



Mortgage Moratoria

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KEY FINDINGS

- In April 2020, Belgium introduced a debt suspension policy aimed at supporting mortgage holders facing financial challenges due to the COVID-19 pandemic. Approximately 6% of outstanding mortgages benefited from the program.
- This study examines the impact of the mortgage moratoria program on the financial outcomes of households during the pandemic, arguing that assignment to the policy provided critical support to the most vulnerable borrowers.
- Findings show that eligible households for the debt suspension policy reduced their mortgage payments by an average of €307 relative to the non-eligible during the policy period.
- Eligible households increased their savings by an average around €525 during the policy period, reflecting strong precautionary behavior driven by financial uncertainty and limited consumption opportunities during the COVID-19 pandemic.
- While no immediate impact on consumption was observed, eligible borrowers increased spending on services compared to non-eligible households after the policy ended.

INTRODUCTION

Debt moratoria, or the temporary suspension of periodic debt payments, are policies designed to provide immediate financial relief during periods of significant income disruption. Under such measures, debt maturity is extended by the duration of the suspension. To illustrate, if a mortgage with a maturity date of 31 January 2035 was granted a six-month debt suspension following the grace period, the maturity date was subsequently adjusted to 31 July 2035. These interventions aim to alleviate financial pressures on households and stabilize economic activity during crises.

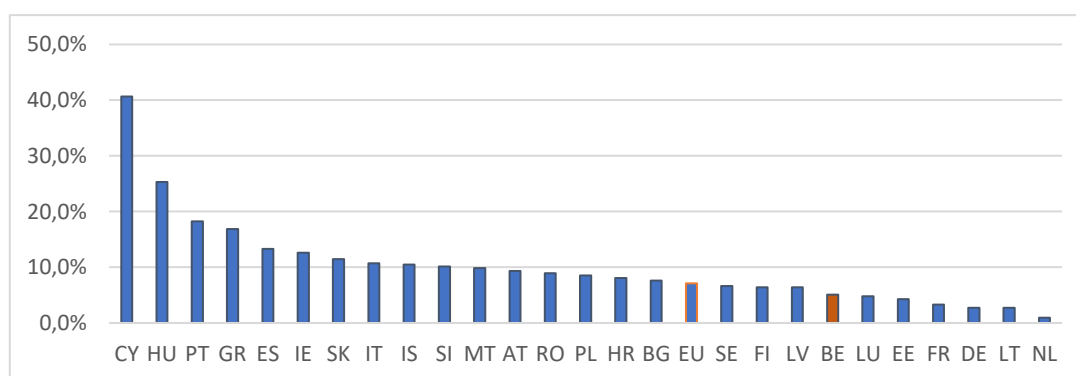
While the concept of debt moratoria has historical roots, its widespread application was rare until the unprecedented economic shock triggered by the COVID-19 pandemic in 2020. For instance, past programs addressed foreclosures on farm loans (Alston, 1984) and the suspension of student loans (Dinerstein, 2023).¹ However, at the outbreak of the pandemic, more than 70 countries adopted moratoria policies, targeting financial market stabilization and household support, particularly for mortgage borrowers (Guler et al., 2024).

In the European Union, all the countries launched similar debt moratoria programs, but the participation varied across countries (**Figure 1**). By June 2020, 7% of all EU mortgages were under moratoria, with higher rates reported in Cyprus (40.7%), Hungary (25.3%), and Portugal (18.2%). In Belgium alone, moratoria covered €12.9 billion, or approximately 6% of outstanding mortgages, by September 2020 (NBB, 2020).

In Belgium by September 2020 moratoria applied to around 12.9 billion of euros which constitutes 6% of outstanding mortgages (NBB, 2020).

Despite the widespread implementation of debt moratoria during the COVID-19 pandemic, there is a notable lack of empirical research on their economic and financial effects. Önder et al. (2024) and Guler et al. (2024) analyze the effects of corporate moratoria and mortgage moratoria during Covid-19 pandemic in Colombia, respectively. The study devoted to mortgage suspension reveals that moratoria programs positively affect financially strained borrowers by enabling them to increase consumption and reduce delinquency days, providing both immediate financial relief and fostering greater economic stability.

Figure 1. Mortgages under moratoria as a percentage of total mortgages across European Union countries – June 2020



¹ The early evidence of moratoria can be found in the manuscript of Islamic religions Quran (2:280), which emphasizes giving time to debtors facing hardship and promotes forgiveness as a moral virtue. In the 20th century, moratoria were used to

support farmers facing droughts. Recently, there has been a study providing evidence on the positive effect of suspension of student loans in 2020 (Dinerstein, 2023).

Sources: EBA supervisory reporting (2021)

The existing literature has yet to thoroughly explore the implications of mere eligibility for moratorium policies for financially pressured households. Specifically, questions remain about whether, and to what extent, simply being eligible for temporary debt payment relief affects household financial balance sheets.

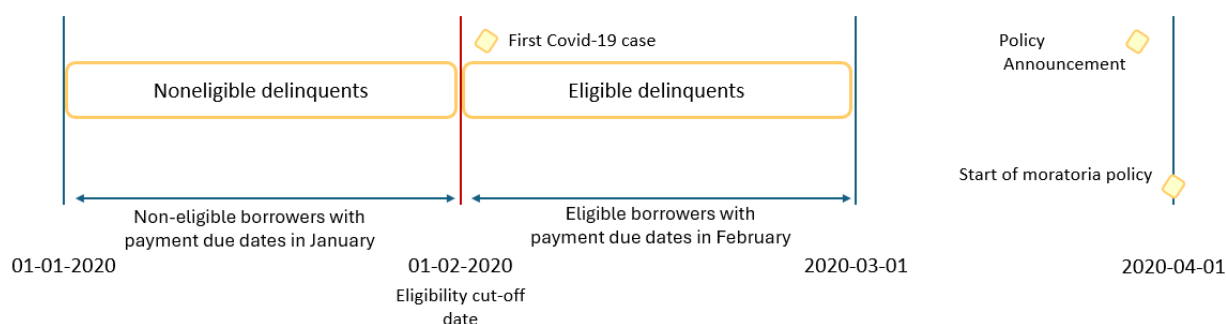
MORATORIA POLICY SETUP IN BELGIUM

The moratorium policy in Belgium, enacted on March 22 by the National Bank of Belgium (NBB) and the Belgian Financial Sector Federation (Febelfin), aimed to provide additional liquidity to mortgage holders affected by the COVID-19 pandemic. Belgium was one of the first country introducing debt suspension policy (Önder et al., 2024). The moratorium policy permitted the deferral of capital and interest payments for up to six months but no later than October 30, 2020. In September, a three-month extension of the policy was announced for borrowers already benefiting from it, extending coverage through December 2020. However, the total suspension

period was capped at a maximum of six months. The policy was applied retrospectively. The principal eligibility rule required mortgage holders to have no overdue payments on loans, taxes, or social security contributions as of February 1st, 2020. It specifically targeted individuals with existing home loans on their primary residence and with less than 25,000 euros in their current, savings and investment portfolio. Subsequently, following the grace period, repayments were scheduled to recommence, with the loan maturity extended by the duration of the suspension. To account for the deferred interest payments, monthly repayments were recalculated to keep the present discounted value of the mortgage unchanged. Additionally, after the debt suspension period ended, borrowers were no longer penalized for missed payments during that time, as the count of overdue days was reset. The policy prohibited banks from imposing additional fees or administrative charges. A key aspect of the moratorium was that it was not granted automatically. Individuals who qualified for program had to proactively contact their banks requesting suspension of mortgage payments. Eligible households could apply for the policy between April and September 2020.

DATASET AND METHODOLOGY

Figure 2. Identification of eligible and non-eligible borrowers to moratorium policy in Belgium



Source: Authors' chart

In a recent paper (Guler et al. (2025)), we exploit the main policy criterion based on the number of past due days on the mortgage payments. Namely, we identify eligible borrowers, defined as those with no delinquency

days on their debt obligation in January but with past due days on their debt liabilities in February. Specifically, **Figure 2** shows the timing of the policy and the identified groups. The eligible borrower's group, on the right of the cut-off date, consists of mortgage holders with

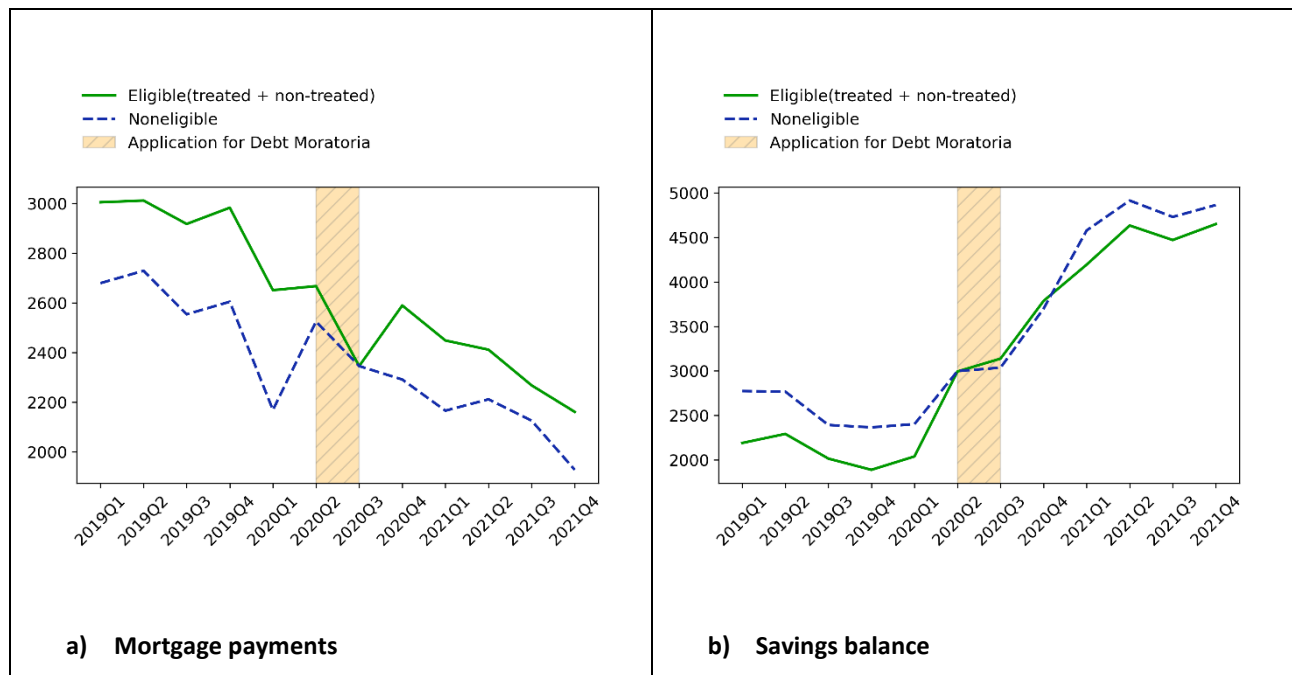
less than 29 past due days as of February 29, 2020. We define the non-eligible borrowers, on the left of the cut-off-date, who did not meet this rule thus having more than 29 past due days as of February 29. This setup allows us to identify financially stressed borrowers with similar payment behavior before the policy. Therefore, these borrowers are generally alike in terms of their financial characteristics and pre-Covid 19 consumption and saving trends and thus are comparable. **Figure 3** presents the evolution of means of consumption, savings and mortgage payments before, during and after the debt suspension policy was implemented. The trends for all outcome variables clearly show parallel behavior before the policy was implemented and notable changes during and after the program. Besides, our statistical analysis in the paper confirms no significant evidence of differences in outcome variables and household characteristics between the groups before the policy was implemented. This allows us to claim that the only difference between the borrowers was the eligibility to the policy.

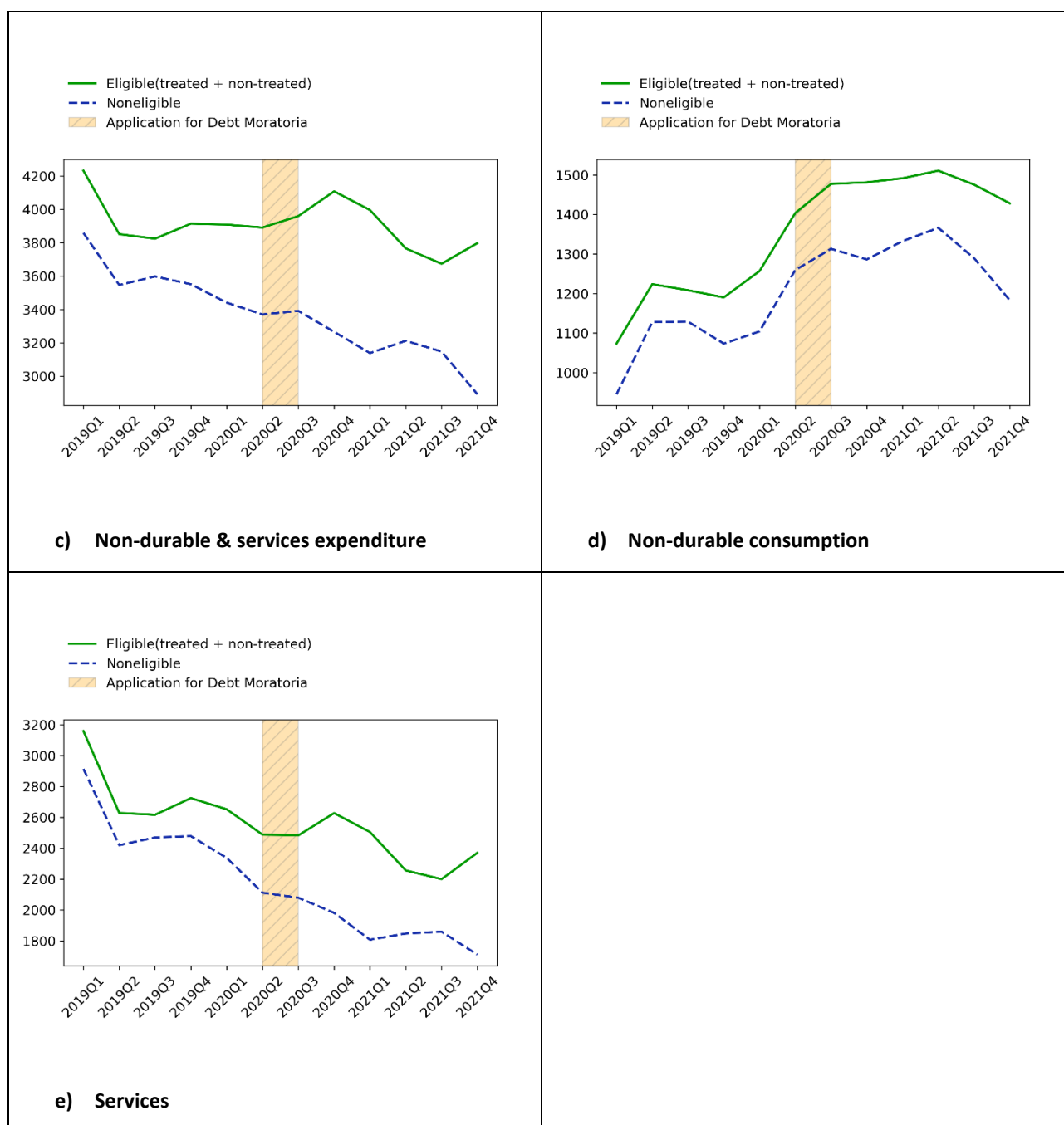
In the study, we use a highly granular, proprietary dataset comprising credit, transaction, and account records from BNP Paribas Fortis (BNPFF). The dataset

comprises monthly anonymized data spanning from 2017 to 2023, with a total of 4.4 million Belgian individuals included. This constitutes approximately a quarter of the Belgian commercial banking market and includes data from all regions of the country. The dataset covers loan-specific information such as loan size, interest rates, maturity, loan type, monthly payment amounts, and delinquency days (i.e., the number of days past due on debt payments). Additionally, it contains information regarding whether the loan was subject to a temporary moratorium and the duration of such a suspension in 2020.

The credit registry is integrated within the BNPFF dataset records of all debit card and online transactions at the individual level. Spending records are categorized into three main groups: durables, non-durables, and services, in accordance with the official European classification system, Classification of Individual Consumption by Purpose (COICOP). The savings balance represents the total savings from the current account as well as short- and long- term savings accounts. For each bank client, savings are represented by the end-of-month savings balances.

Figure 3 Trends in mortgage payments, savings balance and consumption expenditure





Source: Authors' charts. The charts present comparison of trends of quarterly average mortgage payment (a), savings balance (b), consumption expenditures (c, d, e) between eligible and noneligible borrowers between 2019Q1-2021Q4. All variables are expressed in euros deflated by CPI index. Consumption expenditures are calculated as the 6-month moving average. Savings denote the end-of-quarter balance on savings accounts. Consumption expenditures and savings are adjusted to the household size. Mortgage payments refer to the quarterly payments on debt that originated before the policy implementation.

In this analysis, we applied several transformations to the data. The consumption expenditures and balance of savings are calculated as a 6-month moving average to account for the high variance of the data and adjusted by household size. Next, the consumption expenditure

and mortgage payments are aggregated into quarters while saving balances reflect end-of-quarter balances. Moreover, following the other policy criteria, we discard borrowers who had more than 25000 euros in their current savings and investment accounts. With this setup,

we ensure that our sample contains financially stressed borrowers.

RESULTS

Table 1 provides the values of the key parameters of interest, including those for the pre- and post-Covid-19 period.

Our findings show that financially stressed eligible borrowers reduced their mortgage payments by an average of 307.12 euros compared to non-eligible households during the second and third quarters of 2020.

Our findings show that financially stressed eligible borrowers reduced their mortgage payments by an average of 307.12 euros compared to non-eligible households during the second and third quarters of 2020, when they were eligible to apply for the debt suspension policy.

The results highlight a notable response in savings behavior, with eligible households increasing their savings by an average of 525.55 euros per household member compared to non-eligible households in the period of implementation. After debt suspension is withdrawn, we do not see any significant results.

The results highlight a notable response in savings behavior, with eligible households increasing their savings by an average of 525.55 euros per household member compared to non-eligible households in the period of implementation.

In contrast, we find no statistically significant differences in consumption expenditures during the moratoria period. However, consumption behavior diverges in the first and second quarters following the policy's termination, with positive difference between eligible and non-eligible households spending, on average, 479 euros in 2020Q4 and 474 euros in 2021Q1. Notably, the surge in consumption expenditures comes from spending on services.

Next, we calculate the elasticity of savings resulting from the mortgage debt suspension. The average mortgage payment-to-savings ratio for stressed households in the period 2019Q4–2020Q1 was 0.45. Given that eligible households missed mortgage payments by 307 euros during the policy period, this suggests an elasticity of savings of 0.77 per euro of missed payments ($525.55 / 307.12 * 0.45$), illustrating the degree to which the suspension of mortgage payments influenced household savings behavior.

Table 1. The estimated intention-to-treatment effects of mortgage moratoria

	Non-durables and services	Non-durables	Services	Savings	Mortgage Payments
$\beta^{ITT} - 2020Q2\&Q3$	181.34 (164.19)	37.38 (72.45)	143.96 (131.71)	525.55* (296.72)	-307.12** (121.42)
2020Q4	478.58* (251.26)	78.71 (81.73)	400.40* (216.60)	536.73 (435.21)	-80.50 (142.62)
2021Q1	493.86* (259.87)	42.17 (99.02)	451.70* (223.05)	92.83 (590.32)	-95.91 (155.73)
2021Q2	190.80 (216.03)	27.79 (109.46)	163.01 (166.14)	196.63 (624.92)	-178.70 (140.81)
2021Q3	163.18 (207.73)	70.00 (92.36)	94.09 (168.71)	217.32 (636.53)	-236.26 (193.70)
Time FE	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes
Nr households	1215	1215	1215	1201	1215

Source: Authors' calculations. The estimated parameters represent the effect of the moratorium policy on household spending and savings between 2019Q1-2021Q4. The rest of the coefficient are omitted intentionally for clarity of

presentation. 2019Q4 is a reference period. All variables are expressed in euros deflated by CPI index. Consumption expenditures are calculated as the 6-month moving average. Savings denote the end-of-quarter balance on savings accounts. Consumption expenditures and savings are adjusted to the household size. Mortgage payments refer to the quarterly payments on debt that originated before the policy implementation. All columns control for households and time-fixed effects. Standard errors are clustered on the household level. *, **, ***, indicate significance at the 10%, 5%, and 1% respectively.

DISCUSSION

Our results show the alleviating effect of moratoria for financially stressed households. Simply being eligible to the policy appears to trigger a shift in financial behavior.

Eligible households tended to suspend their mortgage payments, even though they could participate in the debt suspension program at any time during first quarters of COVID-19 pandemic. Interestingly, this effect is mainly driven by eligible households who did *not* formally enroll in the program but still suspended their payments. This “as-if treated” behavior may stem from several factors. Some eligible households might not have been fully informed about the debt suspension option. Although the policy was announced in the media and promoted by banks, the message may not have reached all borrowers. Additionally, since this was the first time such a policy was introduced on a broad scale, some borrowers may have been skeptical about participating due to uncertainty or mistrust. While participation had no negative impact on credit scores, this detail may not have been clear to less-informed households, potentially discouraging formal enrollment.

The impact on savings balances is counterintuitive. Eligible borrowers can be considered as hand-to-mouth consumers, who typically spend any additional income or liquidity immediately, as they usually live paycheck to paycheck without substantial savings. However, we observe the opposite phenomenon: eligible households used extra financial flexibility to increase their savings,

reflecting potentially some precautionary behavior. One possible explanation for the difference between eligible and non-eligible households is that the latter continued to make mortgage payments, thereby depleting their savings.

Alternatively, the lack of an immediate impact on consumption can also be explained by the limited spending opportunities during the pandemic. As countries—including Belgium—imposed social distancing and lockdown measures to curb the spread of the virus, households faced fewer opportunities and incentives to spend on non-durables and services. This combination of financial uncertainty and constrained spending opportunities reinforced their tendency to save rather than consume.

CONCLUSION

This study sheds light on the impact of eligibility to the temporary debt suspension on financially stressed borrowers. Our findings demonstrate that eligible households tend to reduce their mortgage payments and prioritize building buffer savings while the suspension option remains available. We find that from 1 euro of mortgage payment suspension translates on average to 1 euro of additional savings. This behavior reflects a strategic adjustment aimed at managing financial distress during times of uncertainty. However, the impact of these policies extends beyond the suspension period. Once restrictions are lifted, households exhibit a notable surge in spending on services.

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