A COMMENT ON THE US STUDENT LOAN SITUATION FROM A POST-KEYNESIAN PERSPECTIVE

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Abstract

This paper aims to contribute to the debate on the US student debt situation. First, it highlights the determination of labor earnings and economic activity as a function of macroeconomic conditions and the relevance of considering this endogeneity to analyzing student debt sustainability. Next, I present a background on student loans and the labor market in the US. Moreover, using a Minskyian framework, I argue that the current student debt situation can have adverse results on economic activity, although not leading to financial instability. Last, I comment on the student debt cancellation debate, proposing alternative policies with more progressive and lasting effects.

Keywords: Household Debt; Student Loans; Debt Canceling; Post-Keynesian Economics.
JEL Code: E12; E24; H52; I22.

1.   Introduction

Soon after the 2007-08 financial crisis, the sharp increase in student debt in the US was brought to light with the growing concern about another debt crisis, although on a smaller scale, involving student loans. A few years later, in 2020, a new crisis has intensified the debate on the student debt situation, given its effects on the labor market, household income, and household debt sustainability. The Coronavirus Aid, Relief, and Economic Security Act (CARES) Act, which suspended the payments of federal student loans in March 2020, addressed the problem to some extent. However, expected to finish in August 2022, the suspension represents a temporary relief to a current situation that may require lasting solutions.

This paper aims to contribute to the student loan debate using a Post-Keynesian (PK) perspective. One common assumption in most PK strands is the role of effective demand in determining the output level, which makes income and employment endogenous to macroeconomic conditions. I argue that understanding the demand-side macroeconomic consequences of student debt is fundamental for the debate on student loan sustainability and policymaking, especially in the face of the second economic crisis in less than 15 years affecting employment conditions and income.

Moreover, after presenting Minsky's Financial Instability Hypothesis and Kalecki's principle of increasing risk, I analyze the possibility of a student debt crisis in the US case. Comparing this scenario to some aspects that contributed to the 2007/08 financial crisis, I argue that student loans will not lead to a new debt crisis. However, it may have adverse effects on household consumption and economic activity worth discussing. For this reason, I comment on the universal student debt canceling debate, proposing alternative policies such as interest rate reduction and changes in the repayment period before loan forgiveness, which have progressive and lasting consequences to economic activity and financial stability.

This paper is structured as follows: Section 1 approaches certain aspects of educational credit and student loan sustainability from microeconomic and PK perspectives. Section 2 consists of a brief analysis of the history of student loans, wage differentials, and household

debt levels in the US. Section 3 addresses the possibility of a student debt crisis in the US and Section 4 discusses the pros and cons of student loan forgiveness. Section 5 concludes this paper.

2.   Microeconomic and macroeconomic aspects of student loans

Most microeconomic literature that assesses student loan sustainability and policymaking relies on individual choice models, following Mincer (1958) and Becker (1964) (Avery & Turner, 2012; Lochner & Monge-Naranjo, 2016), which assume the existence of rational agents that take optimal decisions based on the available information. Moreover, there is an implicit assumption that earnings are equal to labor productivity: more productive workers contribute more to the economy and thus earn proportionally higher labor incomes (Mincer, 1958; Becker, 1964; Friedman, 1955). In this case, the wage structure is exogenous to the relationship between workers and firms, and workers' skills and knowledge determine their wages (Bowles & Gintis, 1975). That assumption implies that workers' human capital level is the only determinant of their labor earnings. Thus, any mismatch between the cost of the human capital investment and its financial return would result from mistaken individual choices or the non-availability of relevant information at the moment of the decision making.

Still, there is empirical evidence on the limitation of the assumptions of the rationality of agents' decisions, even when information is available, and earnings being equal to the marginal productivity of labor. For instance, Avery and Turner state that "students often misunderstand financial aid packages, fail to understand the much greater cost of consumer loans (such as credit card debt) relative to student loans and miscalculate the trade-off between academic study and market work" (2012, p.168). However, the violation of the rationality hypothesis does not mean that high student loan default rates result from a miscalculation in individuals' choices. Instead, it may also result from the impossibility of having an accurate forecast of lifetime earnings, considering that the "fog of uncertainty is everywhere concealing the more distant value of education" (Schultz, 1967, p.304).

I divide the macroeconomic implications of student loans into three categories: supply-side, demand-side, and the effects of debt. First, this investment contributes to the productivity of the labor factor of production, affecting not only individuals' earnings but also

the aggregate supply conditions of this economy. Second, human capital investment is a component of household consumption, and therefore of aggregate demand. As such, it has consequences for economic activity. The third category of student loan consequences is the effect on financial stability, given the increasing concern with the growth pace of student debt in countries such as the US.

Although certain microeconomic aspects of student loans are relevant to understanding individuals' borrowing decisions and the first category of macroeconomic effects, I argue that individual choice models have limitations explaining the other two categories when not considering the demand-side consequences of household borrowing, such as the impact of repayment plans and human capital investment on aggregate consumption for economic activity and growth. For this reason, this paper will discuss certain macroeconomic aspects of student loans, focusing on their implications for economic activity (as a component of aggregate demand) and financial stability. After Section 2 contextualizing the US student loan scenario, Sections 3 and 4 resume the discussion of different economic strands and show the implications of demand-led approaches for policymaking concerning student debt crisis and student loan canceling.

3.   Student Loans in the United States: a brief background

The US government established the federal student financial aid programs with the 1958 National Defense Education Act and expanded them with the 1965 Higher Education Act to provide low-cost student loans to college students with financial needs. The 1965 Act created three types of federal aid: i) the Educational Opportunity Grant (later renamed the Pell Grant), which offered grants for low-income students; ii) the Federal Work-Study program, which provided part-time jobs for students with financial need; and iii) the Guaranteed Student Loans (the Stafford Loans), which consisted in subsidizing the interest rates of private loans (Zhou & Mendoza, 2017).[1] Later, the 1992 Higher Education Amendments created the Direct

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[1] One relevant distinction between the 1958 and 1965 acts was that, while in the former the government provided student loans with an interest rate of 3%, in the latter, the government started subsidizing private loans (initially with an interest rate of 6%), so that the interest rate that the student would pay was equal to the previous one. It is noteworthy that the Higher Education Reauthorization of 1972 created the Student Loan Marketing Association (SLMA, or Sallie Mae), which would buy the student loans from the private lenders, thus taking the risk of those contracts. Sallie Mae was privatized in 1996 (Zhou & Mendoza, 2017).

Loan, the main federal student loan program today (Cappelli & Won, 2016; Looney & Yannelis, 2015).

Currently, there are various repayment plans for federal student loans, which can be split into two categories. The first comprises the time-based repayment loans, in which the future payments are determined beforehand so that the student pays off the total balance in a fixed number of years. Two examples are the Standard Repayment Plan (fixed payments) and the Graduated Repayment Plan (the payment increases over the years). The second category comprises the income-driven loans, in which the debt service is a function of the borrower's discretionary income. These have been available in the US since 1994 and today represent the larger share of the federal student aid programs in terms of the number of borrowers. There are currently four types of income-driven student loans, varying mainly in the percentage of the borrower's discretionary income devoted to the debt service (ranging from 10% to 20%) and repayment period before the remaining balance of the debt is forgiven (20 or 25 years).

The amount that students can borrow per year depends on the repayment plan, their financial needs, and the institution attended, ranging from $5,500 to $12,500 for undergraduate students and up to $20,500 for graduate and professional degree students.[2] The (fixed) interest rates per year are 2.75% for Direct Subsidized Loans, 4.30% for Direct Unsubsidized Loans, and 5.30% for Direct PLUS Loans. The repayment period, which usually begins six months after the student graduates, is between 20 and 25 years. Some repayment plans are eligible for loan forgiveness of any remaining balance after the repayment cycle.

The empirical evidence on the effects of federal student loans is vast. Some of the main findings are that the federal aid programs have contributed to the increase in college enrollment (Lochner & Monge-Naranjo, 2016) and positively affected the students' school performance (Cappelli & Won, 2016). However, some authors point out negative economic consequences of federal aid programs, such as an increase in college tuition and fees, after institutions incorporate the subsidy (Lucca et al., 2019). Another negative aspect of this financial aid is the steep increase in student debt, especially in the US, which has led to discussions of a possible student debt crisis (Looney & Yannelis, 2015). The following two

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[2] Information in US dollars as of January 2021.

subsections address wage differentials, which represent the primary monetary stimulus for pursuing a college degree, and the current US student debt situation.

3.1. Labor market outcome differentials and student debt in the US

Despite the recent trends in pricing, on average, attending college is still worth the cost (Carneiro et al., 2011; Abel & Deitz, 2015). In June 2021, the unemployment rate was 6.0% in the US, being 3.6% for all college graduates and 6.2% for recent college graduates.[3] In 2020, the median annual wages were also different for distinct levels of schooling: $30,000 for those who had only attended high school, versus $50,000 for those with a bachelor's degree. What determines this wage gap is one of the questions that microeconomics aims to explain. One frequent explanation in this literature concerns the increase in labor productivity resulting from higher education: workers with a postsecondary level of education would be more productive, contribute more to the economy, and thus earn proportionately higher labor incomes (Friedman, 1955; Mincer, 1958; Becker, 1964). In the PK literature, wage determination happens through a barg,aining process between workers and firms. Workers' bargaining power is a function of factors such as the tightness of the labor market (which is determined by effective demand), institutional features that affect employment (in)security (Setterfield, 2006), and the growth rate of their human capital stock (Lima et al., 2021).

The equality between earnings and labor productivity assumes, among other premises, the existence of perfect information in the labor market. However, problems with asymmetrical information and discrimination have implications for wage differentials and student loan sustainability. For instance, Hungerford and Solon (1987) show that academic degrees affect wages and employment not only through this technical channel (i.e., labor productivity) but also because of a screening effect - a diploma works as a credential that the worker is more productive, also described as a 'sheepskin effect'. This signaling effect may explain part of the labor earning differentials for different institutions estimated, for example, by Goodell (2016).

Nonetheless, despite the more favorable labor market for college graduates, there is a high disparity in wage differentials even among people with the same educational level.

Consequently, although a college degree pays off for some students, many graduates face labor market earnings below the cost of college (Cellini & Turner, 2019). This fact is especially evident for the bottom 25 [th] percentile of college graduates, whose wages are equal to or below the median wage for high school graduates (Abel & Deitz, 2014). Another fact not related to labor productivity that may contribute to that wage dispersion for graduates is the evidence of gender (Gharehgozli & Atal, 2020) and race discrimination (Borowczyk-Martins et al., 2017) in wages and employment in the US, which indicates that earnings depend not only on human capital formation and productivity but also on social aspects.

Considering the expected (though not always verified) more favorable labor market conditions for college graduates, many people who cannot afford this cost seek financial support to attend college. In these cases, although students' and parents' income and savings, scholarships, and grants account for a significant part of how families pay for college (Sallie-Mae, 2017), the higher costs of attending college could represent an obstacle for many people, especially low-income populations, were it not for credit conditions. In this respect, student loans contribute to reducing inequality in access to postsecondary education. However, the effect on income and wealth inequality is two-fold: on the one hand, low-income students can seek financial aid to attend postsecondary educational levels, with the increase in schooling possibly reflected in higher labor earnings. On the other hand, the high debt levels resulting from student loans constrain wealth accumulation and commit a large fraction of the borrowers' and their relatives' income and wealth during the repayment cycle. This effect is particularly relevant for groups that are discriminated against in the labor market. The following subsection presents data on the US student debt scenario.

3.2. Student debt in the US

The differences in labor market outcomes and affordability of loans have contributed to the recent increase in household debt in the last few decades. In contrast to some other kinds of debt, such as credit card debt and auto loans, which decreased for some years right after the 2007-08 financial crisis, student debt has kept strongly growing (Figure 1), reaching $1.57 trillion in the US in the second quarter of 2021, with an average annual real growth

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[3] Data from the Census Bureau and BLS - IPUMS, Federal Reserve Bank of New York.

between the second quarters of 2003 and 2021 of 8.8%.[4] In comparison, the total debt balance added up to $15.0 trillion, presenting an average annual real growth of 2.0% in the same period. In 2010, household debt balances related to student loans were already higher than those associated with credit cards and auto loans.[5]

Figure 1 - Non-Mortgage Balances (in billions of US dollars)
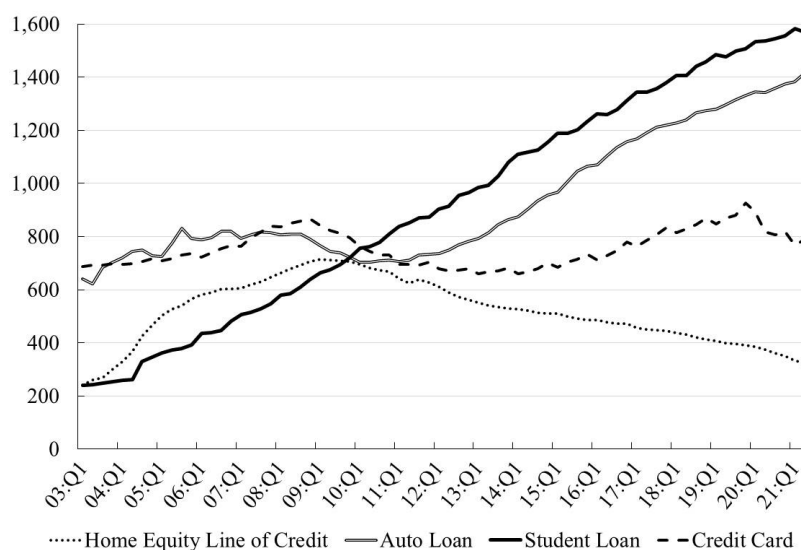
Source: New York Consumer Credit Panel / Equifax.

This growth in total balances is due to, among other factors, an average increase in student debt and the rising number of borrowers. For instance, from 1999-2000 to 2011-2012, the proportion of full-time undergraduates receiving financial support increased from 71.9% to 84.4%. For student loans, this proportion rose from 45.6% to 56.7%.[6] Student debt is most significant for people under 30 years old: in the second quarter of 2021, student loans represented 33% and 16% of the total debt balances owed by people between 18-29 and 30-39 years old, respectively. Some implications of this trend are that younger people in the US tend to i) linger longer in their parents' households (Bleemer et al., 2014); ii) are more risk-averse in searching for jobs (Ji, 2021); and iii) frequently rely on personal savings or family support to manage repayments (Lochner & Monge-Naranjo, 2016).

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[4] I calculate the real value of the debt by using the GDP implicit deflator. The average annual nominal growth in the same period was 10.9%.
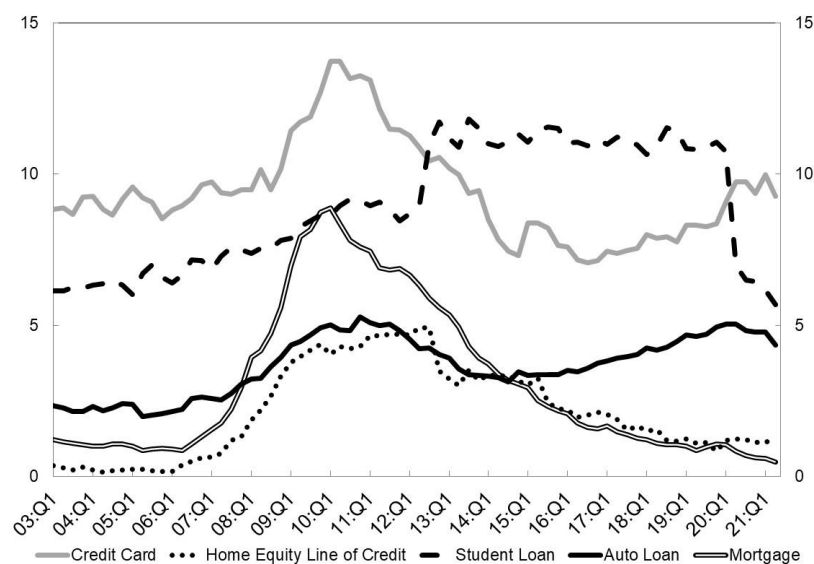[5] Data from the New York Consumer Credit Panel / Equifax.
[6] Data from the US Department of Education - National Center for Education Statistics and National Postsecondary Student Aid Study. Organized by the Institute of Education Sciences – IES.

Another concerning issue related to student debt sustainability is the number of borrowers having repayment difficulties (Figure 2). In the last quarter of 2019, 11.1% of the outstanding balance associated with student loans was default or delinquent, versus 8.4% for credit card debt and 4.9% for auto loans. The default rate for student loans decreased in 2020 because of the CARES Act suspension of loan payments. Nevertheless, the calculation of student loan delinquency rates includes those students out of the repayment cycle and, therefore, tends to underestimate actual delinquency rates and the number of people with repayment difficulties. For this reason, Brown et al. (2015) estimate that, even though the delinquency rate on student debt is already the highest among consumer debt products, delinquency rates among borrowers in the repayment cycle are in fact twice as high as the reported ones.

Figure 2 - Percent of Balance 90+ Days Delinquent by Loan Type

Source: New York Consumer Credit Panel / Equifax.

The problem with student loan default rates is even more striking when analyzing the groups with repayment difficulties. Addo et al. (2016), for instance, analyze racial disparities in student debt balances. The authors verify that young Black adults owe more student debt than whites. Some explanations for this result concern family background and wealth, which may affect how they pay for college, and the characteristics of the postsecondary institution attended. Furthermore, the students from for-profit institutions are the ones who present higher rates of student-loan default (Goodell, 2016). Although their debts are relatively small,

people owing student loans that attend for-profit and public community colleges are more likely to have an economically disadvantaged background, earn low wages after graduating, and, consequently, default on student loans (Looney & Yannelis, 2015). The following section addresses the US student debt problem, emphasizing the implications of different economic approaches.

4.   A student debt crisis in the US?

Considering the recent trends of outstanding debt and delinquency rates, one concern about student loans is that they might result in a new debt crisis (Zhou & Mendoza, 2017). Looney and Yannelis (2015), for instance, analyze this possibility based on the current level of student debt and the proportion of debtors facing difficulties in the repayment process. This section discusses the provision of educational credit from a PK perspective and Minsky's Financial Instability Hypothesis (FIH). I argue that this literature does not support the possibility of a student debt crisis in the US. However, although sustainable, the current student outstanding debt may not be desirable, considering its consequences for economic activity.

4.1   Educational credit provision in the economic literature

For student loans, the fact that the assets resulting from this investment - which may be denoted as human capital - are incorporated in the investor is one of the causes of under-investment in human capital: unlike investments in physical capital, which may have securities based on the sale of the asset, the only collateral for investment in human beings is future remuneration (Friedman, 1955). One of the remedies for this imperfection in the capital market is the government providing educational credit. In this case, the government contributes to funding the investment, even though the individual still bears the cost. However, there is no consensus about government participation in the credit market.[7] For instance, some authors highlight concerns about the implications of the low-cost federal credit for how much risk households are taking, which could have adverse effects on the financial

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[7] During the 1970s and 1980s in the US, the neoliberal argument that the private sector would be more efficient in providing credit was the base for the policy changes that increased the private participation in student loan provision (Zhou & Mendoza, 2017).

system (Ionescu & Simpson, 2016).

The PK literature stresses the importance of credit for investment. Nonetheless, this mechanism also generates the possibility of financial fragility in the economy. When a large part of the aggregate investment is financed by credit, the sustainability of economic growth depends on the relationship between agents' cash flow expectations and their cash flow requirements. Minsky (1992) puts forward the FIH as follows: in periods of economic tranquility, credit risk perception is reduced. Consequently, there is an increase in loans to units whose cash flows are always compatible with the debt service (Hedge situation) and, in a higher proportion, to the economic units whose cash flows are lower than the loan interest (Ponzi situation) or which cannot afford the cash flow requirements at some periods (Speculative situation).

In this context, the lower risk perception increases the proportion of economic units more vulnerable to adverse economic changes. However, in the face of any negative shock that restricts the credit supply, Speculative and Ponzi units would have to reduce their investment due to the cash flow constraint and sell their assets to meet their cash flow requirements. The first consequence has a direct negative impact on aggregate demand. The second affects other firms' investment decisions and cash flow through the capital asset market prices. The decrease in aggregate demand, given the two consequences mentioned above, reduces profits, leading to a cumulative reduction in economic activity level.

Although Minsky has already mentioned the possibility of analyzing the implications of households' liability structure for the financial system (Minsky, 1992), the difficulty in applying the FIH in this case is noteworthy. For the firms, investment decisions are based on the comparison between two relative prices: current output prices, resulting from the short-term demand, and capital asset prices, which depend on long-term expectations. If agents foresee investment opportunities that require more resources than they dispose of, they demand credit to undertake those investments. Moreover, the investment in physical capital increases future production capacity and may contribute to the firms' cash flow expectations compared to their cash flow requirements, which affects their financial risk perception.

On the other hand, household borrowing mostly relies on their consumption behavior.

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Except for human capital investment, consumption goods financed by new borrowing do not necessarily positively affect the households' cash flow expectations, whereas debt servicing increases their cash flow requirements. Besides, Pressman and Scott (2018) highlight that, since households always have to spend on necessities, a Ponzi finance household would be the one not able to pay for both a subsistence level of consumption and the interest on the debt with their income. For this reason, they prefer to call the units in this situation 'Lehman finance'. In contrast, although the subprime mortgage crisis also concerned household debt, the applicability of the FIH arises from the impact of securities on the balance sheet and cash flows of private financial institutions.

When using the FIH to address student loans, other concerns emerge. First, for this comparison to be possible, when in the Speculative or Ponzi positions, households should have to roll over their liabilities, not necessarily under the same payment conditions, with potentially harmful implications for the debt sustainability itself. However, adverse financial situations imply only delinquency or default for student loans, not renegotiation at a higher cost. The second issue relates to the intangibility of human capital.[8] Kalecki (1937) states that asset liquidity affects the risk rate of the investment. The main problem with having most of one's wealth in an illiquid asset, according to Kalecki (1937), is that the need for capital would necessarily result in that person taking out a new loan without the possibility of liquidating their assets. For borrowers with a high debt-to-equity ratio, lenders would require higher interest rates, which could jeopardize their financial condition.

Since a student loan does not result in a tangible asset to be used as collateral, in the context of the FIH, a negative shock in the borrowers' income could lead to households having problems with meeting their cash flow requirements and total debt sustainability, without the possibility of liquidating a significant part of their assets. Moreover, given that, at

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[8] The term 'human capital' became popular in economics through the works of Schultz (1960), Mincer (1958), and Becker (1964). The concept comprises various kinds of investment, such as schooling, that account for wage differentials. Nonetheless, there are not many studies in the post-Keynesian literature considering this variable. Carvalho et al. (2023), for instance, analyze in a neo-Kaleckian model the role of student loans in knowledge capital accumulation, verifying the effects of this mechanism on aggregate demand and households' financial situation. Also in a demand-driven framework, Lima et al. (2021), for their turn, assume that the government provides universal public education responsible for human capital formation. However, the authors verify that the higher supply of high-skilled workers does not automatically create its own demand, which argues for demand-side enhancing policies.

least in the US, student debt is non-dischargeable when a person declares bankruptcy, difficulties in the repayment process would also have negative implications for the sustainability of other types of loans and total household debt, even though each student loan repayment plan has a constant interest rate.

Many authors have applied Minsky's FIH to explain the unfolding of the 2007-08 financial crisis (Dymski, 2010). Even though mortgages and student loans are different kinds of loans - for example, with respect to asset liquidity, constancy of interest rates, securitization of loans, and the lender (mainly the government for student loans) - many aspects of that crisis are relevant in understanding the potentially dangerous elements of the current student loan scenario, such as the contagious effects, credit expansion, and impacts on aggregate demand. In the following subsection, I address the student loan crisis debate from a PK perspective, especially the FIH.

4.2   Addressing student debt crisis from a PK approach

Compared to the 2007-08 subprime crisis, one relevant difference between mortgages and student loans in the US is that, despite the role played over the last decades by the private lenders and Sallie Mae in expanding funding to education, private student loans currently represent only 7.9% of the outstanding balance (Amir et al., 2020).[9] Another difference is the size of student debt and mortgage balances: although the former has sharply increased, totaling $1.57 trillion in the second quarter of 2021, the latter still represents the largest component of household debt, $10.4 trillion in the same period.

For both these reasons, repayment difficulties in student loans would have a contagious effect on the financial system much smaller than the one that led to the events of 2007-08. Despite the high delinquency rates and the many borrowers whose income returns do not pay off their loans, there is no securitization of student debt in the US comparable to what happened to mortgages. Moreover, one of the triggers for the 2007-08 financial crisis was underwater mortgages.[10] When foreclosures increase (and, thus, more lenders are selling the

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[9] Data as of the third quarter of 2020. This shift happened in 2010, with the Health Care and Education Reconciliation Act, after which all new federal student loans were conceded directly by the government (Zhou & Mendoza, 2017).

[10] I.e., when the outstanding balance of the loan is higher than the market price of the collateral, leading to

collateral assets), the higher supply in the real estate market would reduce the housing prices and, ultimately, generate new underwater mortgages. The case of human capital illiquidity has different implications.

For student loans, the asset of this investment is incorporated in the borrower. Hence, borrowers cannot sell their human capital to pay off their debt when current earnings do not outweigh the investment cost. Since the expenditure in human capital represents a sunk cost, the only alternative to generate revenues is through using this asset in the production process. Moreover, this incorporation of the asset also explains why there will not be a student loan bubble like the one that happened to house prices. Briefly, in the case of mortgages, the credit expansion had a feedback effect: while it boosted the demand in that sector, leading to higher housing prices, the favorable trend of market prices reduced the risk perception about this operation, thus promoting new credit expansions. Contrarily, the return on human capital investment (given by future earnings) is determined in the labor market, not in the 'human capital market' itself. Therefore, the feedback effect of credit expansion in the real estate and housing markets is not seen here.

Despite the beforementioned difficulty in applying the FIH analysis to this case, certain aspects of the Minskyan analysis contribute to understanding some adverse consequences of this situation for financial stability and economic growth. First, the impact of economic volatility on the sustainability of student loans with a low internal rate of return: for borrowers who commit a large proportion of their disposable income to debt servicing, small adverse shocks in the labor market would lead them to a default position. This result is relevant especially in the aftermath of economic crises.

Second, household indebtedness and student debt influence their credit conditions and decisions about new borrowing (Edmiston et al., 2013), which affects their consumption level and, thus, aggregate demand. Third, a typical result in the PK literature is that the debt service represents an income transfer from households with a higher marginal propensity to consume to another group with a lower one (for example, rentiers), resulting in a reduction of aggregate consumption. In the Minskyan real-financial cycle, this reduction of aggregate demand could

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foreclosure.

have a negative impact on profits, thus increasing the risk perception of the economy, with unfavorable consequences for the financial situation of economic units and loan sustainability. The following section addresses debt forgiveness and discusses some ways to minimize the adverse economic effects of student debt.

5.   Student debt canceling

With around 43 million people carrying student loans,[11] and many of them having trouble in the repayment process, there has been much discussion of student loan forgiveness in the US. From the arguments mentioned in the previous section, one may infer that reducing the outstanding student debt balance would contribute to economic activity by increasing household consumption. This policy could benefit the recovery pace of the US economy, especially in the aftermath of the current economic-health crisis. Fullwiler et al. (2018), for example, estimate a positive impact of universal student debt forgiveness in the US to aggregate demand through consumption and investment, with a cumulative effect in ten years on GDP ranging from $861 billion to $1,083 billion (in 2016 dollars). This policy would result in an average job creation per year of 1.2 million to 1.5 million, with insignificant inflationary effects and a small increase in the federal government budget deficit-to-GDP ratio (ranging from 0.29 to 0.37 percentage points per year).

The size of total outstanding student loan balances in the US shows the magnitude of an eventual universal student debt forgiveness or even canceling up to $ 5,000 of the balances of 43 million people. Besides, since the federal government owns most of the outstanding student debt owed by households, any policy that affects the public fiscal budget would have to consider these distributional effects. This is a relevant factor considering the positive correlation between household income and student loan balance (Catherine & Yannelis, 2023).

However, as Serra (2023) explains, student loan canceling would only have a short-term impact. If the government aims for long-term economic results, there are more efficient policies, such as lowering interest rates and reducing the period of eligibility for loan forgiveness. Moreover, the policies proposed here have relatively more progressive

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[11] https://studentaid.gov/data-center/student/portfolio.

distributional effects. I show in this section how those policies can be understood from a PK perspective.

The PK literature can explain distributional aspects in the borrowing disposition and, thus, in the student loan forgiveness debate. For instance, Kalecki (1937)'s principle of increasing risk considers not only the return rate of the investment plans, which the microeconomic literature also takes into account, but also the wealth of those agents that undertake it. According to Kalecki, the risk associated with the investment plan reduces the expected gains of that operation. This risk rate is directly proportional to the amount invested relative to the investor's wealth situation, given that "the greater is the investment of an entrepreneur the more is his wealth position endangered in the event of unsuccessful business" (Kalecki 1937, p.442).

When it comes to student loans, this means that for many people, the risk of carrying student debt if this investment is not successful (i.e., if the income return does not exceed the college cost) increases when their wealth is lower. This represents a barrier to taking student loans, especially for low-income populations, and may explain why most of the student loan balances are owed by middle and high-income people. Hence, given that people who currently owe student debt did not take into account the possibility of student loan canceling in their borrowing decisions, universal forgiveness represents an ex-post cost reduction, which mostly benefits those whose financial conditions were more favorable to undertake this investment.

As previously mentioned, the data on household student loan balances corroborates the analysis of the debt-financed human capital investment: households in higher income brackets borrow more to attend postsecondary education (Catherine & Yannelis, 2023), although low-income households (Looney & Yannelis 2015) have more difficulties in the repayment process. For this reason, universal loan forgiveness or the canceling of $50,000 or $10,000 per person would have a regressive effect, benefiting the higher income deciles more than the bottom ones (Catherine & Yannelis, 2023). Moreover, from a PK perspective, the economic implications of that policy are straightforward. Considering the US income and wealth distributions and the lower marginal propensities to consume of higher quintiles of income and wealth (Fisher et al., 2020), such policy would have a lower multiplier effect than

others focusing on low- and middle-income households.

A policy that would have positive long-term economic effects, as Serra (2023) argues, is changing the eligibility criteria for student loan forgiveness in income-driven plans. If the government shortens the student loan repayment cycle without changing the fraction of borrowers' disposable income committed to debt servicing, this policy will increase economic activity. Besides, considering that low- and middle-income people usually carry greater outstanding balances to the loan forgiveness period, earlier loan forgiveness for income-driven plans would have progressive effects (Catherine & Yannelis 2023) and, consequently, a higher multiplier effect. Similar results for household consumption hold if the government lowers student loan interest rates (Serra, 2023).

The positive impact of progressive distributional policies on economic activity results from the differences in marginal propensities to consume of different income groups, as also explored in Section 3. Assuming that the government uses tax revenues to fund this policy, regressive income transfers, considering the distribution of student debt across the population, might have negative implications for economic activity considering the multiplier effect. Besides, even if this policy cost did not affect low-income taxpayers and relied only on taxing upper classes, the opportunity cost of that tax revenue should be taken into account, given that more progressive alternative policies would have a higher multiplier effect.

Catherine and Yannelis (2023) also state that enrolling more borrowers in income-driven plans would help middle-income people. First, in this repayment plan, the debt service represents a constant fraction of earnings, making it easier to afford the debt service if labor market outcomes are oscillating. Following the last section's discussion, it could theoretically reduce default rates in the face of adverse economic shocks. Second, it would increase participation by reducing risk-aversion, given that debt service varies with income (Gary-Bobo & Trannoy, 2015). Relating this argument to Kalecki's principle of increasing risk, income-driven plans mostly benefit people with low income and wealth levels, because it reduces the exposition of their assets to scenarios in which the financial return of this investment does not outweight the cost.

However, some authors highlight potential drawbacks in policies aiming to reduce the

current outstanding student debt balance. One argument against those policies is their moral hazard: canceling the outstanding balances would favor those who miscalculated the costs and benefits of the investment at the expense of those who managed to make the repayments properly (Fullwiler et al., 2018). Ultimately, this could increase the number of new borrowings because people would expect the government to cancel their debt balances again in the future. This incentive could lead to a riskier financial situation for households.

Section 1 reveals some issues with the interpretation that points to the borrowers as the main responsible for the cost-return mismatch. First, it is mostly based on individual choice models, which assume the possibility of making accurate long-term forecasts for labor market outcomes. In contrast, one may point out the impossibility of making such calculations, considering that "at least some essential information about future events cannot be known at the moment of decision because this information does not exist and cannot be inferred from any existing data set" (Dequech, 1999, p.415-6).

For instance, changes in the government's fiscal policy and economic recessions can significantly alter labor market conditions (Rumberger, 1981). This becomes especially relevant as the global economy faces the second crisis in less than 15 years. Second, people who are not having repayment difficulties did not necessarily calculate the cost and benefits of this investment accurately. For instance, many people rely on relatives' savings in the repayment period (Lochner & Monge-Naranjo, 2016; Sallie-Mae, 2017). Therefore, neglecting the macroeconomic impacts on student loan sustainability has negative distributional consequences, considering that low-income populations are the ones who typically cannot count on relatives' savings during difficult times.

6. Final Remarks

This paper comprises a background on the US student loan scenario and discusses demand-side aspects of student loans from the PK perspective that affect economic activity and financial stability. I argue that, although student loans may not pay off for many people, many aspects of this type of loans reduce the risk of a student debt crisis in the US. This paper reaches the conclusion of a relatively low risk of a financial crisis caused by student loans after analyzing aspects such as the constancy of interest rates, the intangibility of human capital, and

the fact that the government is the main lender. Nonetheless, although sustainable in the aggregate, student debt has negative consequences for the economy, considering its impact on household consumption.

The PK perspective also sheds light on the student debt-canceling debate. Considering most of the student loan balances owed by middle and high-income people (which I explain using the Kaleckian theory), I argue that policy would have a regressive effect and a lower multiplier effect than alternative policies such as reducing interest rates on student loans, changing the eligibility criteria for student forgiveness, and having more borrowers enrolled in income-driven repayment plans. Nonetheless, although I focus on the economic consequences of student loans, other alternatives unrelated to the financial system are also worth considering for future research.

For instance, in this paper, I do not address the debate on public versus private postsecondary educational systems (Palmer & Pitcock, 2017). However, many countries provide tuition-free college education at public universities. This is not limited to developed economies (for example, France, Germany, and Norway) but also developing countries such as Brazil, Argentina, and Uruguay. Yet, in the US, public universities are not tuition free. This policy results from the idea that higher education is a private good, with personal gains for the investor (Zhou & Mendoza, 2017). Discussing alternatives to the current US postsecondary education system that comprise tuition-free institutions could also contribute to the debate on households' human capital accumulation. Some actions along those lines are considered in the American Families Plan, announced in 2021, such as ensuring two years of free community college and expanding the provision of scholarships (Serra, 2021).

Student loans have contributed to the expansion in access to US postsecondary education. Nonetheless, the increase in student debt outstanding balance and the number of borrowers with repayment difficulties have led to concerns with the sustainability of this funding mechanism. This paper sheds light on the US case, offering a PK perspective to the matter, identifying relevant issues of this policy, and proposing solutions to improve repayment conditions and distributive aspects of borrowing to study.

References

Abel, J. R., & Deitz, R. (2014), *College may not pay off for everyone*. Liberty Street Eco- nomics, Federal Reserve Bank of New York. < http://libertystreeteconomics.newyorkfed.org/2014/09/college-may-not-pay-off-for-everyone.html.>

Abel, J. R., & Deitz, R. (2015), Agglomeration and job matching among college graduates. *Regional Science and Urban Economics*, 51: 14–24. DOI: https://doi.org/10.1016/j.regsciurbeco.2014.12.001

Addo, F. R., Houle, J. N., & Simon, D. (2016), Young, black, and (still) in the red: Parental wealth, race, and student loan debt. *Race and Social Problems*, 8(1): 64–76. DOI: https://doi.org/10.1007/s12552-016-9162-0

Amir, E., Teslow, J., & Borders, C. (2020), *Private student loan report*. Technical report, MeasureOne.

Avery, C., & Turner, S. (2012), Student loans: do college students borrow too much–or not enough? *Journal of Economic Perspectives*, 26(1): 165–92. DOI: https://doi.org/10.1257/jep.26.1.165

Becker, G. S. (1964), *Human capital: a theoretical and empirical analysis, with special reference to education.* New York: Columbia University Press.

Bleemer, Z., Brown, M., Lee, D., & Van der Klaauw, W. (2014), Debt, jobs, or housing: What's keeping millennials at home? *FRB of New York Staff Report*, n. 700. DOI: http://dx.doi.org/10.2139/ssrn.2530691

Borowczyk-Martins, D., Bradley, J., & Tarasonis, L. (2017), Racial discrimination in the US labor market: Employment and wage differentials by skill. *Labour Economics*, 49: 45–66. DOI: https://doi.org/10.1016/j.labeco.2017.09.007

Bowles, S., & Gintis, H. (1975), The problem with human capital theory–a Marxian critique. *The American Economic Review*, 65 (2): 74–82.

Brown, M., Haughwout, A., Lee, D., Scally, J., & van der Klaauw, W. (2015), *Payback time? measuring progress on student debt repayment.* Liberty Street Economics, Federal Reserve Bank of New York. https://libertystreeteconomics.newyorkfed.org/2015/02/payback_time_measuring_progress_on_student_debt_repayment/

Cappelli, P., & Won, S. (2016), *How you pay affects how you do: Financial aid type and student performance in college.* Technical report, National Bureau of Economic Research. DOI: https://doi.org/10.3386/w22604

Carneiro, P., J. J. Heckman, & Vytlacil, E. J. (2011), Estimating marginal returns to education. *American Economic Review*, 101(6): 2754–81. DOI: https://doi.org/10.1257/aer.101.6.2754

Carvalho, L. B., Lima, G. T., & Serra, G. P. (2023), Household debt, knowledge capital accumulation, and macrodynamic performance. *Journal of Post Keynesian Economics*, 1-33. DOI: https://doi.org/10.1080/01603477.2023.2170247

Catherine, S., & Yannelis, C. (2023), The distributional effects of student loan forgiveness. *Journal of Financial Economics*, 147(2): 297-316. DOI: https://doi.org/10.1016/j.jfineco.2022.10.003

Cellini, S. R., & Turner, N. (2019), Gainfully employed? assessing the employment and earnings of for-profit college students using administrative data. *Journal of Human Resources*, 54(2): 342–370. DOI: https://doi.org/10.3368/jhr.54.2.1016.8302R1

Dequech, D. (1999), Expectations and confidence under uncertainty. *Journal of Post Keynesian Economics*, 21(3):415–430.

Dymski, G. A. (2010), Why the subprime crisis is different: a Minskyian approach. *Cambridge Journal of Economics*, 34(2): 239–255. DOI: https://doi.org/10.1093/cje/bep054

Edmiston, K. D., Brooks, L., & Shepelwich, S. (2013), Student loans: Overview and issues. *Federal Reserve Bank of Kansas City Working Paper*, n. 12-05. DOI:

http://dx.doi.org/10.2139/ssrn.2137243

Fisher, J. D., Johnson, D. S., Smeeding, T. M., & Thompson, J. P. (2020), Estimating the marginal propensity to consume using the distributions of income, consumption, and wealth. *Journal of Macroeconomics,* 65: 103-218. DOI: https://doi.org/10.1016/j.jmacro.2020.103218

Friedman, M. (1955), The role of government in education. In Solo, R. A. (Ed.), *InEconomics and the Public Interest,* 123–144. New Brunswick, New Jersey: Rutgers University Press.

Fullwiler, S., Kelton, S., Ruetschlin, C., & Steinbaum, M. (2018), The macroeconomic effects of student debt cancellation. *The Levy Economics Institute of Bard College Research Project Reports.*

Gary-Bobo, R. J. & Trannoy, A. (2015), Optimal student loans and graduate tax under moral hazard and adverse selection. *The RAND Journal of Economics,* 46(3): 546–576. DOI: https://doi.org/10.1111/1756-2171.12097

Gharehgozli, O., & Atal, V. (2020), Revisiting the gender wage gap in the United States. *Economic Analysis and Policy,* 66: 207–216. DOI: https://doi.org/10.1016/j.eap.2020.04.008

Goodell, J. W. (2016), Do for-profit universities induce bad student loans? *The Quarterly Review of Economics and Finance,* 61: 173–184. DOI: https://doi.org/10.1016/j.qref.2016.02.003

Hungerford, T., & Solon, G. (1987), Sheepskin effects in the returns to education. *The Review of Economics and Statistics,* 175–177. DOI: https://doi.org/10.2307/1937919

Ionescu, F., & Simpson, N. (2016), Default risk and private student loans: implications for higher education policies. *Journal of Economic Dynamics and Control,* 64: 119–147. DOI: https://doi.org/10.1016/j.jedc.2015.12.003

Ji, Y. (2021), Job search under debt: Aggregate implications of student loans. *Journal of Monetary Economics,* 117: 741-759. DOI:

https://doi.org/10.1016/j.jmoneco.2020.05.002

Kalecki, M. (1937), The principle of increasing risk. *Economica*, 4(16): 440–447. DOI: https://doi.org/10.2307/2626879

Lima, G. T., Carvalho, L., & Serra, G. P. (2021), Human capital accumulation, income distribution and economic growth: a neo-Kaleckian analytical framework. *Review of Keynesian Economics,* 9(3): 319–336. DOI: https://doi.org/10.4337/roke.2021.03.02

Lochner, L., & Monge-Naranjo, A. (2016), Student loans and repayment: theory, evidence, and policy. In: Hanushek, E. A., Machin, S., & Woessmann, L. (eds.) *Handbook of the Economics of Education*, 5:. 397–478. North-Holland: Elsevier.

Looney, A., & Yannelis, C. (2015), A crisis in student loans? How changes in the characteristics of borrowers and in the institutions they attended contributed to rising loan defaults. *Brookings Papers on Economic Activity*, 2015(2): 1–89. DOI: https://doi.org/10.1353/eca.2015.0003

Lucca, D. O., Nadauld, T., & Shen, K. (2019), Credit supply and the rise in college tuition: Evidence from the expansion in federal student aid programs. *The Review of Financial Studies*, 32(2),423–466. DOI: https://doi.org/10.1093/rfs/hhy069

Mincer, J. (1958), Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4): 281–302. DOI: https://doi.org/10.1086/258055

Minsky, H. P. (1992), The financial instability hypothesis. *The Jerome Levy Economics Institute Working Paper*, n. 74.

Palmer, J. C., & Pitcock, M. R. (2017), Free tuition: prospects for extending free schooling into the postsecondary years. In: Hartlep, N. D., Eckrich, L. L. T., & Hensley, B. O. (eds.) *The Neoliberal Agenda and the Student Debt Crisis in US Higher Education: Indebted Collegians of the Neoliberal American University.* 161–176. New York: Routledge.

Pressman, S., & Scott, R. (2018), Ten years after the crisis: a lost decade. *Real World Economics Review*, 83: 2–19.

Rumberger, R. W. (1981), The rising incidence of overeducation in the US labor market. *Economics of Education Review*, 1(3): 293–314. DOI: https://doi.org/10.1016/0272-7757(81)90001-7

Sallie-Mae (2017), How America pays for college 2017: Sallie Mae's 10th national study of college students and parents. https://www.salliemae.com/assets/Research/HAP/HowAmericaPaysforCollege2017.pdf.

Schultz, T. W. (1960), Capital formation by education. *Journal of Political Economy*, 68(6), 571–583. DOI: https://doi.org/10.1086/258393

Schultz, T. W. (1967), The rate of return in allocating investment resources to education. *The Journal of Human Resources*, 2(3): 293–309. DOI: https://doi.org/10.2307/144836

Serra, G. P. (2023), Household Debt, Student Loan Forgiveness, and Human Capital Investment: a neo-Kaleckian Approach. *Journal of Post Keynesian Economics, 46*(1): 173-206. DOI: https://doi.org/10.1080/01603477.2022.2134035

Serra, G. P. (2021), American Families Plan e investimento em educação: lições para o caso brasileiro. In: Roncaglia, A., & Barbosa, N. (orgs.), *Bidenomics nos Trópicos*, 115-129. Rio de Janeiro: FGV Editora.

Setterfield, M. (2006), Balancing the macroeconomic books on the backs of workers: a simple analytical political economy model of contemporary US capitalism. *International Journal of Political Economy*, 35(3): 46–63. DOI: https://doi.org/10.2753/IJP0891-1916350303

Zhou, E., & Mendoza, P. (2017), Financing higher education in the United States a historical overview of loans in federal financial aid policy. In: Hartlep, N. D., Eckrich, Lucille L. T., & Hensley, B. O. (eds.), *The Neoliberal Agenda and the Student Debt Crisis in US Higher Education: Indebted Collegians of the Neoliberal American University*, 3–18. New York: Routledge.