

RIISING BUY NOW, PAY LATER DELINQUENCY IN MALAYSIA

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Article history

Received date : 8-10-2026

Revised date : 9-10-2026

Accepted date : 21-10-2026

Published date : 22-10-2026

To cite this document:

Tamjis, A. (2026). Rising buy now, pay later delinquency in Malaysia. *International Journal of Accounting, Finance and Business (IJAFB)*, 11 (69), 1 - 21.

Abstract: Between June 2024 and March 2026, the overdue ratio on Malaysian buy now, pay later (BNPL) balances rose from 2.6 to 3.4 per cent, even as unemployment, the median household debt-service ratio and housing-loan impairment improved. This exploratory study examines how much of the increase in arrears reflects portfolio growth rather than a higher overdue rate, and whether changes in delinquency align more closely with broad economic conditions or with characteristics of BNPL users and product use. The analysis draws on published data from Bank Negara Malaysia and the Department of Statistics Malaysia, parliamentary replies and a regulatory survey of users. Because the official overdue ratio is available for only six dates, the study uses an identity-based decomposition and directional comparisons rather than statistical or causal inference. The decomposition shows that, if the December 2024 overdue ratio had remained unchanged, portfolio growth would have accounted for roughly three-quarters of the subsequent increase in arrears; about one quarter corresponds to the higher overdue rate. The macroeconomic evidence is mixed. Real GDP and private-consumption growth slowed in most intervals in which delinquency rose, whereas labour-market, price and household indicators generally moved in the opposite direction. Evidence on borrowers and product use is also mixed. A one-date comparison is suggestive of larger overdue exposures, and 73 per cent of surveyed users earned below RM5,000 a month, but transactions per account did not rise in step with delinquency. Car loans were the only bank-loan category whose impairment moved consistently with BNPL delinquency. These findings do not identify a single cause. They suggest that broad household credit-risk indicators alone may not track repayment stress well when BNPL users are only partly represented in the populations underlying those indicators, and that changes in a delinquency ratio should be interpreted alongside portfolio growth.

Keywords: Buy now pay later, consumer credit risk, delinquency, household debt, macroeconomic conditions, Malaysia

Introduction

BNPL allows consumers to split purchases into interest-free instalments. Interest-free credit at the point of sale does not, however, necessarily imply costless financing for the household. In the United Kingdom, a substantial share of BNPL instalments is settled with a credit card (Guttman-Kenney, Firth, & Gathergood, 2023), so an interest-free obligation may ultimately be financed through interest-bearing debt. Instalment payment can also increase purchase frequency and purchase value, particularly among consumers who are already financially constrained (Maesen & Ang, 2025). Consumers with lower financial literacy tend to perceive greater benefits and fewer risks in BNPL arrangements (Gerrans, Baur, & Lavagna-Slater, 2022). Together, these findings make repayment outcomes especially relevant for users with limited financial buffers and for consumers who may rely on other forms of credit to meet BNPL obligations.

Monitoring this risk is not straightforward because commonly used household credit-risk indicators do not all describe the same population. Unemployment captures broad labour-market conditions, while debt-service measures and impairment ratios more directly reflect households or borrowers already visible within regulated credit markets. The established relationship between loan performance and the economic cycle (Beck, Jakubík, & PiloIU, 2015; Ghosh, 2015) is therefore most informative for a particular portfolio when the indicators used to monitor it are relevant to the borrowers in that portfolio. Louzis, Vouldis, and Metaxas (2012) show that cyclical sensitivity differs even across loan types within the same banking system. Less is known about portfolios whose users are only partly represented in the credit system from which conventional risk indicators are drawn.

Malaysia provides a useful setting in which to examine this issue because BNPL is supplied mainly by non-bank firms, and most surveyed users report having no other personal financing (Consumer Credit Oversight Board Task Force, 2025). Active accountholders reached eight million by March 2026, while the share of outstanding balances overdue rose from 2.6 per cent in June 2024 to 3.4 per cent in March 2026 (Bank Negara Malaysia [BNM], 2025b; Dewan Rakyat, 2026). Over the same period, unemployment and inflation fell, the policy rate was cut and household debt service eased (BNM, 2026b, 2026e; Department of Statistics Malaysia [DOSM], 2026). The Ministry of Finance described the BNPL debt burden as manageable because BNPL balances represented about 0.3 per cent of household debt (Ministry of Finance Malaysia, 2026). A small aggregate share, however, does not establish whether repayment stress is concentrated among particular users or rising within a rapidly expanding portfolio.

This divergence between BNPL delinquency and several broad indicators motivates two non-exclusive explanations. If delinquency mainly reflects broad economic conditions, the indicators normally used to monitor household credit risk should generally deteriorate as BNPL delinquency rises. If delinquency is more closely related to the characteristics of BNPL users, patterns of product use or provider behaviour, broad indicators may improve even while repayment stress within BNPL increases. The distinction matters for supervision because the latter pattern would increase the value of product-specific monitoring relative to reliance on aggregate household indicators alone.

Rapid portfolio growth creates a separate measurement problem. New lending expands the denominator of a delinquency ratio before those balances have had time to become overdue. The published ratio can therefore move with the pace of lending as well as with repayment behaviour (Breedon, Thomas, & McDonald, 2008; Foos, Norden, & Weber, 2010). Interpreting

changes in the ratio consequently requires separating movements in arrears from movements in outstanding balances.

Two gaps therefore motivate this study. First, evidence on realised BNPL repayment outcomes remains limited, because most studies examine why consumers adopt the product instead of whether they repay. Second, little attention has been given to how rapid portfolio growth affects the interpretation of published delinquency ratios.

Using published evidence for the Malaysian BNPL segment from March 2023 to March 2026, with the main assessment beginning in June 2024, the study addresses four questions: (1) how much of the movement in the overdue ratio reflects growth in arrears relative to growth in outstanding balances; (2) whether changes in BNPL delinquency move in the direction predicted by macroeconomic and household indicators; (3) whether the observed pattern is consistent with BNPL user characteristics, product use and stress in non-mortgage bank credit; and (4) which explanations remain plausible after these comparisons, and what additional data would be required to distinguish among them.

The study connects two issues that are usually considered separately, namely the population coverage of aggregate credit-risk indicators and the measurement effects of rapid growth in a short-tenor portfolio. Conceptually, it treats the overlap between the population represented by an indicator and the borrowers in a portfolio as a condition affecting the indicator's relevance to that portfolio. Methodologically, it uses published aggregates to separate the arithmetic contribution of portfolio growth from that of a changing overdue rate. Empirically, it provides an early assessment of repayment stress in Malaysian BNPL, where prior research has focused mainly on adoption rather than repayment outcomes. The analysis remains exploratory because the official overdue ratio is available for only six dates and classifies any payment that is one day late as overdue; no causal claim is made.

Literature Review

The Malaysian BNPL Market

In Malaysia, BNPL is provided mainly by non-bank firms operating through e-commerce and super-app platforms. In December 2024, there were 12 providers, and three schemes accounted for more than 95 per cent of active accountholders, transaction volume and transaction value (Consumer Credit Oversight Board Task Force, 2025). By July 2025, the number of providers had risen to 16 (Dewan Rakyat, 2025a). Merchants are paid upfront, leaving providers to bear the credit risk. BNPL is used mainly for everyday spending, with an average transaction value below RM100 (BNM, 2025b; Dewan Rakyat, 2026). The market expanded rapidly (Figure 1). Half-yearly transaction value more than quadrupled between the first half of 2023 and the second half of 2025, while outstanding balances nearly doubled between December 2024 and March 2026 (BNM, 2025a, 2025b, 2026b; Dewan Rakyat, 2026).

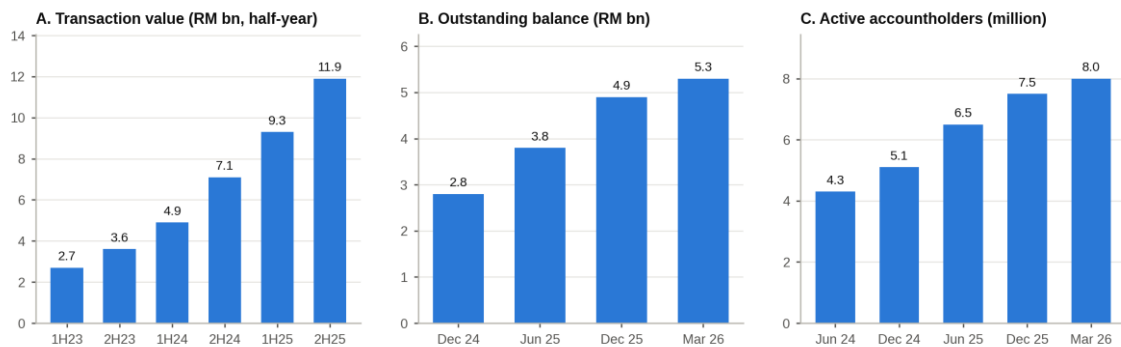


Figure 1: Growth of the Malaysian BNPL Market

Note: Non-bank providers only. Outstanding balances and accountholders are not published for earlier periods.
 Source: BNM (2025a, 2025b, 2026b); Dewan Rakyat (2026).

BNPL expanded within a household sector with relatively high indebtedness. Household debt stood at 84.8 per cent of GDP in December 2025, and BNM's stress tests show that most borrowers at risk of default in the banking system earn under RM5,000 a month (BNM, 2026b). Most surveyed BNPL users fall within the same income group, but many report little or no other personal financing. Bank-based household credit indicators may therefore capture their borrowing circumstances only partially.

BNPL-specific credit regulation was introduced in 2026. Before then, BNPL was not regulated as credit (Zainudin & Othman, 2024). The Consumer Credit Act 2025 came into force on 1 March 2026 and established the Consumer Credit Commission (Suruhanjaya Kredit Pengguna). The Commission opened licensing in June 2026 and issued Conduct Standards governing provider conduct. The standards do not, however, define default, impairment or write-off for BNPL (Consumer Credit Act 2025; Dewan Rakyat, 2026; Suruhanjaya Kredit Pengguna, 2026).

BNPL as a Credit Instrument and Its Measurement

BNPL is a short-tenor instalment facility granted at the point of sale and repaid in a small number of fixed instalments. Consumers pay no interest, while providers earn revenue from merchant discounts and late-payment fees (Gerrans et al., 2022; Tan, 2022). Three features are particularly relevant to risk measurement. First, each facility finances a single transaction, so one consumer may hold several small facilities simultaneously, potentially across providers. Second, the tenor is measured in weeks, allowing the portfolio to turn over several times within a reporting period. Third, because no interest is charged, providers do not use price in the usual way to ration credit and instead rely on approval decisions and limit-setting. Tan (2022) describes automated assessment aimed at young consumers without established credit histories. Because BNPL was not classified as a loan, it also fell outside responsible-lending obligations (Gerrans et al., 2022). O'Brien, Ramsay, and Ali (2024) document consumer harm among low-income users who also rely on payday and pawn lending, while Wilson (2025) argues that treating BNPL as low risk may weaken enforcement even after regulatory obligations are imposed.

A payment is overdue, or delinquent, when it is not made by the due date. Default is conceptually different, as it is a classification event conventionally triggered after more than ninety days past due, and Malaysian banks classify a facility as credit-impaired on this basis (BNM, 2022). The published BNPL ratio treats a payment as overdue from one day past due. It therefore includes arrears that may subsequently be cured and cannot be compared directly

in magnitude with bank impairment ratios. Because no regulatory definition of default is specified for BNPL in the sources used here, this study treats the published overdue ratio as a measure of repayment stress rather than default and compares BNPL and bank measures only by direction of change. Delinquency by value, the share of balances overdue, can also be compared with delinquency by incidence, the share of accounts overdue, although the two measures do not by themselves reveal the total balances held by delinquent users. Throughout the paper, 'arrearage' refers to the overdue amount in ringgit and the 'overdue ratio' to that amount as a share of outstanding balances.

Theoretical Perspectives on Consumer Default

Existing research points to four broad mechanisms through which consumers may fail to repay. The first concerns ability to pay, since repayment becomes more difficult when income falls, living costs or debt service rise, or financial buffers are thin. The second concerns willingness to pay. Gross and Souleles (2002) attribute the rise in United States credit-card default during the 1990s to a decline in the cost of default rather than to riskier borrowers, while Guiso, Sapienza, and Zingales (2013) show that willingness to default also depends on non-financial considerations. A third mechanism is behavioural. Present-biased individuals are more likely to hold credit-card debt (Meier & Sprenger, 2010), and instalment payment can loosen the perceived financial constraint (Maesen & Ang, 2025). The fourth lies on the supply side. Lending standards may ease during expansions as institutional memory fades (Berger & Udell, 2004), and rapid loan growth is associated with higher subsequent losses (Foos et al., 2010; Salas & Saurina, 2002). These mechanisms are not mutually exclusive, and the published Malaysian data cannot identify them separately. The analysis therefore treats broad ability-to-pay conditions as the economic explanation, groups behavioural and willingness-to-pay considerations within the borrower-and-product-use explanation, and retains supply-side loosening as a rival explanation.

A large literature links loan performance to macroeconomic conditions. Using data for seventy-five countries, Beck et al. (2015) find that GDP growth, share prices, exchange rates and lending rates are associated with non-performing loan ratios. Ghosh (2015) similarly reports that unemployment and other regional conditions help explain variation in non-performing loans across United States states. If Malaysian BNPL delinquency is driven mainly by the broad economic cycle, it would be expected to rise when unemployment, inflation, interest rates and household debt burdens rise and when economic growth slows. Louzis et al. (2012), however, show that the strength of these relationships differs across mortgage, business and consumer portfolios, implying that cyclical sensitivity depends partly on borrower composition. National indicators are population averages. When a portfolio serves borrowers who are poorly represented by those averages, divergence between aggregate conditions and portfolio delinquency is plausible. In that setting, forms of credit serving similar borrowers may provide a more informative comparison than the household sector as a whole.

The Borrower, the Product and Its Use

A second set of explanations concerns borrower characteristics and the way BNPL is used. In subprime automobile lending, Adams, Einav, and Levin (2009) show that default rises with loan size and that higher-risk borrowers demand larger loans. In BNPL, where credit is granted transaction by transaction, an analogous exposure-size mechanism would operate through cumulative or repeated use rather than through a single large loan. The BNPL literature also points to a user base with signs of financial constraint. Lower financial literacy is associated with more favourable perceptions of the product (Gerrans et al., 2022), and BNPL use has been

linked to food insecurity among young Australians (Gallo Cordoba, Waite, & Walsh, 2024). Guttman-Kenney et al. (2023) find that BNPL repayments are often made with credit cards. Using bank data for 10.6 million United States consumers, deHaan, Kim, Lourie, and Zhu (2024) find that new BNPL users incur higher overdraft charges and higher credit-card interest and fees. Taken together, these studies suggest that BNPL may coexist with other forms of short-term or unsecured borrowing among financially constrained households.

Under the borrower-and-product-use explanation, delinquency would be expected to rise as use per account deepens, overdue exposure would be greater among accounts in arrears, and BNPL delinquency would move more closely with stress in non-mortgage bank credit than with the household sector as a whole. Evidence in the opposite direction, such as falling use per account while delinquency rises, would weaken this interpretation. Co-movement with non-mortgage credit is not unique to H2, however, because a common economic shock concentrated among lower-income households could generate the same pattern.

Portfolio Growth and Measured Delinquency

Portfolio growth affects both risk and measurement. As a risk channel, rapid lending has been associated with higher subsequent losses, although the lags documented in the existing literature are measured in years (Foos et al., 2010; Salas & Saurina, 2002), and provisioning tends to respond late (Laeven & Majnoni, 2003). As a measurement issue, new balances enlarge the denominator before they have time to become overdue, which can temporarily depress the delinquency ratio. A turnover-based approximation places the implied tenor of the Malaysian BNPL portfolio at about seventy-two to seventy-five days, calculated by dividing outstanding balances by half-yearly transaction value and scaling the result to days. This is only a portfolio-level approximation because it relates a stock of balances to a flow of transactions. Even so, the short implied tenor suggests that new lending can enter arrears within the same reporting period. Any dilution effect should therefore operate over a relatively short horizon, although its size cannot be identified without data by period of origination.

Retail lenders normally separate loan-age, cohort-quality and external-environment effects through vintage analysis (Breedon et al., 2008). Gamba-Santamaria, Melo-Velandia, and Orozco-Vanegas (2024) similarly use vintage data to distinguish borrowers' payment capacity from lenders' risk taking. The published Malaysian BNPL data have no vintage dimension. The decomposition used here is therefore narrower. It separates movements in the published ratio arithmetically into changes in arrears and outstanding balances, but it cannot identify differences in the quality of successive lending cohorts.

Research Gap and Hypotheses

The broader credit-risk literature identifies several findings relevant to this study. Macroeconomic conditions are associated with aggregate loan performance (Beck et al., 2015), default can be concentrated among larger exposures and constrained borrowers (Adams et al., 2009), and loan age and portfolio growth affect observed delinquency (Breedon et al., 2008). The relative importance of ability and willingness to pay remains contested (Gross & Souleles, 2002; Guiso et al., 2013). Evidence on BNPL repayment is much thinner. Nusir, Che Wel, and Ab Hamid (2026) show that BNPL research is concentrated in marketing and consumer-behaviour outlets and rarely examines post-purchase outcomes. The Malaysian studies identified for this review are mainly survey-based, focus on students and young adults, and do not model repayment. Mahmud, Ghuslan, Ahmad, and Alwi (2025), for example, surveyed 366 university students and found that awareness of bankruptcy risk did not translate into more

cautious behaviour. A separate Malaysian research stream focuses on the product's legal status (Zainudin & Othman, 2024).

The empirical gap is therefore specific. Published data now permit a comparison of changes in Malaysian BNPL delinquency with both broad economic indicators and product-specific borrower and use measures, yet no such comparison appears in the studies identified for this review. The question is also timely because the performance measures on which supervisors will rely are still being established (Suruhanjaya Kredit Pengguna, 2026).

These considerations yield two directional propositions, labelled H1 and H2 and summarised in Figure 2. The labels are retained for convenience, but the short series does not permit conventional hypothesis testing; the propositions are used to organise the descriptive evidence.

H1 (The economy). BNPL delinquency in Malaysia is expected to rise when economic and household conditions deteriorate, that is, when unemployment, inflation, interest rates and household debt burdens increase and economic growth slows.

H2 (The borrower and product use). BNPL delinquency in Malaysia is expected to rise with deeper use per account, greater overdue exposure, characteristics indicating limited financial buffers, and stress in non-mortgage bank credit.

Given only six observations of the official overdue ratio, H1 and H2 are assessed descriptively by asking whether the observed direction of change is consistent or inconsistent with each proposition; neither is formally accepted or rejected. H1 is evaluated using national indicators commonly used to assess household credit conditions. Divergence from BNPL delinquency would show only that those indicators do not track this portfolio over the observed period, not that economic conditions are irrelevant to BNPL users. The interest-rate component of H1 cannot be assessed because the policy rate changed only once during the comparison period. H2 combines evidence of different types, namely time-series measures of product use, a one-date exposure-size comparison, a cross-sectional user profile and directional co-movement with non-mortgage bank impairment. These components therefore differ in what they can establish. The first research question is addressed through the decomposition of the overdue ratio, the second and third through H1 and H2, and the fourth in the Discussion by considering which explanations remain plausible after the directional comparisons.

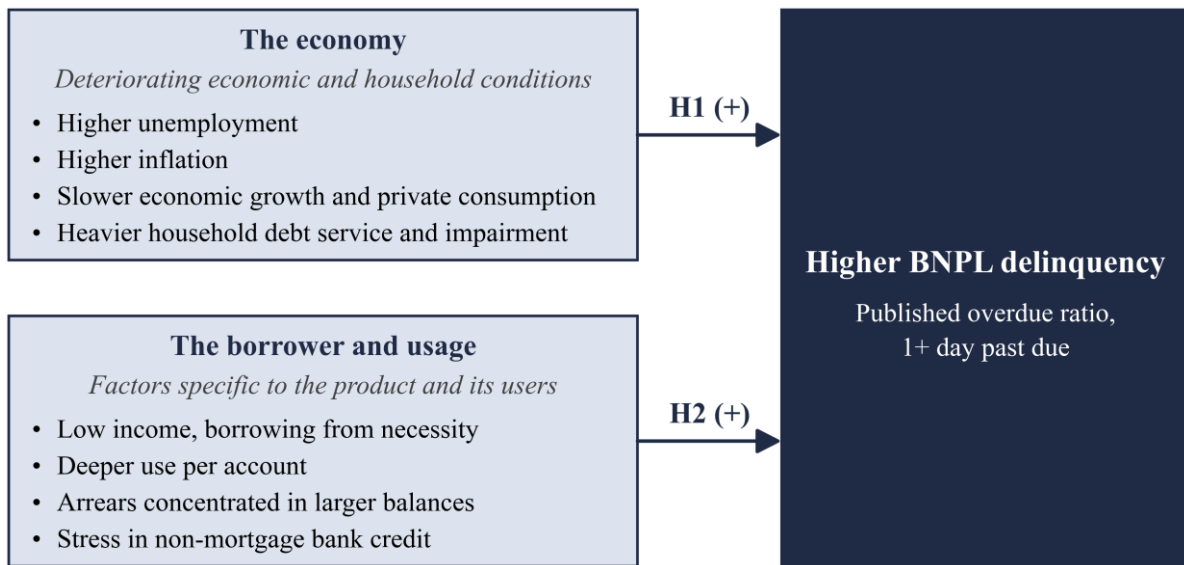


Figure 2: Research Framework

Note: BNPL delinquency is measured by the published overdue ratio, which records any payment one day or more past due.

Source: Author's construction.

Methodology

Research Design and Data

The study adopts an exploratory, descriptive-analytical design based entirely on published secondary data. The unit of analysis is the Malaysian non-bank BNPL segment in aggregate. The data cover March 2023 to March 2026, although the directional assessment of H1 and H2 focuses on June 2024 to March 2026. The official overdue ratio is available for only six dates; regression, significance testing and causal identification are therefore not attempted.

BNPL indicators are drawn from BNM's Financial Stability Review (FSR) for the second half of 2024, the first half of 2025 and the second half of 2025 (BNM, 2025a, 2025b, 2026b). Parliamentary replies provide the overdue amounts for June 2025 and March 2026 (Dewan Rakyat, 2025b, 2026). Macroeconomic series come from OpenDOSM (DOSM, 2026), and the policy rate from BNM (2026e). Banking-system impairment ratios by loan purpose were constructed from BNM's monthly statistics (BNM, 2026c, 2026d). As a validation check, the calculated housing-loan impairment ratio matches the ratio published in the FSR to within 0.06 percentage points. The user profile is drawn from the regulator's 2024 survey of 21,070 active users (Consumer Credit Oversight Board Task Force, 2025). BNM has since replaced the half-yearly FSR with an annual review and quarterly data packs (BNM, 2026a), so the final BNPL observation is taken from a parliamentary reply. Because one consumer may hold accounts with several providers, BNM's count of active accountholders is treated as a count of accounts rather than unique individuals.

Analytical Procedure

The analysis proceeds in three steps. First, each change in the overdue ratio is decomposed into growth in the overdue amount and growth in outstanding balances using the identity $(1 + \% \text{ change in ratio}) = (1 + \text{growth in overdue amount}) / (1 + \text{growth in outstanding balance})$. This is an accounting identity rather than a causal decomposition. It shows how the published ratio

changes as arrears and balances change, but it does not remove seasoning or dilution effects. Second, H1 is assessed by comparing the direction of change in each economic and household indicator with the direction implied by H1 over each interval. Intervals are classified as consistent or inconsistent; those in which either series is unchanged are excluded. Third, H2 is assessed using transactions and balances per account, a one-date comparison of the average overdue amount per overdue account with the average outstanding balance per active account, the user profile, and changes in impairment in non-mortgage bank credit. The exposure-size comparison is only a proxy, as it does not observe the total balances held by overdue users. The user profile is cross-sectional and is therefore treated as contextual evidence rather than as a time-series relationship. For the calculated bank ratios, a change of less than 2 per cent of the previous level is treated as no change to avoid classifying very small movements as directional changes. This threshold is a judgmental convention rather than a statistical criterion. Because month-end impairment ratios may be affected by write-offs around June and December, directions are measured both at month-end and using the average for the quarter ending at each date.

Several features of the data qualify the interpretation. The March 2023 overdue ratio of 6.0 per cent is an early-stage benchmark, cited in later FSRs (BNM, 2025a, 2026b), from a period when the market was much smaller. The ratio fell to 2.6 per cent by June 2024 while unemployment and inflation also fell, so the main assessment of H1 begins in mid-2024; counts are nevertheless reported with and without the earlier interval. The March 2026 observation covers a quarter that includes Chinese New Year, Ramadan and Hari Raya Aidilfitri and may therefore contain a seasonal component that cannot be separated with the available observations. Overdue amounts for December 2024 and December 2025 are derived by multiplying the published overdue ratio by the published outstanding balance. Because the ratios are rounded to one decimal place, rounding bounds are reported where they could affect interpretation. Finally, the Ministry of Finance reported a December 2025 ratio of 3.3 per cent (Ministry of Finance Malaysia, 2026), compared with 3.2 per cent in the FSR, indicating some uncertainty about the precise movement during the second half of 2025.

Directional comparison is more informative when an observation contradicts a prediction than when it accords with one. Movement in the predicted direction is consistent with an explanation but cannot establish either association or causation. With only two or three usable intervals for most indicators, the results are therefore interpreted as descriptive patterns rather than statistical tests.

Results

The Economic Context

Figure 3 compares the BNPL overdue ratio with the main economic and household indicators. Most labour-market, price and household indicators improved over the period. Unemployment fell from 3.6 per cent in January 2023 to 2.9 per cent between November 2025 and March 2026. Headline inflation fell from 3.7 per cent to a low of 1.1 per cent in June 2025 and remained at or below 2.0 per cent thereafter (DOSM, 2026). Real GDP growth recovered from about 3 per cent in mid-2023 and ranged between 4.4 and 6.2 per cent from the second quarter of 2024 onward. The Overnight Policy Rate rose to 3.00 per cent in May 2023 and was cut to 2.75 per cent in July 2025 (BNM, 2026e). Household indicators also improved. The median debt-service ratio eased from 34 to 33 per cent, the share of riskier borrowers fell from 9.3 to 8.9 per cent, and household-loan impairment fell from 1.1 to 1.0 per cent (BNM, 2025a, 2025b, 2026b).

Over the same broad period, the BNPL overdue ratio rose from 2.9 per cent in December 2024 to 3.4 per cent in March 2026. The divergence is clearest for labour-market, price and household indicators. Output and private-consumption growth, by contrast, slowed during several intervals in which BNPL delinquency rose.

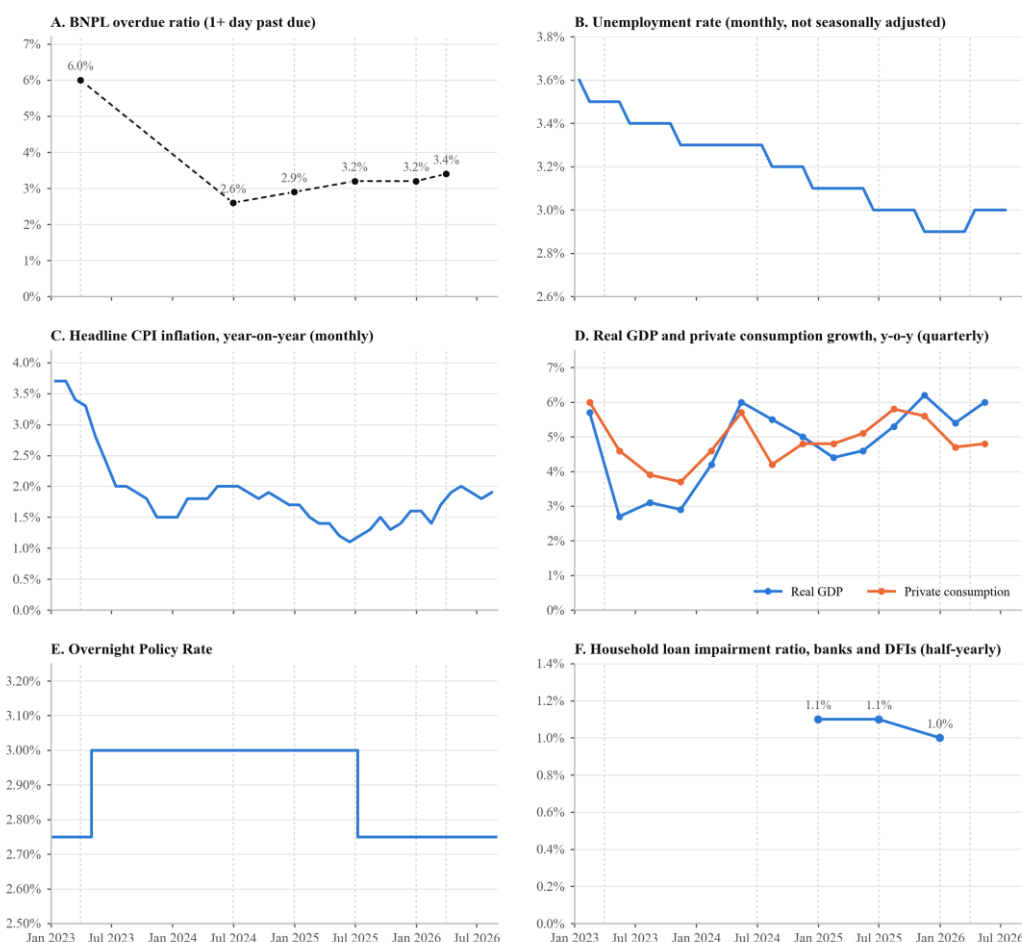


Figure 3: BNPL Delinquency and the Economic Context, 2023–2026

Note: Dashed vertical lines mark the six BNPL observation dates. Panel B is not seasonally adjusted. Panel D shows the latest revised figures. Panel F is published half-yearly from December 2024.

Source: BNM (2025a, 2025b, 2026b, 2026e); DOSM (2026); Dewan Rakyat (2025b, 2026).

Arrears, Balances and the Overdue Ratio

Arrears grew faster than outstanding balances (Table 1 and Figure 4). Between December 2024 and March 2026, the overdue amount rose by 123 per cent, from RM81 million to RM181 million, while outstanding balances rose by 89 per cent, from RM2.8 billion to RM5.3 billion. In the first half of 2025, arrears grew by 50 per cent and balances by 36 per cent, increasing the overdue ratio. During the second half of 2025, the published ratio remained at 3.2 per cent, although one-decimal rounding means that the underlying change could have been between about -3 and +3 per cent. The ratio rose again in the first quarter of 2026, when balances increased by about 8 per cent during the quarter. If that quarterly growth rate were repeated for a second quarter, the corresponding half-year increase would be about 17 per cent.

The overdue amount increased by about RM100 million between December 2024 and March 2026. Holding the December 2024 overdue ratio constant at 2.9 per cent, the observed growth

in outstanding balances would mechanically imply about RM73 million of that increase. The remaining RM27 million, with a rounding range of approximately RM23 million to RM31 million, corresponds to the rise in the overdue ratio. Thus, most of the increase in arrears is associated arithmetically with portfolio growth, while roughly one quarter corresponds to more late payment per ringgit outstanding. The rise in the overdue rate is concentrated in the first half of 2025 and, subject to possible seasonal effects, the first quarter of 2026. Whether the published ratio understates delinquency on older lending cannot be determined without data by period of origination.

Table 1: BNPL Indicators and the Decomposition of the Overdue Ratio

Indicator	Jun 2024	Dec 2024	Jun 2025	Dec 2025	Mar 2026
Overdue ratio (%)	2.6	2.9	3.2	3.2	3.4
Outstanding balance (RM bn)	—	2.8	3.8	4.9	5.3
Overdue amount (RM m)	—	81.2 ^a	121.8	156.8 ^a	181.0
Active accountholders (m)	4.3	5.1	6.5	7.5	8.0
Growth in overdue amount (%)			50.0	28.7	15.4 ^b
Growth in outstanding balance (%)			35.7	28.9	8.2 ^b
Implied change in ratio (%)			+10.5	-0.2	+6.7 ^b
Balance per account (RM)		549	585	653	663
Transactions per account (half-year)	14.5	16.4	15.8	18.7	—

Note: ^a Derived by multiplying the published overdue ratio by the published outstanding balance. ^b One quarter only; the half-year equivalents are about 33 per cent for the overdue amount and 17 per cent for outstanding balances. Published ratios are rounded to one decimal place, so the change in the second half of 2025 lies between about -3 and +3 per cent. The implied change equals $(1 + \text{growth in overdue amount}) \div (1 + \text{growth in outstanding balance}) - 1$.

Source: BNM (2025a, 2025b, 2026b); Dewan Rakyat (2025b, 2026); author's calculations.

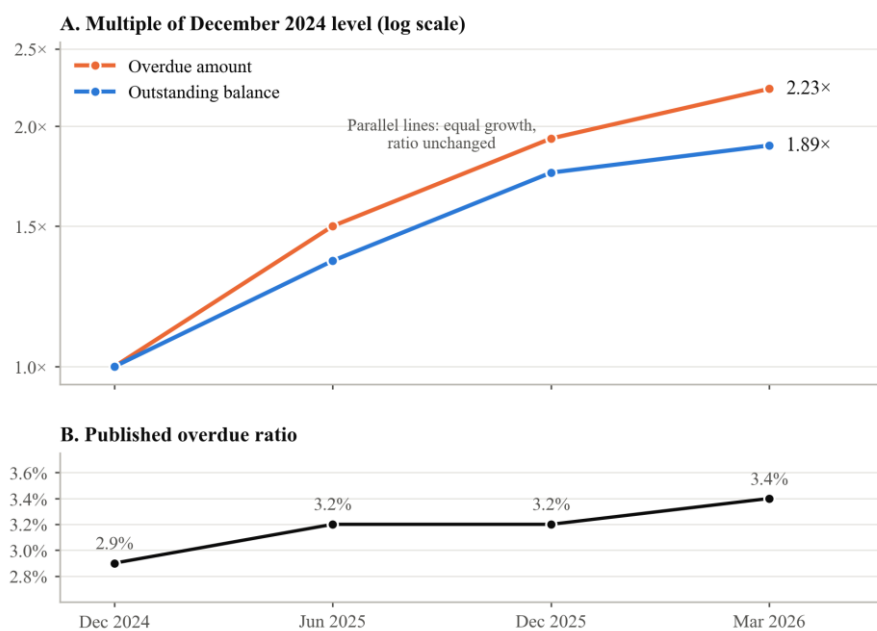


Figure 4: Overdue Amount, Outstanding Balance and the Overdue Ratio

Note: Panel A shows each series as a multiple of its December 2024 level on a logarithmic scale, so equal growth rates appear as parallel lines and a widening gap means arrears grew faster than balances. Panel B shows the published overdue ratio. The overdue amounts for December 2024 and December 2025 are derived from the published ratio and balance.

Source: BNM (2025b, 2026b); Dewan Rakyat (2025b, 2026); author's calculations.

The Economy (H1)

Table 2 reports how each economic and household indicator moved during the intervals from June 2024 in which the BNPL overdue ratio increased. The pattern differs markedly across indicator groups.

The economic-activity indicators mostly move as H1 predicts. Real GDP growth slowed in all three intervals in which BNPL delinquency rose, and private-consumption growth slowed in two of the three. The labour-market, price and household indicators generally moved in the opposite direction. Unemployment and housing-loan impairment fell in both usable intervals. The median debt-service ratio and the share of riskier borrowers also eased in the one interval for which they were available. Inflation rose alongside BNPL delinquency only in the first quarter of 2026. Overall, 6 of 15 directional comparisons are consistent with H1, comprising 5 of 6 for the activity indicators and 1 of 9 for the remaining indicators. Including the earlier interval yields 9 consistent movements out of 20. Given the small number of observations and the modest changes in activity, these counts are descriptive and should not be interpreted as evidence of statistical association.

H1 is therefore more consistent with the activity indicators than with the labour-market and household indicators normally used to assess household credit risk. The available evidence does not support a uniform macroeconomic explanation for the observed rise in BNPL delinquency.

Table 2: Direction of Economic and Household Indicators When BNPL Delinquency Rose (H1)

Indicator	H1 expects	Consistent	Inconsistent	Observed pattern
<i>Economic activity</i>				
Real GDP growth	Slower	3	0	Slowed each time delinquency rose
Private consumption growth	Slower	2	1	Slowed in two of three periods
<i>Labour market, prices and households</i>				
Unemployment rate	Higher	0	2	Fell
Headline inflation	Higher	1	2	Rose only in early 2026
Median debt service ratio	Higher	0	1	Eased
Riskier borrowers' share	Higher	0	1	Fell
Housing loan impairment	Higher	0	2	Fell
Total		6	9	

Note: Counts cover the periods from June 2024 in which the BNPL overdue ratio rose (June to December 2024, December 2024 to June 2025, and December 2025 to March 2026). Periods in which an indicator was unchanged or not published are excluded. Including March 2023 to June 2024, when the ratio fell, gives 9 consistent and 11 inconsistent movements. The Overnight Policy Rate changed only once, during a period in which the BNPL ratio was unchanged, and is therefore not assessed.

Source: DOSM (2026); BNM (2025a, 2025b, 2026b, 2026e); author's calculations.

The Borrower and Product Use (H2)

Evidence on H2 is also mixed. Use per account increased over the full period, but its timing did not match the movement in delinquency. Account growth slowed from 27.5 per cent in the first half of 2025 to 6.7 per cent in the first quarter of 2026, equivalent to about 14 per cent over two quarters if the first-quarter rate were repeated. Over the same period, the balance per account

rose by 21 per cent, from RM549 to RM663. Average transaction value remained between about RM85 and RM91. This pattern is consistent with repeated use contributing more to exposure growth than increases in transaction size, although the aggregate data cannot separate frequency, repayment speed and changes in account composition. More importantly, transactions per account fell from 16.4 to 15.8 in the first half of 2025, when the overdue rate rose most, and then increased to 18.7 in the second half, when the published ratio was unchanged. The timing therefore does not support a simple relationship between deeper use and rising delinquency.

The one-date exposure-size comparison provides only suggestive evidence for H2. In June 2025, 168,967 accountholders were overdue (Dewan Rakyat, 2025b). They represented 2.6 per cent of active accounts, while the overdue amount was 3.2 per cent of outstanding balances. Dividing the overdue amount by the number of overdue accounts gives an average overdue amount per overdue account about 23 per cent above the average outstanding balance per active account. This comparison is not equivalent to showing that overdue users held 23 per cent larger total balances, because the numerator for overdue accounts contains only the overdue amount rather than their full outstanding balances. It is therefore best interpreted as a limited proxy for exposure size rather than direct evidence that larger BNPL balances are more likely to become delinquent.

The user profile shows characteristics consistent with limited financial buffers, but this evidence describes who uses BNPL rather than why delinquency increased. In the regulator's 2024 survey, 73 per cent of users earned under RM5,000 a month, and most reported no access to other personal financing. Thirty per cent reported having no savings at the end of the month, although most low-income respondents reported some savings (Consumer Credit Oversight Board Task Force, 2025). The same survey, as reported to Parliament, found that 12 per cent of users paid late but eventually paid in full, while fewer than 0.5 per cent could not repay (Dewan Rakyat, 2025b). These figures are consistent with many late payments being cured and reinforce the distinction between the published overdue ratio and a measure of ultimate default.

Co-movement with non-mortgage bank credit becomes less clear once the timing of write-offs is considered. Table 3 shows that car-loan impairment moved with BNPL delinquency in every usable interval under both measures. Credit-card impairment moved with BNPL in two of three intervals at month-end, but in none of the usable intervals when quarterly averages are used. Personal-financing impairment moved with BNPL in one of three month-end intervals and one of two quarterly-average intervals. Residential impairment fell or was unchanged in the first two intervals. Credit-card and personal-financing impairment rose between June 2025 and March 2026 and continued to rise afterwards, so their apparent association with BNPL depends partly on months outside the BNPL observation window. The most persistent directional co-movement is therefore with car loans; evidence for other non-mortgage credit is mixed. This pattern cannot distinguish between H2 and an economic shock concentrated among lower-income households because either could produce similar co-movement. Table 4 summarises the evidence.

Table 3: Bank Impairment by Loan Purpose when BNPL Delinquency Rose

Loan Purpose	Moved with BNPL (Month-End)	Moved with BNPL (Quarter Average)	Interpretation
Passenger cars	2 of 2	3 of 3	Consistent
Credit cards	2 of 3	0 of 1	Mixed
Personal financing	1 of 3	1 of 2	Mixed
Residential property	1 of 2	0 of 2	Not consistent

Note: Each cell shows the number of periods in which bank impairment moved in the same direction as BNPL delinquency, out of the periods in which bank impairment changed by at least 2 per cent. The periods are those from June 2024 in which the BNPL ratio rose. Quarter averages cover the three months ending at each date and reduce the effect of write-offs recorded at June and December month-ends.

Source: BNM (2026c, 2026d); author's calculations.

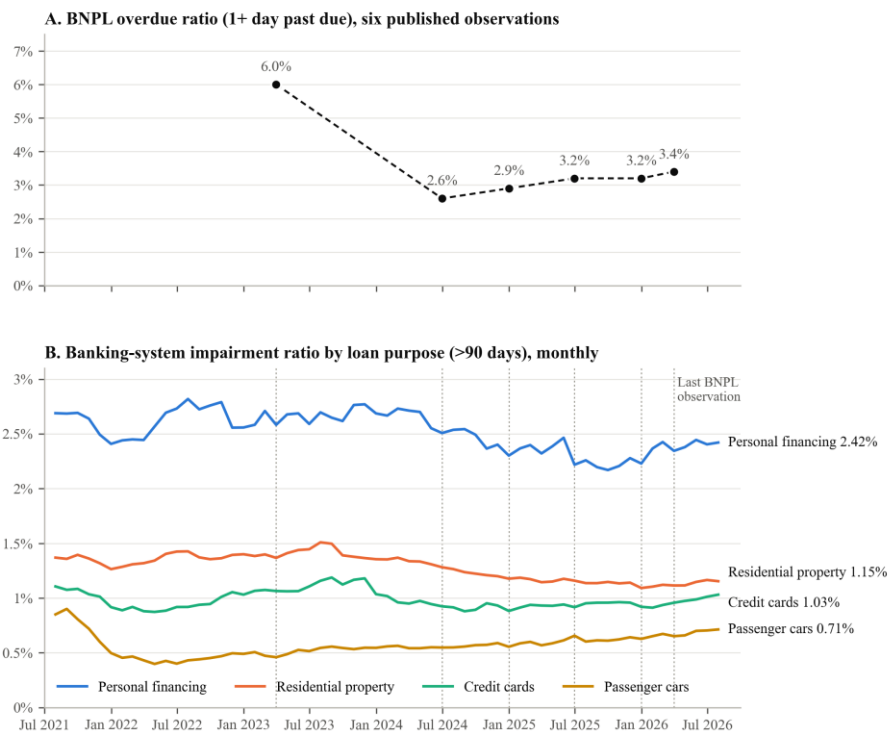


Figure 5: BNPL Overdue Ratio and Bank Impairment by Loan Purpose

Note: Panel B ratios are calculated as impaired loans by purpose (Table 1.22) divided by household loans by purpose (Table 1.19.6) for the banking system, excluding development financial institutions. BNPL and bank ratios use different past-due thresholds and are therefore compared by direction only. Dotted vertical lines mark the BNPL observation dates; the BNPL series ends in March 2026.

Source: BNM (2026c, 2026d); Dewan Rakyat (2025b, 2026); author's calculations.

Table 4: Summary of the Evidence on the Two Hypotheses

Hypothesis	Evidence	Assessment
H1 The economy	Real GDP and private consumption growth slowed in 5 of 6 comparisons in which BNPL delinquency rose; unemployment, inflation, debt service, riskier borrowers and housing impairment moved the other way in 8 of 9; the interest-rate component cannot be assessed	Mixed. Activity indicators are consistent with H1, but broader household-risk indicators are not
H2 The borrower and product use	Transactions per account fell when delinquency rose most; 73% of surveyed users had incomes below RM5,000 (cross-sectional context); a one-date proxy shows average overdue amount per overdue account about 1.23× average outstanding balance per active account, but does not observe total balances held by overdue users; car-loan impairment moved with BNPL in every usable interval, while cards and personal financing were mixed	Mixed. Timing evidence is weak, and the exposure proxy and car-loan co-movement are suggestive only
Growth	Overdue amount +123% versus outstanding balances +89%, Dec 2024 to Mar 2026; about RM27m (RM23–31m allowing for rounding) of the RM100m increase corresponds to the higher overdue ratio	Predominantly portfolio growth; a smaller share corresponds to the higher overdue rate

Discussion

Interpretation

The main empirical pattern is a divergence between BNPL delinquency and several broad household risk indicators. From December 2024 to March 2026, the BNPL overdue ratio rose while labour-market, price and household indicators improved. Holding the December 2024 overdue ratio constant, portfolio growth would account arithmetically for about three-quarters of the subsequent increase in arrears; the remaining quarter corresponds to the higher overdue ratio. One possible explanation for the divergence is incomplete overlap between the populations represented by standard household credit-risk indicators and by BNPL. Aggregate indicators summarise national conditions or borrowers already visible within regulated lending, whereas BNPL users are concentrated among lower-income households and many report no other personal financing. If the populations differ materially, improving aggregate indicators need not imply improving repayment conditions within the BNPL user base. GDP and private-consumption growth moved more often in the direction predicted by H1, but this pattern is not decisive. With only two or three usable intervals for most indicators, the data cannot establish whether the co-movement reflects broad macroeconomic conditions, pressures concentrated among BNPL users or chance.

The borrower-side evidence is weaker and must be separated by type. Balances per account increased as the market expanded, but transactions per account did not rise during the period in which delinquency increased most. Deeper use therefore provides a weak explanation for the timing of the rise. The one-date exposure-size proxy is somewhat more consistent with H2, since the average overdue amount per overdue account exceeded the average outstanding balance per active account. However, this is not a comparison of the total balances held by overdue and non-overdue users, so it cannot establish that larger total BNPL balances are more likely to become delinquent. The result is suggestive rather than conclusive.

Several alternative explanations remain plausible. Providers competing for market share may have eased approval standards or increased limits (Berger & Udell, 2004; Foos et al., 2010).

The increase in the number of providers and the rise in balances per account are compatible with rapid supply-side expansion, but they do not demonstrate weaker underwriting. Later cohorts of users may also differ in risk from early adopters. A further possibility is economic pressure concentrated among lower-income households that affects BNPL and selected forms of bank credit without appearing clearly in national averages. The published aggregates cannot identify the relative importance of these mechanisms. Their main contribution is therefore to narrow the set of plausible explanations by showing which broad indicators did and did not track BNPL delinquency over this short period.

Relation to Prior Evidence and Contribution

The findings add to evidence that credit performance differs across portfolios. Louzis et al. (2012) compare loan categories within the same banking system; the Malaysian BNPL case concerns a portfolio whose users are only partly represented in conventional credit statistics. This distinction suggests a more conditional interpretation of macroeconomic credit-risk indicators. Their relevance to a specific portfolio depends not only on loan type but also on how closely the population represented by the indicator overlaps with the portfolio's borrowers. Borrower composition may therefore shape observed cyclical sensitivity rather than merely serving as a background characteristic.

The growth analysis also applies insights from the loan-growth literature (Foos et al., 2010; Salas & Saurina, 2002) to a credit product whose tenor is measured in weeks. In a short-tenor portfolio, new lending can enter arrears within the same reporting period, so the published delinquency ratio reflects both repayment performance and the pace of balance growth. The accounting decomposition is useful because it requires only published aggregates, but it is not a substitute for vintage analysis, because cohort data are still required to separate seasoning, underwriting quality and changes in borrower risk. The directional co-movement with car loans, together with the weaker relationship with mortgages, is broadly compatible with evidence that BNPL users may also experience stress in other forms of consumer credit (Guttman-Kenney et al., 2023; deHaan et al., 2024). The evidence for credit cards and personal financing is less consistent. More generally, the analysis shifts attention from adoption to repayment outcomes in a BNPL literature that has so far focused mainly on why consumers use the product (Nusir et al., 2026).

Implications for Policy and Practice

Because broad labour-market and household indicators did not deteriorate as BNPL delinquency rose over the observed period, direct monitoring of the BNPL segment could provide information not captured by those aggregate measures. Potential indicators include balances and transactions per account, the number of accounts held by each borrower across providers, and delinquency by income band, age and period of origination. The Consumer Credit Commission now licenses BNPL providers (Consumer Credit Act 2025; Suruhanjaya Kredit Pengguna, 2026), and some of these data may become available through the licensing regime. Research access, subject to appropriate confidentiality safeguards, would allow the relationships identified here to be examined more directly.

For providers, the one-date exposure-size pattern is too limited to support firm operational conclusions. It nevertheless identifies a question for provider-level monitoring, namely whether larger limits, cumulative exposure or rapid limit increases are associated with late payment. Cohort-based management reporting would also help distinguish the effect of rapid portfolio growth from differences in the performance of successive vintages.

BNM has replaced the half-yearly FSR with an annual review and quarterly data packs (BNM, 2026a). Because the FSR was the main regular public source of BNPL information, continued publication of summary BNPL indicators would support research and public understanding. Reporting conventions are also still being established. A clearer framework would distinguish temporary late payment from persistent default and would report credit-quality changes separately from movements produced arithmetically by portfolio growth.

Limitations and Future Research

Several limitations materially constrain the interpretation. The outcome is observed at only six dates, so statistical inference is not possible and series that move together may be unrelated. The H1 result is sensitive to the starting date, while the final observation covers only one quarter and may be influenced by seasonal spending. Small movements, including the unchanged published ratio in the second half of 2025, cannot be distinguished cleanly from rounding. The outcome measures late payment rather than default, counts accounts rather than unique borrowers, and covers only non-bank providers. The user survey and aggregate performance data refer to different populations and dates, so the analysis cannot establish that low-income users are more likely to become delinquent. The one-date exposure-size proxy compares overdue amount per overdue account with outstanding balance per active account and therefore does not observe total balances held by delinquent users. The turnover-based tenor is also an aggregate approximation rather than a direct measure of contractual maturity. In addition, the 2 per cent threshold used to classify movements in bank impairment is judgmental and is not a statistical significance criterion. Because the market is concentrated, the aggregate ratio may reflect the practices of a small number of providers. The analysis can therefore narrow the range of plausible explanations but cannot identify a causal mechanism.

If provider- or regulator-level data become available, four extensions would be particularly informative. Cohort analysis by period of origination could separate seasoning from portfolio growth. Matching BNPL users with borrowers in non-mortgage bank credit could show whether the observed co-movement reflects shared borrowers or common economic pressures. Comparing provider entry, approval standards and limit expansion with subsequent delinquency could test the supply-side explanation more directly. Finally, borrower-level data that distinguish total exposure, overdue exposure and the number of accounts across providers would permit a direct test of whether larger cumulative BNPL exposure predicts late payment. A complementary survey could distinguish users who pay on time, pay late but in full, and fail to repay in order to examine whether temporary delinquency and persistent repayment failure have different determinants.

Additional published observations could provide preliminary out-of-sample checks on two descriptive patterns identified here. The first is whether the overdue rate remains elevated as the portfolio grows, and the second is whether BNPL delinquency continues to move in the same direction as car-loan impairment when quarterly averages are used. Such comparisons would remain descriptive rather than causal tests.

Conclusion

Between December 2024 and March 2026, most of the increase in Malaysian BNPL arrears was associated arithmetically with portfolio growth, while roughly one quarter corresponded to a higher overdue ratio. The higher ratio coincided with slower output and private-consumption growth but not with the labour-market and household indicators normally used to monitor household credit risk, which generally improved. On the borrower side, a one-date exposure-

size proxy suggested larger overdue exposure per delinquent account relative to the portfolio-wide average balance, and the user base was concentrated among lower-income households. However, the proxy does not observe delinquent users' total balances, and the timing of product use and stress in most forms of bank credit did not closely match the rise in BNPL delinquency. The evidence therefore narrows the range of plausible explanations without identifying a single cause.

The broader implication is not that aggregate credit-risk indicators are uninformative, but that their relevance to a specific portfolio depends partly on the population they represent. An indicator should be more informative when the population underlying it overlaps substantially with the portfolio's borrowers. Malaysian BNPL illustrates why this condition may matter, because many users report no other personal financing, while the product's performance has initially been observed through a limited overdue measure rather than through the impairment framework used for bank credit. The findings therefore qualify, rather than overturn, the established macroeconomic account of consumer default. Comparative research could examine whether similar divergences arise in other credit markets serving borrowers who are less visible in conventional banking statistics.

Most BNPL research has concentrated on adoption, while repayment outcomes remain less studied. Malaysia's new licensing regime creates an opportunity to strengthen the evidence base. This study provides an exploratory baseline by separating the arithmetic effects of portfolio growth from changes in the overdue rate, identifying which broad indicators did and did not move with delinquency, and specifying the data needed to examine the remaining explanations. As more observations and provider-level data become available, these descriptive relationships can be evaluated using stronger research designs.

Acknowledgements

The author thanks Prince Sultan University and its ESG Lab for their support in preparing this paper.

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