

Minsky: Economic Cycle, Financial Instability, and Economic Policy

Minsky: Ciclo económico, inestabilidad financiera y política económica

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Abstract

Until the end of 2019, a little before the effects of COVID-19 would be felt globally, the world's most developed capitalist economies did not show signs of recovery, on the contrary, it seemed that their destiny was a new recession. As is well known, after the 2007 crisis that began in the United States, the institutional and economic policy proposals of Hyman Minsky have been reexamined in a different context. In this paper, we make a description and an interpretation of the main Minskian proposals, which have been reexamined in order to explain the economic cycle, as well as the economic crises and economic policies. Minsky considered that financial instability is inherent to the capitalist system itself, because for him the very stability of the system is in itself destabilizing. It is important to understand the proposals of the Minskian approach, as it is an interesting and valuable contribution to the prevailing conventional theory that failed to foresee the recessionary problems or the economic crisis of the first decade of this century.

Keywords:

Economic cycle, financial instability, economic downturn, economic policy.

Resumen

Hasta fines del año 2019, un poco antes de que se sintieran los efectos globales de la COVID-19, las economías capitalistas más desarrolladas del mundo no mostraban signos de recuperación; por el contrario, parecía que su destino era una nueva recesión. Como se sabe, después del inicio de la crisis en Estados Unidos, en 2007, las propuestas de política institucional y económica de Hyman Minsky se han reexaminado en un contexto diferente. En este documento se describen e interpretan algunas de sus principales propuestas que se han retomado para explicar el ciclo económico, las crisis económicas y la política económica. Minsky consideró que la inestabilidad financiera es inherente al sistema capitalista, porque la propia estabilidad del sistema es en sí misma desestabilizadora. Es importante conocer las propuestas de su enfoque, ya que es una alternativa interesante y valiosa a la teoría convencional prevaleciente, que no pudo vislumbrar los problemas recesivos o la crisis económica de la primera década de este siglo.

Palabras clave:

Ciclo económico, inestabilidad financiera, recesión económica, política económica.

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Introduction

After the financial crisis in the United States at the end of 2007, conventional rule-based economic policy measures were relaxed, and more flexible measures were adopted. We even believe that Hyman Minsky's proposals have been reconsidered and evaluated, although, of course, in a different context.

Some of his proposals seem to coincide with the current implementation of Mexican economic policy, which is why, in this paper, we describe and interpret some of his most important proposals, which are combined, as well, with the phases of the economic cycle, especially with its depressive phases. As we will see, for Minsky, capitalism is, in itself, unstable. For these reasons, his hypothesis of financial instability not only serves to explain the critical phase of the cycle, but, at the same time, to show how in its different phases a series of events accumulate that lead to Minsky's conclusion that capitalism is a system that in its own stability is in itself destabilizing.

According to King (2016) the most important aspects of post Keynesian macroeconomics are "the fundamentalist Keynesian approach headed by Paul Davidson, the Kaleckian variant represented by Eckhard Hein, and the hypothesis of Hyman Minsky's financial instability" (King, 2016, p. 13). In this article, references are made to the third aspect associated with Minsky, which has been stressed again in the explanation of both the economic cycle and its critical phase.

Specifically, since 2007, the first effects of the great global crisis of the capitalist system in the 21st century are beginning to be felt. A post-Keynesian alternative to understanding the roots of the crisis in order to reach a possible improvement can be found in Hyman Minsky. From our point of view, the crisis has not been overcome

because some of its effects were initially considered as quasi-catastrophic, such as GDP growth and the percentage of debts/GDP. The crisis still persists, albeit with less intensity. Moreover, the numbers of sovereign debt, profit, unemployment rates, investment, among others, have not reached their pre-crisis level.

Stiglitz (2019) observes that, even when jobs have recovered, economic inequality is growing for the majority of Americans

Despite the lowest unemployment rates since the late 1960s, the American economy is failing its citizens. Some 90 percent have seen their incomes stagnate or decline in the past 30 years. This is not surprising, given that the United States has the highest level of inequality among the advanced countries and one of the lowest levels of opportunity — with the fortunes of young Americans more dependent on the income and education of their parents than elsewhere.

The *Minsky moment* is once again relevant, although it was not considered in the eighties nor in the nineties, an important part of teaching in economics schools, nor, as expressed by Gnjatović and Jovancai (2010) was [it] considered in the design of monetary policies. To which we would add that he was a forgotten author for economic science. But what is certain is that Minsky would not fit in the current monetary policy consensus, since, as these authors warn, central banks focus much more on the measures and instruments related to the management of the monetary rate of interest. That is why the "function of direct regulation of the banking system was reduced to a minimum" (Gnjatović & Jovancai, 2010, pp. 20-21). On the contrary, Minsky is much more in support of institutions as he considers the intervention of the State in the economy both necessary and beneficial.



The recent economic crisis, which is seen as a financial crisis, caused Minsky's writings to be revised again in the light of high-risk leverages, or Ponzi structures of indebtedness and other forms of management and high speculation with financial assets (associated with mortgage loans) in order to make high returns in the short term.

In a straightforward manner, resorting to the predominant orthodox theories, it was not possible to predict or explain in depth the causes and permanence of the crisis during a certain period of time. How to predict or at least explain the crisis with neoclassical, monetarist, neo-Keynesian or new classical tools, when, from our perspective, they do not have the theoretical developments, particularly due to their ideological foundations, relevant to an adequate interpretation of crises or depressions.

For example, neoclassical theory, in its pragmatic-ideological version, points out that the market is an efficient allocator of resources, which in the microeconomic sphere is generally associated with factors such as capital, human factor, natural resources, etc., where the efficiency of the market lies in an allocation and adequate distribution of resources corresponding to their marginal contributions to the product. However, the problems posed in this type of theories are associated with different forms of mathematical optimization and not with reality itself. They start from *heroic* assumptions, for example, when they refer to the financial system, which is believed to be the great (neutral) arbitrator in the efficient allocation of resources, through credit application, interest rates, charges, etc. Therefore, in order for markets work to efficiently and thus allow for the allocation and distribution of resources, it is necessary for this system to operate freely and without restrictions. Hence, economic policy is seen in a passive and subordinate way.

This theoretical approach believes that the best economic policy is the one that involves less intervention and, if implemented, must pursue the principles of free market action. Therefore, under this criterion, the market itself would find its own equilibrium, and so on, with all other markets. A situation of market imbalance would not be inherent to the system, that is, endogenous. But it would be due to elements that exist outside the system, such as State intervention or stochastic events like as a climate phenomenon, or war, global disputes, unexpected interventions by governments, etc., as well as certain distortions that would affect markets and their efficiency, such as problems related to information, its means and channels.

In addition, along the same lines, the existence of the economic cycle could be explained. The fluctuations in a normal or balanced path could only be explained by the intervention of the State (an exogenous agent) that would not allow efficient self-correction by market mechanisms, or by a correlated series of events not contemplated (external) to the system, called *stochastic events*.

But this exogenous vision of the cycle or the self-regulatory form of the markets does not coincide with the proposal of Hyman Minsky, who explains the crisis, the cycle and the financial phenomena from an endogenous approach. Minsky is considered a post-Keynesian economist insofar as he differs from the neo-Keynesian schools or from the neoclassical synthesis, as well as from the orthodox derivative versions such as those of the monetarists or the new classical school. Minsky assimilates the post-Keynesian vision that asserts that the market is neither an efficient allocator nor distributor of resources and that, therefore, State intervention in society is necessary. And the interventions essentially associated with the economy, as we know, are called economic policies. For

Minsky, money is not neutral either, in the sense that a change in the amount of money does not affect the real variables (e.g. production or employment); the opposite is true: both monetary phenomena affect the real sectors of the economy, as well as the changes in these last ones have effects on the monetary ones. For example, an increase (decrease) in economic growth, in general terms, would lead to an increase (decrease) in the demand for money.

The Keynesian heritage in Minsky

Papadimitriou and Wray (2008) believe that there are several factors influencing Keynes, especially the Keynes of the General Theory of Employment, Interest and Money (hereinafter General Theory), which are related to the development of the economic cycle and the valuation of financial and capital assets that Keynes makes in chapters 12 and 17 of his book. In chapter 12 of the General Theory, he refers to long-term psychological expectations that relate mainly to expectations about investment and consumption in scenarios with a certain degree of uncertainty. These expectations are constructed under adaptive expectations that are associated with past behavior, and that affect the present values of certain variables and with certain possible scenarios.

The *convention*, according to Keynes, leads to consider that the current conditions will remain the same in the future, but they can be modified depending on the predictions of the economic agents. It is, then, a subjective category that refers to the *state of confidence*, which has an influence on the marginal efficiency of capital (MEC)—associated with the expectation of future probable returns of investment projects and, therefore, on investment. When the state of confidence is high, so will the MEC, they will positively influence investment and, vice versa.

Now, we must take into account that *the state of confidence* has the possibility on the part of the industrial capitalist to obtain credits and, therefore, of financial capitalist to grant them. When this state is uncertain or is considered subjectively as not favorable, then there will be strong credit limits, which will affect the dynamics of capital investments. Therefore, the state of confidence will affect the credit status (position), and from there the MEC, etc.

In this way, the *state of confidence* is linked to the investments of physical capital as well as to credit and its conditions. Keynes calls it *credit status* (position). Both have influence on the MEC, in the recovery processes and even, it can be inferred, in the depressive ones. In this way, they can be considered an important explanatory element of the economic cycle.

Keynes (1965) tries to associate the *state of confidence* and the *state of credit* with certain stages of the economic cycle, especially those linked to the critical stages. A depression can be caused by loss of confidence or loss of credit status or both. Nevertheless, for recovery, Keynes believes, both must coincide (p. 144).

On the other hand, in chapter 17 of the General Theory (Keynes, 1965), entitled "The essential properties of interest and money", Keynes develops a part of what could be called his financial theory, since it links the prizes for liquidity or in a certain way, the risk for liquidity, with different types of assets, the most liquid is the one that has a greater prize for liquidity. From our perspective, it could also be seen as part of the theory of demand for money as it relates the interests of different assets with little reward for liquidity with the money that is the highest reward. It also provides certain explanations that relate to the interest rates themselves with the marginal efficiency



of capital. Unfortunately, Keynes, still maintains strong theoretical and uncritical remnants of his classical ancestors, and he falls into what Marx considered in capital as fetishism of commodity and, in this way, Keynes incurs in what by analogy would be called the fetishism of money, because it would keep up a certain return or interest for its degree of liquidity. Nor, as a result, is a link established between the analysis of the liquidity of the assets with the economic cycle phenomenon.

It the key chapter 22 of the General Theory, entitled "Notes on the Trade Cycle", although Keynes recognizes that there are multiple determinations of the economic cycle such as the marginal propensity to consume, the preference for liquidity, etc., the primary explanatory element is the marginal efficiency of capital, which influences investment decisions and therefore investment demand. In this way, the economic cycle and, in addition, the crises are explained by demand factors; in this case, mainly because of fluctuations in the MEC.

Even so, the Keynesian explanation of the economic cycle is more an explanation of crisis than of the cycle itself. Hence, its study is somewhat limited. In any case, throughout the General Theory, there are glimpses of the development of a Keynesian explanation of the economic cycle. However, if we analyze Keynes' notes, we can observe that the MEC mainly depends on the amount of existing capital stock and the expected returns on capital investments.

Then, we would have a function of this type: MEC = MEC (K, r^e). Although it is also written as: $I = (r^e - i)$

Where I is private investment; i is interest rate; K is existing stock of capital and r^e is the expected return of capital investments. It follows

that, in general terms [δ (MEC)/ δ K] < 0 and, in addition, that [δ (MEC)/ δ r^e] > 0. The larger the capital stock, the lower the MEC, and the higher the expected return will be. In the second equation, the investment will increase as long as $r^e \ge i$.

Although it is recognized that crisis is a multi-factorial phenomenon which is due, in Keynes' view, to a sudden change in the marginal efficiency of capital. But why this sudden drop? Keynes draws the stage of a final state of boom in which the economy is located. Actually, it is telling us the obvious: that the economy is going to go into depression. However, we also interpret that part of the problem as subjective, because in stock exchanges buyers make bad forecasts or are incompetent and, speculators, he says, are more attentive to what can be the average opinion of the market than what could be the "future performance of capital assets."

However, the above does not evidence the problem, but rather, what can aggravate it, since by decreasing the MEC, and increasing the interest rate, the demand for investment goods would decrease. It does tell us that the problem is that of MEC collapsed, but it does not tell us the reason for this collapse. For example, Keynes (1965) points out that when depression begins, the MEC is already very low, but it stays there, an enigma that stays pending for posterity. On the other hand, it is clear that he points out certain endogenous factors that can lead the capitalist economies to their recovery.

But the interval of time, which will have to elapse before the shortage of capital through use, decay and obsolescence causes a sufficiently obvious scarcity to increase the marginal efficiency, may be a somewhat stable function of the average durability of capital



in a given epoch. If the characteristics of the epoch shift, the standard time-interval will change. (p. 238).

However, the criterion of scarcity of capital is not enough to be considered a theory, neither of the crisis nor of the economic cycle.

In addition to secondary arguments regarding the recovery processes, Keynes notes an important aspect in the explanation related to the low in the MEC: that by lowering this, it also has effects on the marginal propensity to consume (here there is no Pigou effect: no wealth increases with lower prices). But the explanation can be considered as something exogenous to the system, because it indicates that when the MEC falls, the value of assets that are traded in the stock markets decreases, this, Keynes believes, generates a depressive problem (it is understood that this occurs in the psyche of their owners) and due to this, they decrease their consumption levels.

Now, presumably a decrease in the interest rate could incentivize the MEC and, hence, investment. However, Keynes considers that the fall in the interest rate is insufficient (partly due to the preference for liquidity) so that an expansionary monetary policy that had the intention of lowering the interest rate would also be insufficient.

It should be noted that although Keynes recognizes that a problem associated with capital goods and with the depressive stages of the cycle is linked to overinvestment, or in other words, to overproduction of capital, it is not a relevant condition for the cycle and the crises, rather, he appreciates as a particularly explanatory phenomenon the system's own *instability*, which is related to the *conditions that make investment unstable*, and which influence expectations of the future performance of capital goods.

Likewise, Minsky points out that in all of Keynes' work, this is in the General Theory, there are many theoretical developments regarding the economic cycle, however, one could say that they are not enough. Minsky (1985) himself recognizes this insufficiency because: "To tell the truth, the lack of an explicit and precise exposition by Keynes on the details of booms and crises should not prevent us from this task" (p. 73).

The endogenous instability within capitalism

Rather than considering states of unemployment or full employment, Minsky considers primarily that capitalism is an unstable system and that instability is endogenous to the system (Charles, 2008). It is not that the system becomes unstable due to interventions or the application of government economic policy, or due to external shocks, but rather that capitalism is inherently unstable. This instability is associated with the Keynesian view of the capitalist system: unemployment is persistent and capitalism itself generates economic inequality; but as Papadimitriou and Wray (2008) correctly point out, Minsky provides a third expression of instability: that of modern financial capitalism. That is why Lobejón (2010, p. 242) points out that "The hypothesis of financial instability makes it possible to discover that the great restraint that some praised was in fact the manifestation of a very dangerous period (that of the calm that precedes the storm)."

For Minsky, finance and credit are a fundamental part of the dynamics of the capitalist system and have an important and permanent impact on the decisions of credit granting by banks and investment decisions. The Keynesian category of *credit status* will somehow be reflected in the hypothesis of financial instability (HFI), which according to Minsky (1992) "is a theory of the impact of debt on the behavior of the system and



also it incorporates the way in which the debt is validated" (p. 7). However, to understand the HFI, it is necessary to highlight how economic agents can be categorized in relation to the state of their debts, which obviously will be related to investment and to the instability of the economy. This categorization or taxonomy, as Papadimitriou and Wray call it (2008, p. xv), takes the concepts of *covered finances*, *speculative finances* and finally the *Ponzi schemes* of indebtedness.

Thus, an outline of *covered finances* leads us to establish that cash or monetary flows (cash flows) of economic agents are considered as a hedge or sufficient for the payment of interest and amortization of debt; *speculative finances* would be those in which monetary flows would only reach to cover the interests of debt and not the principal debt; while the *Ponzi-type finances*, the monetary flows would not cover either the interest or the principal or part of the principal of the debt (Minsky, 2008, p. 80, Papadimitriou and Wray, 2008, p. xv). These types of finances could be analyzed by the credit system of countries for granting of credit, setting interest rates or the application of various charges or credit conditions.

These outlines can also be used to categorize the sovereign debts of nations, serving to classify nations as *covered, speculative or Ponzi type* depending on the status of their debts. The critical part of the cycle or the critical moment of the economies has been known as the *Minsky moment*:

The term *Minsky moment* was coined in 1998 on the occasion of the Russian debt crisis by Paul McCulley, manager of PIMCO bond funds, an investment company that manages one of the largest funds. This neologism became a buzzword during the *subprime* crisis, as it was soon adopted by other professionals and senior analysts, like George Magnus. (Vercelli, 2009, p. 2).

Then, once the concept has been extended to the debt structure of countries, according to Minsky (2008), the following can be established:

The relative weight of income, balance-sheet, and portfolio payments in an economy determines the susceptibility of the financial system to disruption. An economy in which income cash flows are dominant in meeting balance-sheet commitments is relatively immune to financial crises: it is financially robust. An economy in which portfolio transactions are widely used to obtain the means for making balance-sheet payments can be crisis-prone: it is at least potentially financially fragile. (p. 227).

So, the categories developed by Minsky are linked to the criterion of financial instability (and even fragility) of countries. It is true that in different countries there are different combinations of covered, speculative or Ponzi financing, but the more preponderant the speculative and Ponzi schemes, the greater the financial instability will be.

Then, based on his arguments, if cash flows are insufficient, a harmful influence can occur in the three financial schemes. It is then that the slower the cash flows, the greater the insecurity that economic agents or the government have. With this, it is possible, to the extent that the inflow of cash flows deteriorates, that an economic unit with covered finances can be transformed into a speculative or Ponzi.

Minsky and the economic cycle

Minsky (2008) points out that "Economic cycles are 'natural' in an investing capitalist economy, but to understand why this is so it is necessary to deal with the financing of investment and positions in capital assets explicitly" (p. 249). Therefore, the

economic cycle is related to investment, indebtedness and the risk of leverage. For Minsky, money and credit are associated with the generation of investment, and therefore with production and employment. In a similar way to Keynes, investment is a fundamental part in the explanations of the economic cycle and the crisis. Wray (2001) tells us that "Minsky did have a theory of the economic cycle. He called it "an investment theory of the cycle and a financial theory of investment" (p. 5). He borrowed the first part of that from Keynes: investment is unstable and tends to be the driver of the cycle (through its multiplier impact). Minsky's contribution is the financial theory of investment, with John Maynard Keynes (1975) providing the detailed exposition. In brief, investment is financed with a combination of internal and external (borrowed) funds. (Wray, 2011).

When analyzing chapter 17 of Keynes's General Theory, Minsky stresses that Keynes starts from an implicit return on money which we will call i and will relate it to another rate associated with what he calls quasi-rents or periodic flows of a capital asset, which we will call r. If r < i, investment stops. The implicit situation of the Keynesian argument is that the process of accumulation of capital (increase in stock) leads to lower *r*. What then happens with the *Pk*, the price of capital goods? Well, if it decreases its performance, r, then its price goes down. When does investment in capital goods stop? The answer is simple: when Pk < Cp. That is, when the price of capital goods, Pk, is lower than that of their production costs, *Cp*.

However, Minsky (1998; 2008) assumes that interest on debt charged to companies is deducted from income (less average variable costs according to Minsky's criteria) or from what he calls quasi-rents. But the income of the capital-

ist comes, precisely, from the flow of his profits; for what Minsky expresses is something that Marx had already warned, that interest participates in the profits of capital. Minsky, following Keynes, asserts that when quasi-rents fall, so does the Pk in a way that equals r with i. Why does income go down? It is possible to think that since this topic associates income with the economic cycle, it is a depressive stage of it. This is because Minsky introduces in the Keynesian arguments his own vision of the crisis that has to do with the financial system. In other words, although Keynes takes net quasi-net income into account, it implies deducting the costs from them, Minsky broadens the concept and takes as part of the deductions, the costs of the debts or business obligations and, in that way, as has been expressed, the financial system is included, because the banks are the ones that grant the greatest amount and number of credits. In this way, the Minskian trojan horse enters through the back door of the Keynesian structure and can thus explain the instability of capitalism through the financial system.

But this also serves to explain the phases of the economic cycle for both credit and investment. Minsky believes that, if investment is financed with its own funds and little debt, it leads to a *normal economic expansion*, but if investment implies a greater use of credit to be leveraged, then it is in an *expansive stage*. On the contrary, if the demand for credit is very low or has decreased, it is in a *recessive stage*. Finally, when credit declination is very strong, it is in a *depressive phase* of the cycle. (Minsky, 2008, p. 145).

Now, this is complemented by two aspects that Minsky highlights in the stages of the cycle: the speed of money and the amount of money that could be given even in parallel. For example, in an expansive stage of the economic cycle, the needs



of credit and commercial exchanges would lead, on one hand, to monetary expansion, and on the other hand, to an increase in the speed of circulation of money. The first would have to do with the expansion of business, say investment; while the other would have to do with the different and increased commercial exchanges that occur in an expansive stage of the cycle.

Hence, Minsky (2008) can describe the expansive phase of the economic cycle as follows:

In a business-cycle expansion, the demand for investment goods increases. A greater demand for labor to produce investment goods increases employment and, in turn, wages, profits, and prices. Once investment and employment rise, then the demand for consumption goods, for consumption-goods output, and for employment in consumption-goods production increases; as a result, the gross profits of consumption-goods producers increase. Thus, an initial increase in investment-goods employment and wages leads to rising employment, wages, and prices in consumption goods. (p. 298).

However, there are factors that oppose or counteract the expansive phase, Minsky (2008) emphasizes financial reactions: "This process, however, is limited by financial-market reactions to increased financial layering and the emergence of fragile financial structures conducive to crises and cyclical downturns" (pp. 298-299). Nevertheless, the analysis seems somewhat superficial while in this part it does not refer to specific factors that explain clearly what the fragile financial structures are.

On many occasions the dynamics of capitalism seem stable to us. But this is just its *appearance*. For example, Wray (2011) observes that

"the dynamic forces of the capitalist economy are explosive" (p. 1). So, the ceilings and institutional floors will be transgressed by this explosive dynamic. This reinforces Minsky's assertion that even in expanding economies or those that are considered relatively stable, stability is destabilizing so that the expansion process is limited by the financial system itself.

If the economy is in an expansive phase of the economic cycle, then a large part of new investments will be financed with debt, because the expectations on income or benefits will be optimistic, so investment will continue because the real benefits are greater than those expected and, therefore, the investment and indebtedness processes can continue. That is why Wray (2011) points out that this leads the system to a certain level of instability given the degree of indebtedness of firms. That is, although it is part of a financing situation *covered* by most large firms, the system itself would lead to a situation of speculative financing or, as the case may be, Ponzi financing.

However, when one is in a Ponzi situation, in which neither the interest nor the principal can be covered, it is much more difficult to obtain loans from the banks, which leads to a state of credit restriction due to the poor solvency of the economic units. Does this mean that the economy is in a recession or economic crisis? Not necessarily: the only thing that can be said is that capitalism generates its own conditions of instability, that is, it is endogenous to the system (Minsky, 2008; Ruiz Pérez, 2011). But yes, we must consider that high levels of indebtedness, both of companies, corporations and countries can lead to insolvency or financial crises.

That is, for a recession or a crisis to occur, it is necessary to have what Minsky calls *frag*-



ile financial structures, or in the words of Minsky (2008) himself

Because of the upward instability of the investment-financing-profits interactions, from time to time, fragile financial structures emerge. Fragile financial structures regularly break, which sharply reduces investment spending. Sometimes the end comes with a whimper and a recession result; at other times the end comes with the bang of a financial crisis, and a deep depression follows. (pp. 300-301).

Following his argument, the transition from an expansive stage to a depressive one is due to excessive indebtedness, leverage and speculation. It can be noticed that this stage is well explained by the financial system which affects the real sector of the economy, resulting in a decrease in investments. It follows a generalized decrease in aggregate demand with the latent possibility of a crisis. Like Keynes, Minsky observes that these phases are not contingent, but are part of the inherent capitalist system itself.

Recalling Minsky (1985) in *The Reasons* of Keynes, where he interprets Keynes observation that the scale of investment, which is the determinant of the economic cycle, will fluctuate for no other reasons than the propensity to save (hence, the propensity to consume) or the "technical capacity to support production", Minsky stresses that "different reasons refer to portfolio preferences, financing conditions and uncertainty" (p. 77).

He associates the portfolio with the ownership of fixed assets, financial assets and debt of the "economic units". As can be seen, Minsky is giving a more financial touch to the study of the economic cycle, for only from these elements of analysis, we can deduce some financial reasons such as debt to total assets. But in addition, we must consider other types of relationships such as cash flows or benefits that each particular asset can provide, including in cash flows the possibilities of sale, as well as the commitments made by the structure of debts, both short and long-term.

Minsky (1985, p. 80) not only takes into account income from benefits because in the capitalist system there is a variety of cash flows that are associated with the performance of "assets" such as wages, rents, mortgages, interest, loans, repayments, rates, taxes, profit-sharing, dividends for financial assets, etc. Therefore, it is not only differences in cash flows to their maturity: short, medium or long-term, but also to the degree of (un) certainty that they may have with respect to each of them, and their recurrence or periodicity.

Broadly speaking, it can be said that for Minsky the economic cycle is explained by several factors, but especially by financial aspects that affect the adequate performance of the real sector of the economy, especially investment. Thus, when there is an expansive period of the economy, given the expectations about the future returns of physical assets, more and more indebtedness is going to be borrowed and also financial innovation that is difficult to regulate is increasingly complex. This creates the conditions for financial instability and fragility, which can be appreciated by the speculative and Ponzi debt structures that occur in the economies. "[The] instability of the financial markets, which is incorporated into the capitalist system, is the cause of cyclical oscillations in the economy; this instability can only be eliminated through regulatory measures by the state and the central bank" (Gnjatović & Jovancai, 2010, p. 19). Therefore, it cannot be said that money is a veil in the neoclassical sense, because in Minsky, the real and financial sectors are linked and, we



would say, interdependent, although with certain asymmetries favorable to the latter. But endogenously, the system itself creates its own fragility, which ultimately leads to a crisis of *means of payment*, which is associated with the credit restrictions of banks to other sectors of the economy. The first affected are those that keep up speculative or Ponzi structures of indebtedness and that surely, they will also be the first to fall into insolvency. Therefore, Minsky's economic cycle theory focuses mainly on the credit fluctuations derived from financial instability.

The phases of the economic cycle, states Minsky (cited in Gnjatović & Jovancai, 2010), are displacement, boom, euphoria, profit taking and finally, panic. The displacement phase is related to the expansive stage of capitalism, with high profits, which leads to a boom in the stock market, since almost all financial assets are rising. Asking for loans given the differential between interest rates and returns on financial assets leads to important changes in the portfolio among investors since they prefer financial assets that keep money in liquid form, since financial assets have a higher return. Banks can grant more loans and there is always the possibility of mechanisms of financial innovation with which credit can be increased, as it was the case of the *securitization* of the mortgage credit that resulted in the 2007-2008 financial crisis in the U.S. As the demand for financial securities increases, they rise in price, which has the effect of more loans being requested, etc., which will, in turn, increase the demand for securities or securities-prices-credit titles ... etc. There will then be a boom or bubble, in this case, stock market or financial.

Now, when the demand for loans grows, banks also go to loans to face the increased demand. They need to have more liquid resources to be able to continue granting credits. As a gen-

eral rule, banks get liquidity through the exchange market. The problem is that it is a very short-term market with little volume. This process is known as euphoria, what we would call the euphoria for fictitious capital. The next phase is known as taking of profits, which is now claiming more liquidity than before. Both banks and intermediaries and financial agents can support several strategies such as selling the highest risk securities that have given them high returns over a certain period of time, to reinvest them later in financial assets with lower risk but with lower yield. However, the entire amount of the investment is not always withdrawn, but may be partial depending on the expectations that are held of the behavior of the market or by the borrowers in particular.

What is known as the panic phase is associated with events that at a certain moment seem fortuitous as insolvencies and some minor losses, but which at peak times reach important financial institutions or companies. Banks and institutional investors want to recover their loans or investments, but the poor solvency of the borrowers is not as expected, and there is a strong increase in the portfolio not recovered on time or finally uncollectable. In this way, credit is strongly restricted and interest rates increase. What used to be cheap credit to buy financial assets, now becomes more onerous; it is difficult to wait for the returns that were habituated in the good times. Then the demand for financial assets decreases and, hence, their prices begin to decrease. To this situation is added the fact that there is a panic process because the market is going down, and goes down even more due to the oversupply of the financial assets that are trying to recover at least part of the investment. This is what Gnjatović and Jovancai (2010) call "the bursting of the market bubble". Needless to say, they are very likely to be those who keep up a speculative or Ponzi type of debt, based on Minsky's taxonomy.



Gnjatović and Jovancai (2010) add the following:

The credit cycle ends when the momentum of interest rate growth moves to the real sector of the economy, according to the standard Keynesian scheme. Namely, the growth of the interest rate leads to a drop-in investment demand. Households are buying less durable consumer goods and real estate, producers of durable consumer goods are accumulating inventories, decreasing production and laying off workers. The construction industry slows down. Companies are investing less in the purchase of machines and equipment. The layoffs of workers increase the unemployment rate in the national economy and reduce the purchasing power in the market. The recessive spiral threatens to cause deflation. (p. 20).

This, finally, produces a *crisis* in the real part of the economy coming from the financial markets. The contracting of credits is necessary for a greater accumulation and reproduction of capital, which not only ensures a higher rate of profit, but a greater amount of profit in monetary terms. But this accumulation and expanded reproduction of capital is intrinsic to capitalism. That is why Boyer (2015) claims that:

[...] as it is reaffirming the strength of growth, companies that already gained confidence, they accept a higher debt ratio, to the point of becoming speculators, in the sense that they rely on a comfortable renewal of credit and consider that they will only have to pay the interest charges. In some cases, companies can acquire even more risks, considering that, even if they have the means to repay loans, the capital gain will allow them to safely continue a strategy of chivalry or financial pyramid as happened to posterity under the name of Ponzi. (p. 25).

Some of Minsky's economic policy proposals

Minsky distinguishes two types of government, the *Big Government*, and the *Small Government*; from there, different types of economic policy can be derived. Tymoigne (2008) observes that, according to the Minskian view, capitalism (and hence the difference in the application of economic policy) can be

[...] of *laissez-faire*, where the government represents an insignificant proportion of the economy, promotes individual initiatives and creativity (what can be called business initiative) but also generates unfair depressions and inequalities. On the contrary, the capitalism of the strong State [Big Government] is more stable but also has its own problems, such as lack of dynamism and inflationary tendencies. (p. 3).

Minsky analyzed capitalist economies, especially in the decades of the sixties and seventies of the last century, when inflation phenomenon occurred. Based on the Keynesian thesis that capitalism only reaches equilibrium (full employment) by chance and that the normal state of the dynamics of the capitalist system is in a constant state of imbalance, Minsky highlights the distributive problems, where a significant percentage of the global income is concentrated in the layers of the population with the highest incomes. He also covers problems related to economic instability and financial fragility, as well as chronic unemployment. Hence, Minsky's proposals will defend the strong State, which taking into account the intrinsic instability of capitalism, will have the objective of combating a whole series of phenomena related to instability, such as inflation and redistributive actions, without losing the objectives of production and employment.

At the same time, Minsky (2008) does not stop considering the normative actions with respect to the financial system. Because for him, in capitalist economies there is a strong association between the financial system and "the real sector", where portfolio decisions and therefore indebtedness would have a strong impact on the latter. This is not a vision where market imperfections, asymmetric information, price rigidities (including salaries) are privileged, where economic policy would be devoted to the correction of these aspects that would be relatively circumstantial. Thus, the intervention of the government would not be something that would violate the normal or natural development of markets, on the contrary, it would strengthen it. But,

on the contrary, Minsky viewed the government as a necessary complement to the profit-oriented sector (and more generally the individual sphere of the economy). Given that, according to Minsky's Financial Instability Hypothesis, market mechanisms tend to promote inflationary pressures and financial fragility as the economy tends towards full employment, a major role of the government is to promote stable full employment, that is, non-inflationary and financially sound full employment. This requires that the government intervenes continuously over the economic cycle, rather than sporadically during downturns and upturns. (Tymoigne, 2008, p. 9).

The endogenous nature of money supply

One key aspect for understanding that the government is limited in the management of money in the economy, is the idea the quantity of money is not exogenous in the sense that economic agents are able, through financial innovation, to create new credit instruments. Minsky does not believe in the mere application of traditional monetary

policy instruments such as the management of money supply or the control of interest rates.

When the government tries to control the supply of money, Minsky (2008) says, this is difficult to achieve. He does not agree with the monetarist thesis whose objective is to maintain a stable growth of the money supply in relation to the growth of the long-term economy. In this case, monetary policy would focus on maintaining a constant rate of growth of the money supply. However, as Minsky points out, banks treat money like any other capitalist company to obtain profits in different ways. They will use various mechanisms and instruments to get profit, which is associated with the increase and diversification of credit. They will create various financial instruments, financial innovation, which will increase the possibilities of credit, but also financial instability. The government, Minsky believes, will always be left behind so it is difficult to manage the supply of money through traditional mechanisms such as bank reserve.

Minsky also does not agree with the control of the interest rate through various mechanisms such as the discount window (Papadimitriou & Wray, 2008, p. xxvi; Flanders, 2015, pp. 85-66), which influences interest rates. What Minsky proposes is greater regulation and surveillance through institutional mechanisms, which implies measures totally different from those of a neoliberal nature; because the regulation of the government through institutional mechanisms goes against the current principles of liberalization, deregulation and free market proposed by those closer to the hypothesis of efficient markets.

An important proposal within the economic and public policy of Minsky is what is called the *employer of last resort*, which is similar



to the concept of the lender of last resort of the Central Bank.

A lender of last resort is the action of the Central Bank to lend money to commercial or investment banks when, in certain circumstances, they cannot cover the short-term liquidity requirements. That is, when banks have already gone to other banks or other financial institutions, and have not been able to cover the needs derived from their liabilities in the short term. So, in a colloquial way, the central bank comes to the rescue of these banks by providing them with liquidity.

This is not done for humanitarian reasons, but to avoid a collapse of the financial system and avoid unnecessary pressures on the real sector of the economy, thus avoiding the possibility of a crisis. Similarly, Minsky (2008) proposed that the State become an employer of last resort (ELR) for those who had not been employed by the private sector of the economy. This again, as Wray (2011) points out, is not done for humanitarian reasons. Rather, Minsky thought of permanent and decentralized programs (Tymoigne, 2008) but with a basic salary, no matter how qualified the person is. At the same time, there would be another set of jobs that would depend on the government's goals for people with different levels of training, qualification and payment.

Mastromatteo and Esposito (2017) point out that

An ELR program can be summarized as follows: (i) it offers a job to everyone, but with strings attached: (ii) it awards a wage lower than the prevailing private sector's wages; and (iii) it is designed to fulfil local projects linked to social needs. Thanks to its features, the ELR includes all the different aspects of a labor market policy: namely, unemployment reduction and employability, human capital

preservation, poverty prevention, consumption smoothing, and others... (p. 637).

However, as was already stated, the Miskyan proposal on the ELR, is not necessarily a humanitarian proposal, but rather it has to do in large part with counter-cyclical measures, because when there is a depressive or critical problem of the economy, it faces problems of unemployment. The proposal of Minsky has as a background the recovery of aggregate demand and from there, production and, at a later stage, productive investment. But the ELR program can become something stronger as is the case with income control or wage control. What can at a certain moment benefit capital, because an institutionalized regulation of wages, if it were to contain wages, would actually benefit capital, could also contain inflation, but very likely there would be a fall in productivity and in international competitiveness.

How contemporary is Minsky's proposal? In a derivation of the Minskian ideas, Wray (2018) points out that

The idea of a job guarantee (JG) policy has been vaulted to prominence in the context of several recent endorsements of the idea (or variants thereof) by a number of likely contenders for the 2020 democratic nomination [...] Our approach to the JG would provide new jobs in a Public Service Employment (PSE) program for approximately 15 million workers at \$15 per hour, while creating an additional 4.2 million private sector jobs. It would include a package of benefits worth 25 percent of the wage bill and cover additional costs at 20 percent of the wage bill. The generous wage and benefit package would become standard across the country, as all private and government sector employers would need to match it to retain workers. (p. 1).



Although the proposal seems somewhat optimistic, it is important to note that Minsky's ideas are somehow retaken within the employment and distributive policy proposals in some political sectors of the United States.

However, within the budget transfers, long ago Minsky proposed for the year 1983, a subsidy for children under 16 years, which would be equivalent to 1.33% of GDP. Also, for young people over 16 there would be special employment programs such as programs (temporary, especially of summer) of conservation, like for example those oriented towards the care and preservation of forest areas, the environment, conservation of lakes and fishing, among others. These jobs were appreciated as a temporary relief for poverty mitigation, but unfortunately, he believed that poverty came from the size of the family. Similar programs are given in Mexico as scholarships to students or support for older adults by the government, with a different meaning, as they can be seen as poverty alleviation programs; although they could also be considered as stimuli to aggregate demand, the intention is not necessarily anti-cyclical.

Also, but with less emphasis, Minsky proposed that a set of expenditures be directed towards agriculture for the protection of farmers due to the possible drops in agricultural prices with a strong impact on their income. He also proposed the elimination of corporate income tax, the application of a general value-added tax (VAT instead of specific taxes), because for him, the first is less destabilizing than the second. Broadly speaking, Minsky proposed a series of taxes or changes in its structure, in way that favored the government's income so that it could become a Big Government and could act with pertinent tactics when the economic situation demanded it. That is, especially

in cases of depression or economic crisis.

Since Minsky considers the capitalist system as intrinsically unstable, the important aspect of the objectives and actions of the government is to carry out long-term changes or structural actions, in order to be able to maintain, not to a path of equilibrium, but rather to a path of stability for the system. In order to implement these actions, there cannot be a small government in the style of neoliberal purposes. On the contrary, what is needed is a big government that ensures, as well as the relevance, the viability of the actions. Because in the face of a significant drop in private investment, the small government will not be able to compensate for this decrease through different spending policies, including investment spending. So, the State would not be able to reach the goal of stabilizing the economy. In contrast, a powerful government, a big government, would be able to compensate for the decline in private sector investments and achieve stabilization purposes to a large extent.

Minsky's proposals are very similar to capitalist systems called mixed economies, in which the state assumes an active role in the economy, investing in areas essentially of a social nature. The state influences even the benefits and certain branches of the economy based on a strategy oriented, not to development because the policy is made for developed countries, but rather, aimed at avoiding the instability and fragility of the system. In other words, if Minsky proposes socializing alternatives, it is not because his ideology is socialist, but because he wants the best possible stable state for capitalism. That is why, for him, the best proposal would be an offer of infinitely elastic work. In that way, the scissors of labor supply and demand would be in favor of the demand for work. As a result, it would be the latter that would find the levels of employment, and hence there would be no class con-



frontation under this optimistic Minsky option. In that sense, Tymoigne (2008) also plays Keynes of the General Theory, pointing out that

The government (or special committees including government representatives) would select the most appropriate projects without necessarily undertaking their construction nor removing ownership from the private sector ... The government could also leave frivolous investment projects (cell phones, etc.) to the private sector while housing, infrastructures and other social needs would be supervised by government. Minsky's proposal for community development banks is part of this project. (p. 20).

To which we would add, not only supervising or regulating but investing directly with a much more regulatory and socializing role. In this way, the Minskian proposals for development banks would be much more effective and forceful, that is, socially efficient. This is because not only the stabilizing goal would be met, but also a proposal for development or welfare, with greater equity than the more developed economies of the world, and with less inequality and social and economic asymmetries.

Minsky (2008) himself considers that his proposals are very "human", as evidenced by the following sentence: "However, a program of reform that builds an economy oriented toward employment rather than toward growth should show benefits quickly. The primary aim is a humane economy as a first step toward a humane society" (p. 326).

Minsky (2008) takes some points of Keynesian orientation, of which we would like to highlight the following:

> Big Government capitalism is more stable than Small Government capitalism: this is

shown by both the experience of the past century and by an economic theory that allows for financial institutions. This greater stability is because of the impact of government deficits as a contracyclical phenomenon in stabilizing profits. However, if Big Government is not to be conducive to inflation, the budget structure must be such that profits are constrained by surpluses when inflation rules. (p. 325).

The Big Government becomes, then, the great stabilizer of the capitalist system. Similar to Keynes, Minsky's proposal is related to the promotion of employment, because otherwise it puts at risk a system in itself unstable and asymmetric. The important thing in promoting employment is ultimately the stability of business, of profit and therefore of the capitalist system itself. Everything else is subsumed for this purpose. What is more, when Minsky proposes that the budget of the public sector be surplus, he does so thinking about the stages of the economic cycle. Specifically, in the depressive phase, in which both profits and investment go down, therefore, the public sector going to surplus, or through deficit, could eventually sustain and keep capitalist investments afloat. Another euphemistic form of expression is to point out that the government anticipates an eventual contraction, cyclical or not, of the economy.

But what worries Minsky the most and he considers the backbone of the capitalist system and therefore of the economic cycle, is the financial system. Hence, he devotes a large space to financial reform. The purpose of all of Minsky's proposals is based on the assumption that the system is unstable. Therefore, this instability can lead to its malfunction and from there, affect benefits and investments, and, in consequence, employment.



Thus, according to Minsky's vision of the entities or economic units covered (hedge), speculative or Ponzi, initially instability would not come from the financial system but from the real economy, since for him corporations could go from a state of covered finances to speculative finances, in short because the corporation is seen as a long-lived institution, but the shareholders will want short-term returns, so they will exchange their long-term assets with other shorter-term assets in the financial system, which for Minsky can lead to speculation and instability. Now, bankruptcies can happen and the government must not always rescue big corporations, because the defaults do not necessarily transmit to the whole economy.

However, instability is not exclusive to corporations, also banks can contribute to it, since they are organizations that aim to obtain profit, like all private companies. Thus, banks as any economic entity, could be part of Minsky's financial classification: Covered, speculative or Ponzi. In certain circumstances, companies and banks can lead to economic fragility and financial instability. Therefore, financial regulation must be addressed fully and more frequently to be effective.

In addition to regulating financial operations, as well as the size and growth of banks, Minsky emphasizes the role of the central bank, the Federal Reserve, with respect to its function as lender of last resort or in the rediscount application and their respective rates. It is in this sense that the Central Bank can indirectly intervene in the economy, exerting control over the banks' finances, determining branches or priority areas and thereby avoiding financial collapses as much as possible. No details are discussed, but the author considers the discount window better than

open market operations. Especially because the first has more control over the fate of money and hence the credits and branches of the economy.

Final considerations

Unlike those who criticize the mainstream on the grounds that capitalism is always on a path of imbalance, Minsky goes beyond this. With Keynes' own theoretical tools, he arrives at the conclusion that capitalism is in itself unstable. His hypothesis gives priority to the financial system over all other systems of the economy. However, instability is inherent, that is, endogenous to the system, because there are forces, both from the perspective of the real sector and the financial sector, that cause capitalism to go through different phases that are integrated into what is known as the economic cycle. Therefore, the economic cycle is also inherent to the capitalist system itself and has to be explained by endogenous forces.

When Minsky makes a comparison between government spending and private investment, he finds that there is a high positive correlation between these two variables. He observes that in the great depression of 1929-1933, investment fell, but also government expenditure, so that the government could not sustain or compensate the decline of private investment and therefore the amount of them (although he does not mention the profit rate). But when government expenditure begins to increase in time, there is also an increase in the amount of investment. Even in the United States depression of 1974-1975, government expenditures did not fall, and the amount of benefits increased, even though investment in that period declined. That is why for Minsky the big government is the one that has an approximately equal share as a percentage of GDP as private investment. That is, government deficit must represent a percentage of participation in GDP similar to that of private investment. If the percentage is lower, the government could not help the recovery when necessary and, we would be talking about a small government.

Within his class vision, what Minsky cares about is that capitalism continues to work. Because the important investments are those of the large corporations with a strong concentration of income and in the style of Kalecki, we would say, with a high degree of monopoly. In order for the system to continue functioning, Minsky goes to the government's last resort as rescuer, and this income comes from the public. Therefore, it is not a matter of obtaining direct resources through capital gains, but rather, that resources for capital to continue supporting capitalism come from the population, albeit indirectly through budget deficits. This is just another variant of what David Harvey (2005) has called accumulation by dispossession.

The above is collated with the employer of last resort. As we have mentioned, Minsky's proposal is not humanitarian, but rather, he defends it because he knows, as he says, that capitalism is, in itself, unstable, so there needs to be a way of employing people with a basic salary, regardless of their training or qualification. Dispossession is hidden, because even if it were the government and not capital that implemented this form of employment that could be more or less permanent, what is actually exercised is pressure on the labor market for workers to accept lower wages. This is the way to institute a labor program through the institutions that are privileged by Minsky in big government. It is true that these measures can encourage aggregate consumption and hence aggregate demand, because the profit margin could

increase, as well as employment and demand. But this does not mean that the weight of the recovery is largely at the expense of the employees.

What Minsky would want is not to interrupt cash flows for capitalist corporations. Because with public resources earnings and secondarily wages and employment can be sustained. For him, liquidity is the sustenance of the capitalist gear. If it stops somewhere, this important lubricant of the system is lost. But the system itself could not always produce the necessary or sufficient amount, so it is essential to have a big government. It is not just a rescuing State of last resort, but, rather, of the very first instance. Public resources are an insurer of liquidity, of the cash flows necessary for the system to work under the conditions, not optimal, but stable or with minimum instability, at least.

That is why the proposals and the Minskian hypothesis have been welcomed at a time when capitalism has gone through a critical phase of the economic cycle and that, in the case of the United States, involved, especially in the Obama administration, a strong injection of liquidity to the system so that it would not succumb.

Currently economies are leaving aside the stage of deregulation, liberalization and extreme openness. But this will not eliminate the strong degree of monopoly of big capital, and maybe only initially there are some processes opposed to deregulation and privatization for certain sectors weighed as strategic, as is the case of the energy sector in Mexico. And, continuing with the speculation, the central banks could change from their insignificant regulatory role in the economy to a much more active one. In general terms, strong and profound changes are expected in public and economic policies for the following decades of the 21st century.



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