the average for Latin America. However, this is about four times the rate of growth in the low-performing states. Their per capita output shows the same diverging path. Contrary to the views of mainstream economics, the 1994 NAFTA trade deal with the US and Canada has not taken the Mexican economy forward. Whereas the Mexican economy more than doubled to reach 16% of the US output in the 30 years to the mid-1980s, it has declined to 12% since then. Mexican output per hour worked, relative to that of the US, is near its lowest level since 1950.

NAFTA, far from boosting Mexico's economic performance, increased its dependence on the US trade and investment, locked in the neo-liberal measures of the 1980s and increased the disparities between the faster-growing US border areas with their special economic zones and the poor southern rural regions. US President Trump has now negotiated a new deal which is even more favorable to the US! If NAFTA had been successful in restoring Mexican pre-1980 growth rate, Mexico today would be a high-income country, with income per person significantly higher than that of Portugal or Greece. And it is unlikely that immigration reform would have become a major political issue in the United States, since relatively few Mexicans would seek to cross the border.

As a result of low profitability and investment, along with the impact of the NAFTA deal, the Mexican economy has basically stagnated. The 'neo-liberal period' since the early 1980s did stem the fall in the profitability of Mexican capital to some extent, but it failed to turn profitability up, as it was achieved in most other capitalist economies. Here is my calculation of Mexico's rate of profit alongside that of the US (ROBERTS, 2018b).

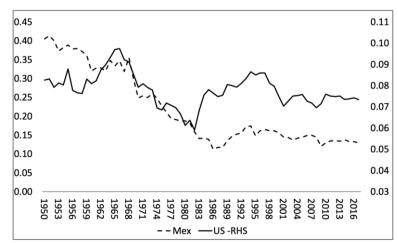


Figure 7 – US-Mexico rate of return

Source: Elaborated by the author.

Roberts (2014b) points out in another paper, that during the Long Depression, Argentina fell into a succession of financial crises. During the 1990s, their rate of profit lifted off. However, it peaked in the late 1990s and the rate of profit then fell (ROBERTS, 2014b). This crisis of profitability ignited the financial crisis and slump of 2001. The commodity boom renovated the rate of profit for a while, although the level never returned to that of 1997. And then the global financial crash hit the economy.

The falling rate of profit after 2007 was the sign that the crisis would return. And so it did. Argentina went deep into recession in 2018. Despite the largest IMF loan in its history, investment stagnated, inflation rocketed and the high interest rates imposed by the central bank attracted short-term speculative portfolio capital, or 'hot money' (ROBERTS, 2019f). In 2020, the amount of external debt which must be repaid will be at its highest and the IMF loans must also be repaid. The new Argentine government faces two unpleasant options: a straitjacket of higher debt payments, more austerity, and more recession, or a painful debt restructuring with an uncertain outcome (ROBERTS, 2019f).

Then, there is the tragedy of Venezuela, brought to its knees during the Long Depression. According to the IMF, real GDP is now 40% below 2013 levels, or 50% in per capita terms. This is a significantly larger contraction than during the 1929-1933 Great Depression in the US, when US GDP is estimated to have fallen 28%. It is slightly bigger than the decline in Russia (1990-1994), Cuba (1989-1993), and Albania (1989-1993) (HAUSSMANN, 2017). On this measure, according to Ricardo Haussman, former chief economist of Inter-American Development Bank, Venezuelan economic catastrophe diminishes any in the history of the US, Western Europe or the rest of Latin America (HAUSSMANN, 2017).

Roberts (2020c) noted that in the 'Bolivarian revolution', under Chavez, the conditions of the poorest had improved with increased wages, social services and reduced inequality. But these improvements were only possible within the confines of a capitalist economy by using the revenues of oil exports at a time of very high global oil prices. But oil prices started to mark time and virtually halved after 2014. Oil exports fell by \$2,200 per capita from 2012 to 2016, of which \$1,500 was due to the decline in oil prices. Maduro's

government started to accumulate huge foreign debts to try and sustain living standards. Venezuela is now the world's most indebted country.

The government resorted to the devaluation of the currency to boost dollar revenues, but this only stimulated outrageous inflation and cuts in real wages. At the same time, the government decided to 'honor' all its foreign debt payments and cut imports instead. This led to a collapse in agriculture and manufacturing even larger than that of overall GDP. The minimum wage declined by 75%. Venezuelans could buy less than a fifth of the food that traditionally poorer Colombians could buy with theirs. Income poverty increased from 48% in 2014 to 82% in 2016, according to a survey conducted by Venezuela's three most prestigious universities (ROBERTS, 2020c).

The Chavista and Maduro governments relied on high oil prices and huge oil reserves to reduce poverty, while failing to transform the economy through productive investment, state ownership, and planning. Between 1999 and 2012 the state had an income of \$383bn from oil, due not only to the improvement in prices, but also to the increase in the royalties paid by the transnationals. However, this income was not used in order to transform the productive sectors of the economy. Indeed, the share of industry in GDP fell from 18% of GDP in 1998 to 14% in 2012. The history of the last ten years is not the failure of 'socialism' or planning in Venezuela; it is the failure to end the control of capital in a weak (an increasingly isolated) capitalist country with apparently only one asset, oil (ROBERTS, 2020c).

#### Imperialism rules

According to Roberts (2018f), the story of Latin America in the last ten years confirms that imperialism is alive and well in the 21st century. One important counteracting factor to Marx's law of falling profitability is foreign trade and investment overseas. This can cheapen the cost of raw materials extracted from dominated countries and raise the rate of exploitation of the labor force by using the plentiful supplies of cheap labor (an untapped 'reserve army' of labor). The profit created by that labor is transferred to the imperialist economies and so it raises the rate of profit at the center. Lenin (1915) explained this counteracting factor as follows. "The need to export capital arises from the fact that, in a few countries, capitalism has become 'overripe' (owing to the backward state of agriculture and the poverty of the masses)" and "capital cannot find a field for 'profitable' investment." It is the race for higher rates of profit which is the motive power of world capitalism and the driver of imperialism and rivalry among imperialist nation-states. Foreign trade can yield a surplus profit for the advanced country.

From about the mid-1960s onwards, the rate of profit fell in the major economies to reach a post-war low by the early 1980s. Therefore, the leading capitalist states again looked to counteract Marx's law through renewed capital flows into countries having massive potential reserves of labor which would be submissive and accept 'super-exploiting' wages. The world trade barriers were lowered, restrictions on cross-border capital flows were reduced and multi-national corporations moved capital at will, within their corporate accounts. This explains the policies of the major imperialist states at home (an intensified attack on the working class) and abroad (a drive to transform foreign nations into tributaries). The globalization of the last 20 years of the 20<sup>th</sup> century is thus a product of the drive to raise profitability after its significant decline in the major capitalist economies from the mid-1960s to the early 1980s.

With imperialism, there is a value transfer from the dominated economies to the imperialist economies through unequal exchange in international trade; through global value chain flows (transfer pricing) within multi-nationals; through factor income flows (debt interest, equity profits and property rents); through seigniorage (i.e. control of the money supply where dollar is 'king'); and through capital flows (foreign investment inflows and portfolio flows ( i.e. buying and selling financial assets)<sup>15</sup>.

There are about ten countries which receive sustained and secular net inflows of income from all these channels. They fit the bill as imperialists. Indeed, nothing much has changed in the last 100 years since Lenin wrote his analysis of imperialism: they are still the same countries. No others have made it from dominated to imperialist status. Net primary

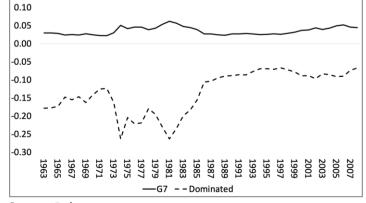
<sup>&</sup>lt;sup>15</sup> Some of the following arguments were also discussed in Roberts (2019g).

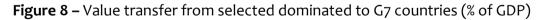
income flows per head are concentrated in the G7 plus a few other smaller states (and the tiny tax haven states). Every other country is an 'also-ran'.

The G8-plus countries own the vast bulk of all the foreign-owned assets. Even the so-called BRICS (Brazil, Russia, India, China and South Africa) own little abroad compared to the imperialist countries. The G8 has six times as much FDI stock as the BRICS (ROBERTS; 2019g).

There has been a large increase in intra-firm trade by affiliates to the parent company using price mark-ups (transfer pricing). For instance, UNCTAD considers the trans-national companies (TNCs) to be involved in 80% of global trade. And of TNC trade, about 40% is intra-firm; 15% through fixed contracts with suppliers and 40% with so-called arms-length firms (i.e. not owned affiliates but 'captive' domestic firms). Real intra-firm trade (affiliates to parent company) is about 33% of all annual trade. So the main way is still to export trade on world markets with internationally set prices (UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT, 2019).

There has been an annual value transfer from these countries to the G7 through their international trade of \$120bn or more a year (CARCHEDI; ROBERTS, unpublished). This annual transfer of value to the imperialist countries (G7) is equivalent to about 2-3% of their combined GDP. However, the transfer from the dominated countries is much more, around 10% of their combined GDP. So, there is a substantial transfer out through unequal exchange (ROBERTS; 2019g).





Source: Roberts, 2020.

#### Prospects for the 2020s

As the world economy enters its third decade of the 21<sup>st</sup> century, the Long Depression in investment, output and income growth seems set to continue as the profitability of capital remains near historic lows. Only a substantial new slump could reduce the costs of capital (means of production and living labor), enough to revive profitability and provide a new period of capitalist expansion. Maybe the political and economic conditions for such a new lease of life for capitalism could happen in, say, the next decade as a result of further slumps, but only if working people in the countries ,who will suffer from this, are unable to change the situation in any way, and the capitalists and their strategists and political representatives remain in power.

Although, even if that happens, capitalism is not going to solve its problems indefinitely. In fact, it is becoming more and more difficult for it to have a new lease of life and expand. Capitalism faces some key challenges over the next 20 years. Firstly, climate change and global warming. The environmental and ecological impact of the capitalist mode of production was highlighted by Marx and Engels way back in the early decades of industrialization in Europe<sup>16</sup> (ROBERTS, 2013c). As Engels put it: "What cared the Spanish planters in Cuba, who burned down forests on the slopes of the mountains and obtained from the ashes sufficient fertilizer for one generation of very highly profitable coffee trees–what cared they that the heavy tropical rainfall afterwards washed away the unprotected upper stratum of the soil, leaving behind only bare rock!" (ENGELS, 2006, s. p.).

Marx synthesized the impact of capitalist production on nature: "All progress in capitalistic agriculture is a progress in the art, not only of robbing the laborer but of robbing the soil; all progress in increasing the fertility of the soil for a given time, is a progress towards ruining the lasting sources of that fertility [...] Capitalist production, therefore, develops technology, and the combining together of various processes into a social whole, only by sapping the original sources of all wealth–the soil and the laborer" (MARX, 1976, p. 637-8). This enthusiasm for profit leads to ecological catastrophe. Nowadays, there is

<sup>&</sup>lt;sup>16</sup> The matter is evident in terms of relevance to the present. The reader also finds some of these aspects in a text by Roberts, written later in 2013 (ROBERTS, 2013c).

overwhelming evidence that climate change and global warming is the result of capitalist accumulation.

What is more, there are other challenges for capitalism in the 2020s. There are huge inequalities in wealth and income in the world, which create enormous social tensions. Over the past 25 years, the inequality in income and wealth globally has reached a level probably not seen in 150 years. And there is also the slowdown in productivity: clear evidence of the failure of capitalism to expand the productive forces in order to provide what people need. Technology has not expanded to the level of what is possible and productivity growth is very weak.

All these factors threaten the future of capitalism to meet the needs of people and the ability of the US to maintain its hegemonic position. The rivalries between the big capitalist powers will increase, particularly between the US and China, because China is a major threat in trade and production, and probably in finance and technology in the future.

A new wave of globalization is possible. While the industrial workforce in the mature capitalist economies has shrunk to under 150 million, in the so-called emerging economies the industrial workforce now stands at 500 million. In addition, there is a large reserve army of labor composed of unemployed, underemployed, or inactive adults of another 2.3 billion people who could also be exploited for new value (ROBERTS, 2018f).

Besides, there are still more human beings in the world to be exploited and there are always new technological innovations which can provide a new cycle for expansion of value and surplus value. There are still huge reserves of labor, as yet untapped, particularly in Africa. The latest UN projections for the world's economies show that Africa is expected to dominate population growth over the next 90 years, as populations in many of the world's developed economies and China and India shrink (ROBERTS, 2018f).

So, capitalism could get a further kick forward from exploiting these hundreds of millions coming into the global labor force. However, competition and imperialist rivalry will grow, just as Marx and Lenin predicted. Imperialism has two Achilles heels. The first is the tendency of the rate of profit to fall as capitalism accumulates, posing increased rivalry and even damaging and destructive wars. The second is the global proletariat – the

gravediggers of capitalism – who are still growing in size across the world. The global proletariat has never been larger in the history of capitalism. In that sense, Marx's prophecy in the Communist Manifesto 170 years ago is confirmed (ROBERTS, 2018f).

Marx's laws about capital accumulation have not gone away. Crises will reoccur at regular intervals with the accumulation of capital and the longer capital accumulates, the more difficult it will be for capital to deliver the needs and desires of humanity, as capital concentrates and centralizes, while inequality of wealth and income remains embedded and even increases. There is no avoidance of this downward spiral.

#### References

ADRIAN, Tobias; NATALUCCI, Fabio. **Lower for Longer:** Rising Vulnerabilities May Put Growth at Risk. 16 oct. 2019. IMFBlog. Disponível em: <a href="https://bit.ly/2Xa84CQ">https://bit.ly/2Xa84CQ</a>. Acesso em: 24 jul. 2020.

BAKIR, Erdogan. The current business cycle expansion in the US. In: HISTORICAL MATERIALISM 2019, 16, 2019, London. **Proceedings of Sixteenth Annual Conference -Historical Materialism.** London: Historical Materialism, 2019. p. 1 - 23.

BASU, Deepankar; MANOLAKOS, Panayiotis T. Is There a Tendency for the Rate of Profit to Fall? Econometric Evidence for the U.S. Economy, 1948-2007. **Review of Radical Political Economics**, Thousand Oaks, v. 45, n. 1, p. 76-95, maio 2012.

BERNANKE, Ben S. **The Subprime Mortgage Market.** 2007. Federal Reserve Bank of Chicago's 43rd Annual Conference on Bank Structure and Competition, Chicago, Illinois. Disponível em: <a href="http://bit.ly/37UXoN7">http://bit.ly/37UXoN7</a>. Acesso em: 03 fev. 2020.

BONNER, Bill. Economic Instability as a Result of Extreme Imbecility. 2010. Daily Reckoning. Disponível em: <a href="http://bit.ly/360unjv">http://bit.ly/360unjv</a>. Acesso em: 12 fev. 2010.

BORDO, Michael D.; MEISSNER, Christopher M. **Does Inequality Lead to a Financial Crisis?** 2012. Disponível em: <a href="http://bit.ly/2u5Vgll">http://bit.ly/2u5Vgll</a>. Acesso em: 10 fev. 2020.

BORDO, Michael; MEISSNER, Christopher. **Does Inequality Lead to a Financial Crisis?.** 2012. NBER Working Paper no. 17896. Disponível em: <a href="http://bit.ly/2u5Vgll">http://bit.ly/2u5Vgll</a>. Acesso em: 03 fev. 2020.

CARCHEDI, Guglielmo; ROBERTS, Michael. **The Economics of Modern Imperialism**. No prelo.

CARCHEDI, Guglielmo; ROBERTS, Michael. **The Long Roots of the present crisis: Keynesians, Austerians and Marx's law**. In: CARCHEDI, Guglielmo; ROBERTS, Michael. World in crisis. Chicago: Haymarket Books, 2018, p. 21-43.

CARCHEDI, Guglielmo; ROBERTS, Michael. A Critique of Heinrich's, 'Crisis Theory, the Law of the Tendency of the Profit Rate to Fall, and Marx's Studies in the 1870s'. 2013. Disponível em: https://bit.ly/2P6Bxcx. Acesso em: 24 jul. 2020.

CASSIDY, John. Interview with Eugene Fama. 2010. The New Yorker. Disponível em: <a href="http://bit.ly/2RTkk8z">http://bit.ly/2RTkk8z</a>. Acesso em: 03 fev. 2020.

ENGELS, Friedrich. **Dialectics of Nature.** 2006. Disponível em: <http://bit.ly/37fJtPc>. Acesso em: 10 fev. 2020.

EVENETT, Simon; FRITZ, Johannes. **Trade policy after three years of populism.** 2019. Disponível em: <a href="http://bit.ly/3bt8wRU">http://bit.ly/3bt8wRU</a>>. Acesso em: 10 fev. 2019.

FEENSTRA, Robert C.; INKLAAR, Robert; TIMMER, Marcel P. The Next Generation of the Penn World Table". **American Economic Review**, Washington D.c., v. 10, n. 105, p.3150-3182, 2015. Disponível em: <a href="http://bit.ly/3b7QO6D">http://bit.ly/3b7QO6D</a>. Acesso em: 15 jan. 2020.

FREEMAN, Alan. **The sixty-year downward trend of economic growth in the industrialised countries of the world.** 2019. Disponível em: <http://bit.ly/38akM7Y>. Acesso em: 10 fev. 2020.

GALBRAITH, James K. Inequality and instability: A study of the world economy just before the great crisis. Oxford University Press, 2012.

GOPINATH, Gita; MILESI-FERRETTI, Gian Maria; NABAR, Malhar. **2019 in Review:** The Global Economy Explained in 5 Charts. 2019. Disponível em: <a href="http://bit.ly/2w54gYQ">http://bit.ly/2w54gYQ</a>. Acesso em: 10 fev. 2020.

GRIM, Ryan. How The Federal Reserve Bought The Economics Profession. 2013. Huffpost. Disponível em: <a href="http://bit.ly/2uXaQjt">http://bit.ly/2uXaQjt</a>. Acesso em: 03 fev. 2020.

GROSS, Daniel. Dumb Money. New York: Free Press, 2009.

HAUSMANN, Ricardo. **Venezuela's Unprecedented Collapse.** 2017. Disponível em: <a href="http://bit.ly/38cvmLS">http://bit.ly/38cvmLS</a>>. Acesso em: 10 fev. 2020.

INKLAAR, Robert; WOLTJER, Pieter. **What is new in PWT 9.1?** 2019. Disponível em: <a href="http://bit.ly/2HcQaag">http://bit.ly/2HcQaag</a>>. Acesso em: 10 fev. 2020.

INTERNATIONAL MONETARY FUND (IMF). **Global Economic Outlook 2020:** Stagnating Growth amid an Uncertain Outlook. 2019a. Disponível em: <a href="http://bit.ly/31FITch">http://bit.ly/31FITch</a>>. Acesso em: 10 fev. 2020.

INTERNATIONAL MONETARY FUND (IMF). **Global Financial Stability Report:** October 2019. 2019b. Disponível em: <a href="http://bit.ly/31G5e9y">http://bit.ly/31G5e9y</a>>. Acesso em: 10 fev. 2020.

TAPIA, José A. **Investment, Profit and Crises: Theories and Evidence**. In: CARCHEDI, Guglielmo; ROBERTS, Michael. World in crisis. Chicago: Haymarket Books, 2018, p. 85-138.

KRUGMAN, Paul. End This Depression Now! New York: W. W. Norton & Company, 2012.

KRUGMAN, Paul. Notes on Excessive Wealth Disorder. 2019. The New York Times. Disponível em: <a href="https://nyti.ms/2SgPLbR">https://nyti.ms/2SgPLbR</a>. Acesso em: 03 fev. 2020.

KUMHOF, Michael; RANCIÈRE, Romain. Levarging inequality. **Finance & Development**, Washington, D. C., v. 47, n. 4, p.28-31, dez. 2010.

LUCCHINO, Paolo; MORELLI, Salvatore. **Inequality, debt and growth.** 2012. Resolution Foundation. Disponível em: <a href="http://bit.ly/20n9Yf4">http://bit.ly/20n9Yf4</a>>. Acesso em: 03 fev. 2020.

MAITO, Esteban Ezequiel. The tendency of the Rate of Profit to fall since the ninetennth century and a World Rate of Profit. In: CARCHEDI, Guglielmo; ROBERTS, Michael. **World in crisis**. Chicago: Haymarket Books, 2018, p. 140-168.

MARX, Karl. Capital Vol. I. London: Penguin, 1976.

MARX, Karl. **Capital Vol. III.** 1996. Disponível em: <http://bit.ly/2Shjldb>. Acesso em: 10 fev. 2020.

MARX, Karl. **Dispatches for the New York Tribune:** Selected Journalism of Karl Marx. London: Penguin, 2008. 322 p. (Penguin Classics).

MARX, Karl. **Grundrisse:** Foundations of the Critique of Political Economy (Rough Draft). London: Penguin Books, 1973. Disponível em: <a href="http://bit.ly/2vh3tUe">http://bit.ly/2vh3tUe</a>>. Acesso em: 10 fev. 2020.

Organisation for Economic Cooperation and Development (OECD). **OECD Economic Outlook.** *Volume 2019, Issue 1*. OECD Publishing: Paris, 2019.

POLLIN, Robert. **We're All Minskyites Now.** 2008. The Nation. Disponível em: <a href="http://bit.ly/36YvWvm">http://bit.ly/36YvWvm</a>>. Acesso em: 03 fev. 2020.

ROBERTS, Michael. **Brazil's Tropical Trump.** 2018a. Disponível em: <a href="http://bit.ly/2Shkmax">http://bit.ly/2Shkmax</a>>. Acesso em: 10 fev. 2020.

ROBERTS, Michael. **Mexico: violence, corruption and inequality:** AMLO to the rescue? 2018b. Disponível em: <a href="http://bit.ly/38huWUy">http://bit.ly/38huWUy</a>>. Acesso em: 10 fev. 2020.

ROBERTS, Michael. The great recession. Lulu. com, 2009.

ROBERTS, Michael. How the official strategists were in denial. 2010. Disponível em: https://bit.ly/30FqxrN. Acesso em: 23 jul. 2020.

ROBERTS, Michael. **The causes of the Great Recession**: mainstream and heterodox interpretations and the cherry pickers. mainstream and heterodox interpretations and the cherry pickers. 2011. Disponível em: https://bit.ly/32Mluar. Acesso em: 23 jul. 2020.

ROBERTS, Michael. **Measuring the rate of profit; profit cycles and the next recession**. 2011b. Disponível em: https://bit.ly/3g3cTVU. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **Inequality**: the cause of crisis and depression?. the cause of crisis and depression?. 2012. Disponível em: https://bit.ly/2BwSWb4. Acesso em: 24 jul. 2020.

ROBERTS, Michael. **Marx versus Keynes in the summer**. 2013. Disponível em: https://bit.ly/30FoZuS. Acesso em: 24 jul. 2020.

ROBERTS, Michael. **Why is there a long depression?** 2013b. Disponível em: https://bit.ly/32XsKkY. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **Climate change and capitalism.** 2013c. Disponível em: https://bit.ly/3jLmiUc. Acesso em: 27 jul. 2020.

ROBERTS, Michael. **The causes of the crisis**: the rate of profit, overaccumulation and indebtedness. the rate of profit, overaccumulation and indebtedness. 2014. Disponível em: https://bit.ly/2EgqYRS. Acesso em: 24 jul. 2020.

ROBERTS, Michael. **Argentina, Paul Krugman and the Great Recession**. 2014b. Disponível em: https://bit.ly/2WXFoNo. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **The Marxist theory of economic crises in capitalism – part two**. 2015. Disponível em: https://bit.ly/3fWGyQm. Acesso em: 23 jul. 2020.

ROBERTS, Michael. The Long Depression. Chicago: Haymarket, 2016.

ROBERTS, Michael. **The Great Recession and Keynesian policies: the big test**. 2016b. Disponível em: https://bit.ly/2D5XNjD. Acesso em: 24 jul. 2020.

ROBERTS, Michael. **Mapping out the class struggle**: from the point of view of capitalist accumulation. from the point of view of capitalist accumulation. 2017. Disponível em: https://bit.ly/2ZVV855. Acesso em: 24 jun. 2020.

Roberts, Michael. **Marx 200**: a rewiew of Marx's economics 200 years after his birth. London: Lulu, 2018. 176 p.

ROBERTS, Michael. **Brazil's Tropical Trump.** 2018a. Disponível em: <http://bit.ly/2Shkmax>. Acesso em: 10 fev. 2020.

ROBERTS, Michael. **Mexico: violence, corruption and inequality:** AMLO to the rescue?. 2018b. Disponível em: <a href="http://bit.ly/38huWUy">http://bit.ly/38huWUy</a>>. Acesso em: 10 fev. 2020.

ROBERTS, Michael. **Trump in the tropics**: bolsonaro takes power in brazil. Bolsonaro takes power in Brazil. 2018c. Disponível em: https://bit.ly/2WXO2eC. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **The macro**: what **`**s the big idea?. what's the big idea?. 2018d. Disponível em: https://bit.ly/302dYry. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **Three laws of motion in capitalism.** 2018b. Presentation. Disponível em: <a href="http://bit.ly/31GGCNX">http://bit.ly/31GGCNX</a>>. Acesso em: 10 fev. 2020.

ROBERTS, Michael. Imperialism, globalization and the profitability of capital – Michael Roberts. 2018f. Disponível em: https://bit.ly/3hGaLUi. Acesso em: 27 jul. 2020.

ROBERTS, Michael. **Understanding socialism**. 2019. Disponível em: https://bit.ly/2EcWznm. Acesso em: 25 jul. 2020.

ROBERTS, Michael. **Forecast 2020**. 2019b. Disponível em: https://bit.ly/3hxzqug. Acesso em: 25 jul. 2020.

ROBERTS, Michael. **The fantasy world continues**. 2019c. Disponível em: https://bit.ly/2En2JS3. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **The fantasy world of the Long Depression**. 2019d. Disponível em: https://bit.ly/3g3yei2. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **Corporate debt, fiscal stimulus and the next recession**. 2019e. Disponível em: https://bit.ly/3g3jvn5. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **Boom and then bust?** 2019f. Disponível em: https://bit.ly/332Rd8R. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **HM2 – The economics of modern imperialism**. 2019g. Disponível em: https://bit.ly/3hxPUCK. Acesso em: 27 jul. 2020.

ROBERTS, Michael. **The value in GDP.** 2020. Disponível em: <a href="http://bit.ly/39q5lJ3">http://bit.ly/39q5lJ3</a>. Acesso em: 10 dev. 2020. Disponível em: <a href="http://bit.ly/39q5lJ3">http://bit.ly/39q5lJ3</a>. Acesso em: 10 dez. 2020.

ROBERTS, Michael. Let's get fiscal! 2020b. Disponível em: https://bit.ly/2OYIiwJ. Acesso em: 26 jul. 2020.

ROBERTS, Michael. **The tragedy of Venezuela**. 2020c. Disponível em: https://bit.ly/30OpVQH. Acesso em: 26 jul. 2020.

SKIDELSKY, Robert. John Maynard Keynes Vol. 2: The Economist as Saviour. Macmillan London Limited: London, 1992.

STIGLITZ, Joseph. **Inequality and Economic Growth.** 2019. Also published in Chinese in Comparative Economic & Social Systems. Disponível em: <a href="http://bit.ly/2019fL2">http://bit.ly/2019fL2</a>. Acesso em: 03 fev. 2020.

STOCK, James H.; WATSON, Mark W. Has the Business Cycle Changed and Why? **Mit Press**, Massachusetts, v. 17, n. 1, p. 1-73, jan. 2003.

TSOULFIDIS, Lefteris; PAITARIDIS, Dimitris. **Capital Intensity, Unproductive Activities and the Great Recession of the US Economy.** 2017. Disponível em: <a href="http://bit.ly/2wcqoAE">http://bit.ly/2wcqoAE</a>>. Acesso em: 28 fev. 2020.

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT. **Trade Wars:** A Threat to Food Security. 2019. Disponível em: <a href="http://bit.ly/2HaWjn7">http://bit.ly/2HaWjn7</a>>. Acesso em: 10 fev. 2020.

UNIVERSITY OF GRONINGEN. Groningen Growth and Development Centre. **Penn World Table version 9.1.** 2019. Disponível em: <a href="http://bit.ly/2HdcMY3">http://bit.ly/2HdcMY3</a>>. Acesso em: 10 fev. 2020.

UTTING, Peter; RAZAVI, Shahra; BUCHHOLZ, Rebecca Varghese. Social and Political Dimensions of the Global Crisis: Possible Futures. In: UTTING, Peter; RAZAVI, Shahra; BUCHHOLZ, Rebecca Varghese. **The Global Crisis and Transformative Social Change.** London: Palgrave Macmillan, 2012. p. 1-22. (International Political Economy Series).

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