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Easy Credit, Uneven Evidence: A Scoping Review of Digital Consumer Credit, Repayment, and Household Financial Wellbeing in Southeast Asia

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Abstract

Purpose: Digital consumer credit, chiefly buy-now-pay-later (BNPL or PayLater) services and app-based online loans, has spread quickly across Southeast Asia, and concern about borrower harm has grown with it. This scoping review maps the empirical evidence on how consumer digital credit relates to borrowers' repayment, debt burden, financial wellbeing, and debt-related stress in the region; identifies which borrower characteristics and consumer-protection factors that evidence examines; and locates its principal gaps.

Design: Fifteen SciSpace and Google Scholar exports generated on 18 September 2026 (1,114 records; 547 after deduplication) were reconstructed and re-audited, including 47 records an earlier ranking cap had omitted, and a supplementary semantic search on 21 September 2026 added 57 new records. Reports were assessed against explicit population, concept, and context criteria, and data were charted into five outcome domains without statistical pooling.

Findings: Thirty-two reports were included: 27 from Indonesia, three from Malaysia, and two from the Philippines. No eligible report from Vietnam, Thailand, Singapore, or the other ASEAN members was retrieved. Twenty-seven of the 31 dated reports appeared in 2025 or 2026. Twenty reports were cross-sectional surveys of modest, usually location-specific samples (median $n = 207$), and eight were qualitative or purposive-sample studies. No report used administrative or credit-bureau repayment records, a longitudinal panel, or a quasi-experimental design, and none evaluated the effect of a consumer-protection measure. Much of the quantitative evidence measures perceived risk, risky-borrowing propensity, or subjective wellbeing rather than observed arrears or default. Qualitative studies consistently describe repeated borrowing, the normalisation of debt, family strain, and psychological distress. Financial literacy was the borrower characteristic examined most often, yet its association with borrowing risk was not consistently protective.

Originality and limitations: The review reports its AI-assisted search and its audit transparently, including 18 reports whose full text could not be verified and 426 earlier title-and-abstract exclusions that were not re-audited. The evidence supports a descriptive map rather than conclusions about causal effects, and it identifies the data infrastructure regulators in the region would need to assess digital-credit harm with confidence.

Keywords: *buy now pay later; online lending; digital credit; financial wellbeing; over-indebtedness; Southeast Asia; scoping review*

1. Introduction

Consumer credit in Southeast Asia is increasingly arranged on a phone. Buy-now-pay-later options sit inside e-commerce and ride-hailing applications, splitting purchases into instalments at the moment of checkout, while app-based lenders advance small, short-tenor cash loans with minimal paperwork. In Indonesia these online loans are known colloquially as pinjol (pinjaman online); similar lending applications operate in the Philippines, Malaysia, and elsewhere in the region. Their proponents present them as instruments of financial inclusion: they reach people whom banks have historically underserved, and they offer a way to smooth consumption when income is irregular. Regional evidence nonetheless suggests that expanding digital connectivity does not translate automatically into active and equitable financial participation (A. G. Atento, R. G. O. Atento, et al., 2026), nor, at the macro level, into faster

household consumption growth (Lantin-Magana & Atento, 2026). Their critics point to high effective costs, late fees that accumulate quickly, aggressive collection practices, and an unlicensed fringe of lenders operating outside regulatory reach.

These concerns have moved from the margins of the policy debate to its centre. Regulatory responses in the region have included licensing regimes for online lenders, enforcement action against unlicensed applications, and proposed or enacted conduct rules for BNPL providers. In the Philippines, for instance, the central bank has moved to close licence-category arbitrage by fintech-affiliated digital banking platforms through reclassification rules and tiered prudential requirements (Geca et al., 2026). Each of these responses rests, implicitly, on a view about what digital credit does to the households that use it: whether it helps them manage volatility, whether it draws them into cycles of repeated borrowing, and which borrowers are most exposed. That view ought to be informed by evidence, and the academic literature on the subject has grown rapidly. Much of it, however, appears in national and regional journals, a substantial share in Indonesian, and it varies widely in design and rigour. No regional synthesis has yet set out what this literature actually measures and what it can support.

A second, methodological problem compounds the first. Literature reviews in fast-moving fields are now commonly assembled with AI-assisted search and screening platforms, which can retrieve and rank hundreds of records in minutes. These tools are useful, but their outputs require verification: relevance-ranking caps can silently omit records, automated summaries can misreport study designs, and inclusion counts can drift away from what the underlying full texts contain. A review built on such outputs is only as reliable as the audit applied to them.

This paper responds to both problems with a scoping review of consumer digital credit and household financial outcomes in Southeast Asia. A scoping design was chosen deliberately. The evidence base is new, heterogeneous in its exposures and outcome measures, and dominated by cross-sectional and qualitative designs that do not lend themselves to pooled effect estimation. The appropriate first task is therefore to map the evidence: to establish where it comes from, which credit products and outcomes it covers, which borrower characteristics and protection factors it examines, and where it is silent. The review asks what empirical evidence exists on the relationship between consumer digital credit and borrowers' repayment, debt burden, financial wellbeing, and debt-related stress in Southeast Asia; which borrower characteristics are examined as correlates or moderators of those outcomes; to what extent the evidence addresses consumer-protection features; and what gaps would need to be filled before stronger conclusions could be drawn.

The paper makes three contributions. First, it provides the first region-specific evidence map on this question, drawing on English- and Indonesian-language reports. Second, it separates outcome domains that the literature frequently conflates, distinguishing observed repayment behaviour from self-reported borrowing propensity, perceived risk, subjective wellbeing, and qualitative accounts of hardship. This distinction matters because policy arguments often treat a high score on a risky-indebtedness scale as though it were evidence of default. Third, it documents an AI-assisted search and screening process together with the audit used to correct it, offering a transparent account of what such tools can and cannot be relied upon to do.

The remainder of the paper is organised as follows. Section 2 sets out the forms of digital consumer credit under review and the outcome framework used to chart the evidence. Section 3 describes the search reconstruction, eligibility criteria, selection process, and charting procedure. Section 4 presents the results by outcome domain and examines borrower characteristics, consumer protection, and reporting integrity. Section 5 discusses what the evidence can and cannot support, Section 6 states the limitations, and Section 7 concludes with recommendations for research and policy.

2. Digital Consumer Credit and Borrower Outcomes

2.1 Forms of Digital Consumer Credit

Two product families dominate the reports reviewed here. The first is buy-now-pay-later, marketed in Indonesia largely as PayLater. BNPL is a point-of-sale instalment facility, typically embedded in an e-commerce or super-app checkout, that allows a purchase to be divided into several payments. Instalments may carry no interest when paid on time, but fees and penalties apply to late payment, and credit limits can rise with use. The second family comprises app-based online loans, including peer-to-peer (P2P) platforms and direct digital lenders. These advance small cash

amounts for short periods, often with automated approval, and their pricing and collection conduct depend heavily on whether the lender is licensed.

The boundary between household and microenterprise credit is not always clean. Women street vendors, small traders, and wage earners may use the same online loan for stock, school fees, and food. Policy analysis of Philippine crisis instruments likewise distinguishes household relief from enterprise credit, treating concessional credit as better suited to viable enterprises than to non-bankable and informally employed households (A. G. Atento, Quinto, et al., 2026). The review therefore retains mixed household and business samples where household or borrower-level findings can be identified, and excludes reports concerned only with business lending.

2.2 An Outcome Framework for Charting the Evidence

The outcomes of interest are financial: repayment, debt burden, financial wellbeing, and debt-related stress. These are not interchangeable, and a central task of this review is to keep them apart. The evidence was charted into five outcome domains. The first, repayment and financial-management behaviour, covers reported repayment, late payment, debt management, and budgeting. The second, subjective financial wellbeing and stress, covers self-assessed wellbeing, financial stress, and debt-related psychological distress. The third, borrowing-risk proxies, covers scales of risky-indebtedness behaviour, over-indebtedness propensity, predatory-lending vulnerability, and perceived financial risk. The fourth, borrower experiences, covers qualitative accounts of how borrowers and households live with digital debt. The fifth, household consumption, covers the use of credit to sustain or raise consumption. Other household resource flows in the region show a similar consumption orientation; in the Philippines, remittance inflows are positively associated with changes in household consumption but negatively associated with investment (R. G. Atento, Feng, et al., 2026).

The domains differ in what they can establish. A self-reported propensity to over-borrow is not an observed default rate. A cross-sectional association between BNPL use and lower wellbeing does not show that BNPL lowered wellbeing; the causation may run the other way, or both may reflect a third factor such as income volatility. A qualitative account can reveal mechanisms that surveys miss, but it cannot estimate how common those mechanisms are. Evidence from credit markets with richer data illustrates what becomes possible when repayment and spending are observed directly. Using transaction-level data from the United States, Di Maggio et al. (2022) find that BNPL access raises total spending and the retail share of spending, while Hayashi and Routh (2025), drawing on a national household survey, find that BNPL users tend to be more financially vulnerable than non-users and that late BNPL payment is closely correlated with financial distress. Comparable designs are the benchmark against which the Southeast Asian evidence should be read.

2.3 Borrower Characteristics and Consumer Protection

The literature draws on two broad explanatory traditions. Behavioural finance emphasises self-control, impulsive buying, materialism, mental accounting, and present bias, which together predict that frictionless credit will be over-used by some consumers. Platform-mediated cues add to these pressures: among young Filipino social media users, parasocial trust in influencers independently predicted purchase intention (A. G. Atento & R. G. Atento, 2026). Financial-capability approaches emphasise financial literacy and money-management practice, implying that education can protect borrowers. Related Philippine work on financial decision-making shows that knowledge is only one input, with attitudes and salary emerging as the significant predictors of investment decisions even though capital-market knowledge was positively correlated with them (Lantin-Magana, Espelita, et al., 2026). Demographic characteristics, particularly age cohort, gender, income, and employment security, are examined as correlates or moderators within both traditions. Consumer protection, in turn, operates through licensing, pricing and fee limits, disclosure requirements, credit-limit and affordability rules, and the regulation of collection conduct. The review charts whether each report examines these characteristics and protection features, and whether any report evaluates the effect of a protection measure on borrower outcomes.

3. Methods

3.1 Review Design

The review follows the scoping-review framework of Arksey and O'Malley (2005), as refined by Levac et al. (2010), and is reported against the PRISMA extension for scoping reviews (PRISMA-ScR; Tricco et al., 2018). The

selection flow is presented in the PRISMA 2020 format (Page et al., 2021). Consistent with scoping methodology, a formal risk-of-bias assessment was not undertaken, because the aim is to map the extent and nature of the evidence rather than to estimate an effect. In its place, the review charts reporting-integrity concerns identified during full-text assessment, such as conflicting sample sizes or coefficients, so that readers can see where individual reports require caution. The research questions and screening criteria were specified in a written strategy document before the searches were run; the protocol was not registered in a public registry.

3.2 Research Questions

Four questions guided the review. The first (RQ1) asks what empirical evidence exists in Southeast Asia on the relationship between consumer or household digital credit and borrowers' repayment, debt burden, financial wellbeing, or debt-related stress, and from which countries, products, and designs it comes. The second (RQ2) asks which borrower characteristics, such as income, financial literacy, employment, psychological traits, gender, and age cohort, are examined as correlates or moderators of those outcomes. The third (RQ3) asks to what extent the evidence addresses consumer-protection features, including licensing, pricing limits, disclosure, credit limits, and collection conduct. The fourth (RQ4) asks which gaps in geography, measurement, and design limit what the evidence can currently support.

3.3 Information Sources and Search Strategy

The original searches were run through SciSpace's systematic-review workflow on 18 September 2026; the export files carry time stamps between 13:05 and 13:08 on that date. The workflow's query log records eighteen queries. On SciSpace, nine Deep Search queries (including repeated runs and reformulations covering impact, regulation and consumer protection, comparative product effects, and borrower characteristics) and two Library queries produced eleven exports, and two natural-language questions run through the Full Text search produced two more. On Google Scholar, two Boolean strings combined digital-credit product terms with outcome or borrower-characteristic terms and the names of Southeast Asian countries. Two PubMed queries appear in the log, but no PubMed records were exported, so PubMed contributed nothing to the record set. A final combine-and-rerank query produced the ranked file used for screening. Table 1 summarises the fifteen exports and Appendix A reports the exact queries. The pipeline's own feasibility report stated an end date of October 2024, which conflicts with both the export time stamps and the many 2025 and 2026 records retrieved; it is treated here as an error. No claim is made that Scopus or Web of Science were searched.

Because the earlier pipeline had capped its ranked output and its coverage was untested, a supplementary search was run on 19 September 2026 using Consensus, a semantic search engine for academic literature. Four queries targeted digital credit and household financial distress, BNPL and financial wellbeing, online lending and over-indebtedness, and mobile credit in the less-represented ASEAN economies, each restricted to 2010 to 2026 and limited to the top 20 results. Further queries failed at the service's rate limit and contributed no records. Targeted title and DOI searches during full-text retrieval located one additional primary report. The supplementary search was designed to test the completeness of the original record set, not to replicate it exhaustively. The review's operational date range is 2010 to 19 September 2026. No language restriction was applied at eligibility, and reports in English and Indonesian were assessed.

Table 1. Search sources and records

Search	Platform	Query focus	Exports	Records
O1	SciSpace Deep Search and Library	Impact of digital credit, app-based loans, and BNPL on wellbeing, distress, over-indebtedness, and repayment difficulty (DS1, DS4, L1)	3	342
O2	SciSpace Deep Search	Regulatory impacts, consumer protection, and behavioural determinants (DS2)	1	63
O3	SciSpace Deep Search	Comparative effects of digital lending formats (DS3)	1	3
O4	SciSpace Deep Search and Library	Borrower characteristics moderating digital credit and financial outcomes (DS5, DS8, DS9, L2)	4	264

Search	Platform	Query focus	Exports	Records
O5	SciSpace Deep Search	Borrower demographics and financial behaviour as moderators (DS6)	1	56
O6	SciSpace Deep Search	Regional regulatory and policy contexts as moderators (DS7)	1	32
O7	SciSpace Full Text	Impact question, Southeast Asia (FT1)	1	100
O8	SciSpace Full Text	Borrower-characteristics question, Southeast Asia (FT2)	1	100
O9	Google Scholar	Digital credit products AND distress or wellbeing outcomes AND Southeast Asian countries (GS1)	1	75
O10	Google Scholar	Digital credit products AND borrower characteristics or protection features AND Southeast Asian countries (GS2)	1	79
O11	PubMed	Two Boolean queries (PM1, PM2)	0	0
		Original total, 18 September 2026 (547 unique after removing 567 duplicates)	15	1,114
S1	Consensus	Digital credit and household financial distress, Southeast Asia (19 Oct 2026)	1	20
S2	Consensus	BNPL, financial wellbeing, repayment, and debt (19 Oct 2026)	1	20
S3	Consensus	Online lending, financial distress, and over-indebtedness (19 Oct 2026)	1	20
S4	Consensus	Mobile credit and financial resilience in less-represented ASEAN economies (19 Oct 2026)	1	20
S5	Targeted web/DOI discovery	Title search during full-text retrieval (19 Oct 2026)	—	1
		Supplementary total (57 new after removing 3 internal duplicates and 21 already in the original pool)		81

Note. Query codes refer to the SciSpace query log (DS Deep Search, L Library, FT Full Text, GS Google Scholar, PM PubMed). Exports were time-stamped 18 September 2026, 13:05–13:08. Exports from repeated or reformulated queries are grouped by query family because individual Deep Search and Library exports cannot be mapped one-to-one from file names. Consensus queries returned the top 20 results each; further queries failed at a service rate limit and contributed no records. Exact queries appear in Appendix A.

3.4 Record Reconstruction and Deduplication

The fifteen original exports contained 1,114 records. Six exports (734 records) were reconstructed record by record; deduplication used normalised exact matching on DOI or title after removing HTML markup and normalising Unicode, punctuation, and spacing, and left 547 unique records, which reconciles with the total reported by the original pipeline. The other nine exports, all from repeated or reformulated SciSpace queries, contained 380 records, every one of which duplicated a title already in the 547. In total, 567 duplicates were removed. The earlier pipeline had passed only a 500-record ranked file to screening; all 500 matched the reconstructed pool, and the remaining 47 records omitted by the ranking cap were restored and screened in this review. Of the 81 supplementary hits, three duplicated one another and 21 were already present among the 547 original records, leaving 57 new records. Record-level deduplication does not establish that reports derive from independent samples. One preprint was linked to its subsequently published journal version and counted once, with the published version preferred; several other reports share authors, most notably four BNPL studies from one author group. Their reported sample sizes differ, but the independence of their samples could not be confirmed, and the 32 included reports should therefore be read as up to 32 studies.

3.5 Eligibility Criteria

Table 2 sets out the eligibility criteria in population, concept, and context form. Eligible reports had to provide completed empirical evidence from one or more Southeast Asian countries, identify consumer or household use of digital credit, and report a financial outcome or borrower experience relevant to repayment, debt burden, financial wellbeing, or debt-related stress. Reports were not required to evaluate an intervention. Studies of adoption intention, platform trust, algorithmic credit scoring, broad fintech inclusion, or financial literacy alone were excluded unless they also reported an eligible outcome. Legal and policy articles were eligible only where they contained original borrower evidence; normative analysis alone was excluded. Literature reviews, studies based on simulated data, and proposals for studies not yet conducted were excluded from the primary evidence base.

Table 2. Eligibility criteria

Element	Included	Excluded
Population	Consumers, households, or individual borrowers in Southeast Asia; mixed household and microenterprise samples where borrower-level or household findings are identifiable	Studies outside Southeast Asia; multi-region studies without separable Southeast Asian findings; business-only lending
Concept: exposure	Consumer or household use of digital credit: BNPL or PayLater, online or P2P loans, app-based or mobile credit	Broad fintech or digital financial inclusion without a separately analysed credit exposure; payments or savings products only
Concept: outcome	Repayment, late payment, or debt management; debt burden or over-indebtedness (including risk proxies); subjective financial wellbeing or stress; debt-related psychological distress; borrower experiences of debt; household consumption	Adoption intention, platform trust, algorithmic credit-scoring accuracy, or financial literacy alone without an eligible financial outcome
Evidence type	Completed empirical studies: quantitative, qualitative, mixed-methods, or secondary-data analyses; legal or policy articles containing original borrower evidence	Literature reviews and other secondary evidence; normative or doctrinal analysis without original borrower evidence; simulated data; proposed or unfinished studies
Context and time	Published or posted 2010 to 19 September 2026; any language	None additional

Note. Mixed household and business samples were retained only where borrower-level or household findings could be identified.

3.6 Selection Process

Selection proceeded in two stages. In the original pipeline, the SciSpace platform's large-language-model-assisted screening ranked records against the review questions; 426 of the 500 ranked records were excluded at title and abstract, and 74 were advanced. These 426 exclusions were retained and were not independently re-screened, a limitation discussed in Section 6. The present review then audited every advanced record, every restored record, and every new supplementary record against the criteria in Table 2. Records that clearly failed the criteria on title, abstract, or bibliographic metadata were excluded at that stage; for the remainder, full text was sought through publisher websites, DOI resolution, and institutional repositories. Seventy-four full reports were obtained, 72 as PDF files and two as complete HTML articles.

Each decision was recorded with its primary reason, its basis (title and abstract, metadata, or full text), and, for full-text decisions, the page locations supporting it. Reports whose full text could not be verified, because of publisher access blocks, missing or unrelated files, or uncertainty about the identity of the target report, were classified as awaiting full text and were neither included nor excluded. The audit was conducted by a single reviewer with

generative AI assistance. The decision workbook provides columns for an independent second-reviewer decision, but these were not completed before submission.

3.7 Data Charting and Synthesis

For each included report the review charted the country, credit product, design, sample, primary outcome domain, borrower characteristics examined, consumer-protection content, and any reporting-integrity concern. The direction of reported associations was charted where it could be verified from the report's abstract or from the full-text decision record. Where a report's abstract and full text described different models or coefficients, or where tables and narrative disagreed, numerical findings were withheld from the synthesis and the discrepancy was recorded instead. Synthesis was descriptive and narrative. Reports were counted by country, year, product, design, and outcome domain, and the findings within each domain were summarised in prose. No effect sizes were pooled and no vote count of statistically significant results was used, because the exposures, outcome measures, and designs were too heterogeneous for either approach to be meaningful.

4. Results

4.1 Selection of Reports

Figure 1 shows the selection flow. In the original stream, 547 unique records were screened. Of these, 478 were excluded on title, abstract, or metadata: 426 by the original platform screen and 52 in the present audit, most often because the study was outside Southeast Asia (29 records). Full text was sought for 69 reports, of which 13 could not be verified. Of the 56 reports assessed in full, 39 were excluded, most commonly for an ineligible outcome (10) or an ineligible exposure or unit of analysis (12); one preprint was linked to its published version; and 16 were included. Two exclusions deserve mention because they illustrate the value of full-text assessment: one report presented an apparently large household finding that its methods section identified as simulated data, and another described a survey and interviews that had not yet been conducted. In the supplementary stream, 57 new records were screened, 34 were excluded, 23 were sought, five could not be verified, 18 were assessed, two were excluded, and 16 were included. The review therefore includes 32 reports, while 18 reports remain awaiting verified full text and are listed in the supplementary workbook.

The supplementary stream matters for the interpretation of the results. Half of the included reports were found only by the dated supplementary search, and the 21 supplementary records that were already in the original pool, against 57 that were not, indicate that the original searches captured part, but not all, of the relevant literature. Two eligible reports also came from the 47 records that the original ranking cap had omitted. The evidence base is therefore growing quickly, and any search of it is a snapshot.

4.2 Characteristics of the Included Reports

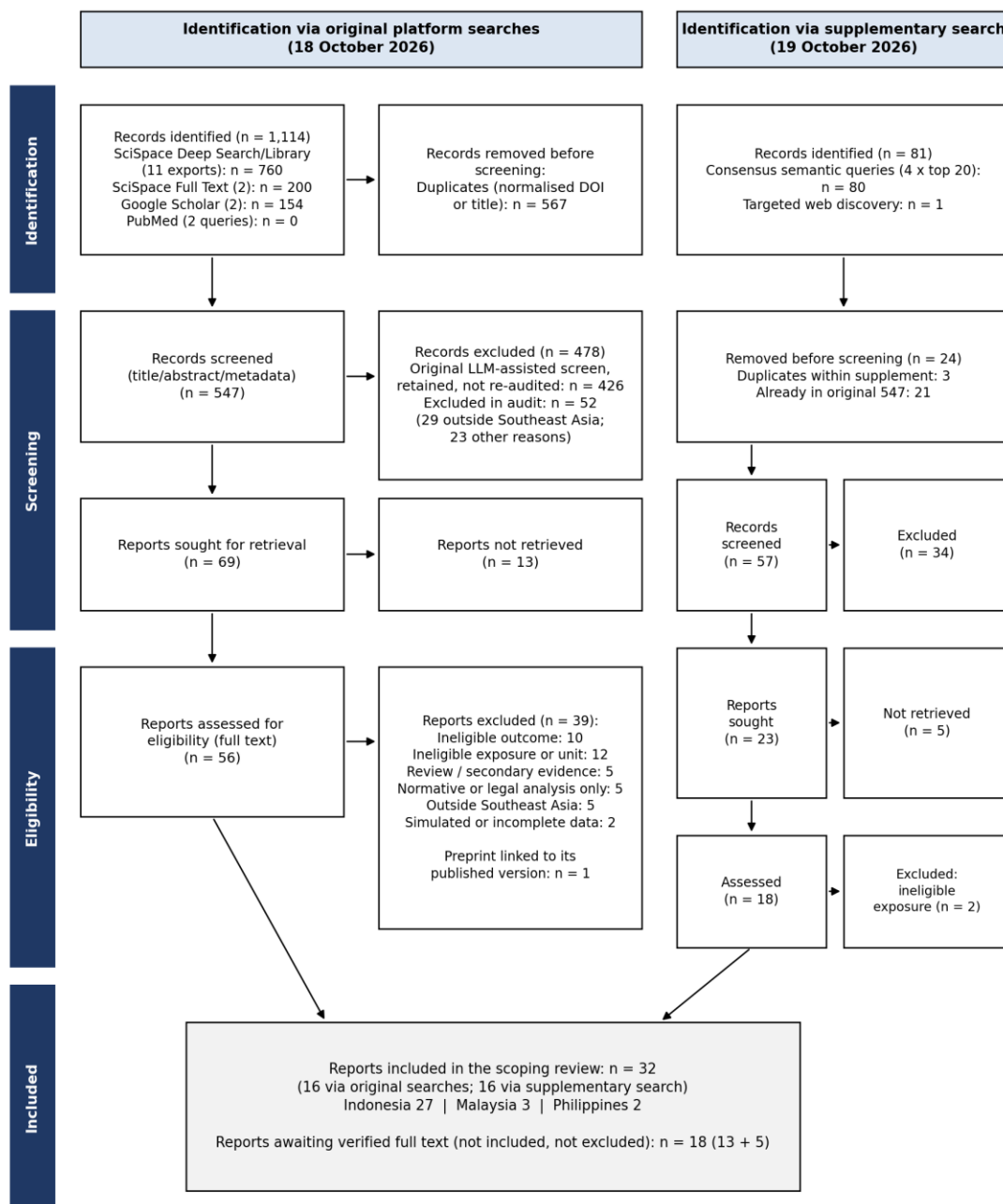
Table 3 lists the 32 included reports. The geographic concentration is pronounced: 27 reports come from Indonesia, three from Malaysia, and two from the Philippines. No eligible report from Vietnam, Thailand, Singapore, Cambodia, Laos, Myanmar, Brunei, or Timor-Leste was retrieved, although one Singapore report remains among those awaiting full text. The literature is also very recent. Of the 31 reports with a verified publication year, one appeared in 2023, three in 2024, twelve in 2025, and fifteen in 2026; one report lacked a verifiable year.

Fourteen reports concern BNPL or PayLater, thirteen concern online, P2P, or other app-based loans, and five address digital credit in general or more than one product. Twenty reports are cross-sectional surveys. Their samples range from 100 to 587 respondents with a median of 207, and most were drawn from a single city or from online convenience samples of product users. Partial least squares structural equation modelling was the technique most often identified among surveys whose analytical method was charted. Eight reports are qualitative or purposive-sample studies, two use mixed methods, and two analyse secondary household survey data. No included report uses

administrative repayment records or credit-bureau data, follows borrowers over time, or exploits a policy change, product roll-out, or other source of quasi-experimental variation.

Across outcome domains, ten reports address subjective financial wellbeing or stress, eight describe borrower experiences, seven address repayment or financial-management behaviour, six measure borrowing-risk proxies, and one examines household consumption. Generation Z and young adults are the most frequently targeted population: at least seven reports sample them specifically, while women workers, housewives, women street vendors, civil servants, teachers, university students, and village households appear in one or two reports each.

Figure 1. PRISMA 2020 flow diagram



Note. Counts are report-level. The 426 original title-and-abstract exclusions were retained without independent re-screening. Reports awaiting verified full text are listed with retrieval attempts in the supplementary workbook.

Table 3. Characteristics of the 32 included reports

Report	Ctry	Product	Design and sample	Dom.	Reported pattern
Agustin et al. (2025)	ID	BNPL	Survey; 327 Gen X and Millennial users	B	Mindfulness linked to less impulsive buying; impulsive buying linked to more BNPL use; financial wellbeing measured
Alwahidin et al. (2023)	ID	Online credit within digital finance	Secondary data; IFLS-5 (2014), 34,463 households	E	Higher consumption, concentrated in lower-asset, lower-literacy, lower-income households
Azzahra et al. (2026)	ID	BNPL	Qualitative (phenomenological); Gen Z users	D	Debt reframed and normalised; financial pressure and coping
Tan et al. (2026)	MY	BNPL	Survey; 150 university students	A	Numerical findings withheld (internal conflicts)
Chamidah et al. (2024)	ID	Online loans	Survey (chi-square); 191 respondents	B	No association between loan-use frequency and wellbeing
Chandra et al. (2026)	ID	PayLater	Survey (PLS-SEM); 150 students, Manado	B	Usage intensity strongest predictor of higher distress; literacy linked to lower distress
Chen (2025)	MY	BNPL	Mixed (400-consumer survey, focus groups) within legal-policy analysis	D	Borrower evidence on latent BNPL risks; direction not charted
Dewi et al. (2026)	ID	Digital credit (general)	Survey (PLS-SEM); 200 Gen Z users	C	Mental accounting linked to higher, management behaviour to lower debt-spiral risk
Esperanza et al (2025)	PH	Digital loans	Survey (descriptive-correlational); 100 wage earners, Cebu City	A	Budget restraint, repayment, informed borrowing modelled; direction not charted
Widarwati et al (2024)	ID	P2P loans	Survey; 132 current and former borrowers	A	Bill payment and money management; direction not charted
Gultom & Iqbal (2026)	ID	Online loans	Qualitative; housewives, Medan Amplas	D	Financial strain and family effects
Hafidz (2026)	ID	Online loans	Secondary data (Susenas 2022 claimed)	B	Family wellbeing analysis; data provenance unverified
Hesniati et al. (2025)	ID	BNPL	Survey; 401 users	C	Risky indebtedness, impulsivity, credit attitude linked to BNPL intention; gender differences
Hesniati et al. (2026)	ID	BNPL	Survey (PLS-SEM); 195 users	B	BNPL use and materialism linked to impulsive buying; impulsive buying linked to higher (short-term) wellbeing

Report	Ctr y	Product	Design and sample	Do m.	Reported pattern
Irsya & Faturohman (2024)	ID	BNPL	Survey; 400 users	B	Demographic differences in wellbeing; direction not charted
Kesuma et al. (2025)	ID	Fintech credit	Survey (PLS-SEM); 150 Gen Z, Malang	A	Digital literacy linked to credit behaviour, directly and via access and locus of control
Kurniawan et al. (2026)	ID	Online loans	Qualitative; village residents, Tebo	D	Household needs, repeated borrowing, dependence
Kusmalinda & Purwanto (2026)	ID	PayLater	Survey (PLS-SEM); 456 users, Jakarta	C	Impulsive buying linked to risky credit behaviour; no direct literacy link (abstract and full text conflict)
Majeed & Samorin (2025)	PH	BNPL	Survey (correlational); 214 Gen Z, Iloilo City	C	High perceived debt-accumulation risk; moderate late-fee and instability concern; differences by civil status and education
Marheni et al. (2026)	ID	BNPL	Survey; 473 consumers	B	Personality, BNPL use, financial and mental wellbeing; direction not charted
Marlina et al. (2025)	ID	Online loans and PayLater	Survey; 100 workers, Medan	B	Better financial behaviour linked to lower stress and loan susceptibility
Maulana et al. (2025)	ID	Online loans	Legal analysis with interviews; Aceh	D	Borrower account of interest, arrears, debt escalation
Muqsith et al. (2026)	ID	Online loans	Purposive; middle-class borrowers in difficulty, Bogor	B	Mental-health risks among borrowers in difficulty
Nurbayani et al. (2026)	ID	Online loans	Qualitative; women street vendors (N = 6 or 10)	D	Gendered debt cycle; household consequences
Podin et al. (2025)	MY	BNPL	Qualitative; 5 Millennial and Gen Z users	D	Normalisation, spending change, strain, anxiety, guilt
Purno & Azizurrohman (2026)	ID	BNPL	Survey; 587 users	A	Over-indebtedness drivers incl. repayment distress; direction not charted
Safari et al. (2026)	ID	Online loans	Mixed methods; 166 borrowers, Jakarta	B	Psychosocial impact and financial stress among borrowers
Tambunan et al. (2025)	ID	PayLater	Survey (PLS-SEM); 280 users, Bogor	A	Consumption model; late-payment descriptives reported
Triastuti et al. (2025)	ID	Online loans	Qualitative; families, Pontianak	D	Debt cycles, hardship, psychological and social strain
Wahyuni et al. (2026)	ID	Online loans	Survey; 378 female industrial workers, Batam	C	61.4% borrowed online in prior year; predatory-vulnerability model
Warokka et al. (2025)	ID	Fintech loans	Survey (PLS-SEM); 400 workers	C	Biases, emotion, culture, materialism raise propensity; literacy and job security amplify

Report	Ctry	Product	Design and sample	Dom.	Reported pattern
Zulkarnain & Selviana (2026)	ID	PayLater	Descriptive survey; 152 Gen Z employees, Sukabumi	A	Borrowing without repayment checks, late payment reported; gender differences (scale scores)

Note. Ctry: ID Indonesia, MY Malaysia, PH Philippines. Dom. (primary outcome domain): A repayment and financial-management behaviour; B subjective financial wellbeing and stress; C borrowing-risk proxies; D borrower experiences; E household consumption. "Direction not charted" means the outcome was measured but its direction could not be verified from the abstract or decision record. Reports without verified authors are cited by short title. Survey associations are cross-sectional and do not establish causal effects.

4.3 Repayment and Financial-Management Behaviour

Seven reports address how borrowers repay and manage digital debt, and every one relies on self-report. Among 280 PayLater users in Bogor, Tambunan et al. (2025) model consumptive behaviour as their main outcome, but their results also include descriptive statistics on late payment, which the review charts as repayment evidence separate from the consumption model. Kesuma et al. (2025) find, among 150 Generation Z fintech users in Malang, that digital financial literacy is associated with credit behaviour, measured to include borrowing and repayment practice, both directly and through digital financial access and internal locus of control. Purno and Azizurrohman (2026) examine behavioural drivers of BNPL over-indebtedness among 587 users and include repayment distress among their measures. Zulkarnain and Selviana (2026) describe risky PayLater credit behaviour among 152 employed members of Generation Z in Sukabumi. Respondents scored highest on responsiveness to large discounts and on borrowing without adequately considering repayment capacity, and they also reported late bill payment and limited attention to late-payment penalties. Women scored higher on risky borrowing and on disregard of penalties, while men scored slightly higher on delayed payment. These are descriptive scale scores out of 100 and should not be read as percentages of borrowers.

The two non-Indonesian reports in this domain show both the potential and the current weakness of the evidence. A descriptive-correlational study of 100 wage earners in Cebu City models budget restraint, repayment behaviour, and informed borrowing in relation to digital lending (Esperanza et al, 2025). A Malaysian study of 150 university BNPL users models debt management (Tan et al., 2026), but its tables, narrative claims of significance, and issue metadata conflict, and its numerical findings are withheld here. A study of 132 current and former P2P borrowers (Widarwati et al, 2024) examines bill payment and money management, although its sample mixes consumer and business borrowing purposes. Taken together, the domain establishes that repayment behaviour is being measured, but not yet how often digital borrowers fall into arrears or how their repayment compares with that of non-users or users of other credit.

4.4 Subjective Financial Wellbeing and Stress

Ten reports examine subjective wellbeing, financial stress, or debt-related psychological distress, and their findings are mixed. Marlina et al. (2025) find, among 100 urban workers in Medan who were predominantly teachers, that better financial behaviour is associated with lower financial stress and lower susceptibility to online loans; they also report that many respondents with stable incomes and university education did not keep budgets, record spending, or hold emergency funds. In contrast, Chamidah et al. (2024) find no association between the frequency of online-loan use and wellbeing among 191 Indonesian respondents, across age, education, and occupation groups. That null result comes from chi-square tests on categorical data in a sample that may include non-users, which limits what it can show, but it is a reminder that the direction of association is not settled.

Several BNPL studies place wellbeing at the end of a behavioural chain. Agustin et al. (2025) measure financial wellbeing among 327 Generation X and Millennial BNPL users and report that mindfulness is associated with less impulsive buying, that impulsive buying is associated with greater BNPL use, and that perceived risk moderates the link between mindfulness and planned use. Hesniati et al. (2026) find among 195 BNPL users that materialism and BNPL use are associated with more impulsive buying while digital financial literacy is not, and, unexpectedly, that impulsive buying is associated with higher financial wellbeing; the authors interpret this as short-term perceived satisfaction, which suggests their wellbeing measure captures momentary contentment rather than financial security. Irsya and Faturohman (2024) compare subjective financial wellbeing across demographic groups of 400 BNPL users,

and Marheni et al. (2026) relate personality traits and BNPL use to financial and mental wellbeing among 473 consumers. The clearest exposure-outcome association in the review comes from Chandra et al. (2026), who find among 150 management students using PayLater in Manado that PayLater usage intensity is the strongest predictor of financial distress ($\beta = 0.377$, $p < 0.001$), alongside a consumptive lifestyle ($\beta = 0.351$), while financial literacy is associated with lower distress ($\beta = -0.240$, $p = 0.046$) and financial self-control shows no significant association; the association is cross-sectional and the report's institutional and sample descriptions need reconciling. Hafidz (2026) reports an analysis of family financial wellbeing based on national household survey data whose variable construction and data provenance could not be verified.

Two reports focus on distress among online borrowers. Muqsith et al. (2026) examine mental-health risks among middle-class borrowers in Bogor who were selected because they had experienced borrowing or repayment difficulties, so their findings describe affected borrowers rather than the prevalence of distress among borrowers generally. Safari et al. (2026) use mixed methods with 166 borrowers in Jakarta to trace the psychosocial impact and financial stress of online loans; their quantitative and qualitative components need to be read separately, and the sample is location-specific.

4.5 Borrowing-Risk Proxies

Six reports measure the propensity or vulnerability to harmful borrowing rather than its realisation. Warokka et al. (2025) survey 400 Indonesian civil servants and private or self-employed workers and find that financial behaviour biases, emotions, culture, and materialism are each associated with a higher propensity to fintech indebtedness, with behavioural biases the strongest. Contrary to the usual expectation, financial literacy and job security strengthened rather than weakened these associations, while religiosity weakened the influence of emotions and materialism. Hesniati et al. (2025) find among 401 BNPL users that risky indebtedness behaviour, impulsive buying, and attitude toward credit are associated with BNPL intention, with impulsive buying weighing more heavily for men and risky indebtedness behaviour, operating through attitude, for women.

Wahyuni et al. (2026) survey 378 female industrial workers in Batam, of whom 61.4 percent reported taking an online loan in the previous year, and model vulnerability to predatory lending as a function of digital financial literacy, financial stress, self-efficacy, and peer influence. In the Philippines, Majeed and Samorin (2025) find among 214 Generation Z BNPL users in Iloilo City that perceived risk of debt accumulation was high while concern about late fees and perceived financial instability were moderate; perceived risks differed by civil status and educational attainment, with single respondents and high-school graduates reporting higher risk, and spending patterns were significantly related to perceived risk. Dewi et al. (2026) find among 200 Generation Z digital-credit users that mental accounting is associated with higher debt-spiral risk and that financial-management behaviour is associated with lower risk, acting as a direct protective factor rather than a moderator. Kusmalinda and Purwanto (2026) examine risky PayLater credit behaviour among 456 users in Jakarta. Their abstract and full text report different models: the abstract describes a moderation effect of self-control, while the tabulated results test mediation and find none. Both versions agree that impulsive buying is positively associated with risky credit behaviour, and the full-text results show no direct association between financial literacy and risky credit behaviour; other numerical results are withheld.

None of these measures is an observed outcome. A high score on a risky-indebtedness or predatory-vulnerability scale indicates self-reported disposition or perceived exposure. It may predict later difficulty, but no included report tests whether it does.

4.6 Borrower Experiences

Eight reports provide qualitative or legally embedded accounts of borrowing, and they converge on a small number of themes. The first is repeated borrowing. Families in Pontianak described becoming trapped in cycles of online debt that led to economic hardship, psychological instability, and strained social relationships (Triastuti et al., 2025). Village residents in Tebo Regency described household needs leading to repeated borrowing and dependence on online lenders (Kurniawan et al., 2026). A borrower interviewed in Aceh described interest, arrears, and escalating debt, in a study otherwise concerned with the supervision of conventional online lending under the province's Islamic financial institutions regulation (Maulana et al., 2025).

The second theme is the normalisation of debt. Five Malaysian BNPL users of the Millennial and Generation Z cohorts described BNPL as accessible and socially normal, reported changes in spending and in their perception of debt, and spoke of financial strain, anxiety, and guilt (Podin et al., 2025). Indonesian Generation Z consumers

described reframing BNPL obligations as something other than debt, alongside financial pressure and coping strategies (Azzahra et al., 2026). The third theme is the gendered and familial spread of strain. Housewives in Medan Amplas described financial strain and its effects on family life (Gultom & Iqbal, 2026), and women street vendors described a debt cycle in which business and household borrowing were intertwined, framed by the authors as predatory inclusion (Nurbayani et al., 2026); the latter report gives its sample as ten in the abstract and six in the methods. Chen (2025) embeds an original 400-consumer survey and BNPL focus groups in a legal-policy analysis of BNPL's latent risks in Malaysia, a design that makes it one of the few reports to combine borrower evidence with regulatory analysis.

These accounts are consistent with one another and with the mechanisms that behavioural theory predicts. Their samples, however, are small and purposive. They establish that the harms described occur; they do not establish how frequently they occur.

4.7 Household Consumption

One report examines consumption. Using the fifth wave of the Indonesian Family Life Survey, Alwahidin et al. (2023) find that digital financial inclusion is associated with higher household consumption, particularly among households with fewer assets, lower financial literacy, and lower incomes, and they analyse online credit separately from broader digital finance. The finding is consistent with digital credit supporting consumption among constrained households, but the survey data date from 2014, before the expansion of most of the products examined elsewhere in this review, and the report's variable provenance requires checking.

4.8 Borrower Characteristics and Consumer Protection

Financial literacy, including digital financial literacy, is the borrower characteristic examined most often, appearing in at least eight reports, and the evidence on its role is not uniform. In one report it is protective: Chandra et al. (2026) associate higher financial literacy with lower financial distress. In others it is not: Kusmalinda and Purwanto (2026) find no direct association between literacy and risky credit behaviour, Hesniati et al. (2026) find digital financial literacy unrelated to impulsive buying, and Marlina et al. (2025) document a gap between knowledge and practice among educated, salaried borrowers. Kesuma et al. (2025) associate digital financial literacy with credit behaviour, and Alwahidin et al. (2023) find the consumption association concentrated among lower-literacy households. Most strikingly, Warokka et al. (2025) find that higher financial literacy amplified rather than dampened the association between behavioural drivers and indebtedness propensity. Psychological traits, namely impulsive buying, materialism, self-control, mindfulness, mental accounting, and personality, form the second major cluster. Gender is examined directly in five reports, through comparisons of men and women (Hesniati et al., 2025; Zulkarnain & Selviana, 2026) and through samples of women workers, housewives, and women vendors. By contrast, financial-management behaviour, as distinct from knowledge, is associated with lower risk or stress in the two reports that measure it directly (Dewi et al., 2026; Marlina et al., 2025). Income, assets, and employment security appear less often, and none of the charted reports identified existing indebtedness as a measured moderator.

On consumer protection, the evidence is thin. Almost every report closes with a recommendation for financial education, stronger regulation, or both, but no included report evaluates whether any protection measure changes borrower outcomes. Two reports engage directly with the regulatory framework, one analysing BNPL risks in Malaysian law (Chen, 2025) and one examining online-lending supervision in Aceh (Maulana et al., 2025), and two frame borrower harm in terms of predatory lending (Nurbayani et al., 2026; Wahyuni et al., 2026). Interest-rate caps, disclosure rules, credit-limit and affordability requirements, and collection conduct, which were named in the original search strategy, are discussed in the literature but are not studied as exposures.

4.9 Reporting Integrity

Full-text assessment identified reporting concerns in a substantial minority of included reports, summarised in Table 4. The most serious are internal contradictions: in two reports the abstract and full text, or the tables and narrative, describe different models or significance results, and their numerical findings are withheld. Other concerns are conflicting sample sizes, unverifiable claims about secondary data sources, ambiguity over whether non-users were included in analyses of users, and incomplete bibliographic metadata. One included report lacked a verifiable publication year, and several lacked complete author or outlet information. Inclusion in this review is a relevance decision; it does not endorse the reliability of any individual report.

Table 4. Reporting-integrity concerns identified at full-text assessment

Report	Concern	Treatment in this review
Kusmalinda & Purwanto (2026)	Abstract reports a moderation model and coefficients absent from the full-text results, which test mediation	Directions agreed by both versions charted; other numbers withheld
Tan et al. (2026)	Tables, narrative significance claims, issue metadata, and template header conflict	Mapped; numerical findings withheld
Nurbayani et al. (2026)	Sample size given as 10 in the abstract and 6 in the methods and conclusion	Themes charted; N not stated as a single figure
Hafidz (2026)	Claimed analysis of 75,000 households from Susenas 2022; variable construction and access unverified	Mapped; no findings relied upon
Alwahidin et al. (2023)	Inconsistent country wording; variable provenance; data from 2014	Charted with timing caveat
Chamidah et al. (2024)	Possible inclusion of non-users in a user-wellbeing analysis; categorical tests only	Null finding reported with caveat
Chandra et al. (2026)	Institution and sample descriptions differ within the report	Findings charted with caveat
Hesniati et al. (2026)	Impulsive buying positively associated with wellbeing, suggesting the wellbeing measure captures short-term satisfaction	Charted with construct caveat
Zulkarnain & Selviana (2026)	Scale scores at risk of being read as percentages	Reported as scale scores
Chen (2025)	Publication date and volume metadata inconsistent	Year to be confirmed
Triastuti et al. (2025)	Interview sample size not established	N not inferred from quotations
Hafidz (2026)	No verifiable publication year in exported metadata	Cited as n.d. pending verification

Note. Inclusion is a relevance decision and does not endorse a report's reliability. Concerns are those recorded in the decision workbook; absence of a listed concern does not imply that a report is free of them.

5. Discussion

5.1 What the Evidence Can and Cannot Support

The evidence mapped here supports three statements with reasonable confidence. Digital consumer credit is associated, in the experience of at least some Southeast Asian borrowers, with repeated borrowing, financial strain, family conflict, and psychological distress; the qualitative reports are consistent on this point across settings and products. Researchers in the region are measuring borrowing risk, repayment practice, and wellbeing with increasing frequency. And the evidence comes overwhelmingly from Indonesia, from predominantly young and urban samples, and from the last two years.

The evidence does not support estimates of how common harm is among digital borrowers, nor claims that digital credit causes lower wellbeing or higher distress. The quantitative reports are cross-sectional associations among self-

selected users, and at least one report documenting acute distress recruited its participants because they were already in difficulty. Nor can the evidence say whether any protection measure works. Policy arguments that cite this literature as showing that BNPL or online loans cause over-indebtedness in Southeast Asia, or that financial literacy protects borrowers, claim more than it can bear.

5.2 Financial Literacy Is Not Yet a Proven Safeguard

Recommendations for financial education are nearly universal in the reports reviewed, yet the evidence that literacy reduces digital-credit harm is equivocal. One study associated literacy with lower financial distress, two found no association with risky credit behaviour or impulsive buying, and one well-specified study found that literacy strengthened the association between behavioural biases and indebtedness propensity. Another documented educated, salaried borrowers who did not apply basic money-management practice. Where financial-management behaviour was measured separately from knowledge, it was the more consistently protective of the two. A similar pattern appears outside the credit setting: among Filipino students, awareness of monetary policy predicted saving and investment behaviour but not spending (Espelita et al., 2025). Several explanations are possible. More literate borrowers may be more confident users of credit; literacy scales may capture knowledge rather than behaviour; or the constraints that drive borrowing, such as irregular income and household shocks, may lie beyond the reach of education. Such constraints are visible among platform workers in the Philippines; delivery riders in Batangas, for example, identified cost and financial concerns as their most prominent operational challenge (Hinagpis & Mendoza, 2026). The policy implication is not that literacy programmes are useless, but that they should not substitute for product-level and conduct-level protection until their effect on borrower outcomes has been tested.

5.3 ASEAN Is Not One Credit Market

The concentration of evidence in Indonesia limits regional inference. Southeast Asian economies differ in the maturity of their credit-reporting systems, the reach of formal banking, the structure of their e-commerce platforms, and the design of their digital-lending regulation. Income levels across the region remain heterogeneous despite evidence of catch-up growth (Balingit et al., 2026), and the conversion of digital access into active financial use differs markedly within Asia (A. G. Atento, R. G. O. Atento, et al., 2026). Even within the Philippines, differences in digital access correspond to measurable differences in financial inclusion among firms (R. G. O. Atento, Quinto, et al., 2026). Findings from Indonesian PayLater users cannot be assumed to hold for Filipino lending-app borrowers, Malaysian BNPL users under a different legal regime, or Vietnamese and Thai consumers for whom no eligible evidence was retrieved. The two Philippine reports, from Iloilo and Cebu, are a beginning, and the Philippine case deserves particular attention, since only two eligible reports were found for one of the region's largest consumer markets. Comparative work across at least two national regulatory regimes would add more to policy understanding than further single-city surveys within one country.

5.4 The Binding Constraint Is Data

The most consequential gap is measurement. No included report observes repayment directly, and none can follow a borrower from first use to later outcomes. Evidence from the United States shows what becomes possible with transaction data and nationally representative surveys: researchers can estimate how BNPL access changes spending (Di Maggio et al., 2022) and how late BNPL payment relates to broader financial distress (Hayashi & Routh, 2025). In Southeast Asia, the data that would permit comparable work largely sit with regulators, credit bureaus, and lenders. Philippine regulatory analysis has similarly identified supervisory data infrastructure as a priority in digital banking oversight (Geca et al., 2026), and regional work treats public data openness as an institutional policy instrument in its own right (R. G. O. Atento, Espelita, et al., 2026). Financial authorities could make anonymised, aggregated delinquency and complaint data available for research, require licensed digital lenders and BNPL providers to report standardised repayment indicators, and evaluate new rules, such as fee caps or affordability checks, with before-and-after designs at the time they are introduced. Until such data exist, the regional literature will continue to measure what borrowers say about their risk rather than what happens to their repayments.

5.5 A Note on AI-Assisted Reviews

The search and selection history of this review carries a methodological lesson. An automated ranking cap silently removed 47 records, two of which proved eligible. An earlier automated summary had counted a simulated-data exercise and a not-yet-conducted survey as completed evidence, and had treated a preprint and its published version as separate studies. Each error was caught only by checking decisions against full texts and recording the page

locations that supported them. Comparable verification overhead has been documented in professional practice, where AI outputs that lack traceability add a further validation step (Bendal et al., 2026), and conceptual work suggests that calibrated human-AI collaboration tends to outperform fully automated deployment where outputs carry accountability (Tolentino et al., 2026). AI-assisted platforms can make reviews of fast-moving literatures feasible, but their outputs should be treated as a first screen to be audited, and reviews that use them should report the audit as fully as the search.

6. Limitations

Several limitations bound the conclusions of this review. First, the search was not exhaustive. The original searches used two platforms with AI-assisted ranking whose settings are not fully documented, and the supplementary search was limited to the top 20 results of four queries on one engine, with further queries lost to a rate limit. Major bibliographic databases such as Scopus and Web of Science were not searched. Relevant reports, particularly in national-language outlets, are likely to have been missed, and the high yield of the supplementary search suggests the literature is growing faster than any single search can capture.

Second, the 426 title-and-abstract exclusions made by the original platform screen were retained without independent re-screening, so eligible reports may have been excluded at that stage. Third, screening and charting were conducted by a single reviewer with generative AI assistance, without independent duplicate assessment; decisions are fully documented in the supplementary workbook to allow verification. Fourth, 18 reports whose full text could not be verified were neither included nor excluded. Their topics, which include Philippine and Singaporean reports, overlap with the included evidence, and their eventual inclusion could alter the geographic picture.

Fifth, consistent with scoping methodology, no formal risk-of-bias appraisal was performed, and inclusion signals relevance rather than reliability. Sixth, the direction of reported associations was charted only where it could be verified from abstracts or from the full-text decision record, so for a number of quantitative reports the review records what was measured but not what was found. Seventh, publication metadata were incomplete for several reports, and the independence of samples across reports from the same author groups could not be confirmed. These limitations are inherent in a first mapping exercise on a young literature; they define the scope of the claims made here rather than invalidating them.

7. Conclusion and Recommendations

This review set out to map what is known about digital consumer credit and household financial outcomes in Southeast Asia. Thirty-two reports were identified, almost all from Indonesia and almost all published in the last two years. They show that BNPL and online loans are bound up, for some borrowers, with repeated borrowing, debt normalisation, family strain, and distress, and that researchers are beginning to measure repayment behaviour, wellbeing, and borrowing risk systematically. They do not yet show how common these harms are, whether digital credit causes them, or whether any protective measure reduces them.

Four recommendations follow. For researchers, the priority is to observe outcomes rather than dispositions: partnering with lenders or regulators to obtain repayment data, following borrowers over time, and exploiting regulatory changes as natural experiments. Studies should report whether non-users are included, keep risk-propensity scales distinct from realised arrears, and publish complete metadata. For regulators, the priority is data infrastructure: standardised reporting of delinquency and complaints by licensed providers, access arrangements for researchers, and built-in evaluation of new conduct rules. For policy design, financial-education initiatives should be paired with, rather than offered in place of, product-level protections such as fee limits, affordability checks, and collection standards, until education is shown to change borrower outcomes. And for the evidence base itself, comparative work beyond Indonesia, especially in the Philippines, Vietnam, and Thailand, is needed before regional conclusions can be drawn.

Digital credit in Southeast Asia has grown faster than the evidence on what it does to the households that use it. The task for the next phase of research is to close that gap with data that observe borrowers' financial lives directly, so that the region's regulatory choices can rest on measured outcomes rather than on assumption.

Declarations

Conflict of interest. The author is the founder and chief executive of SLSI Press, the publisher of *Asian Financial Economics and Policy*. Editorial handling of this manuscript, including reviewer selection and the final decision, was delegated to Dr. Peter Cwynzski, who has no reporting relationship to the author on this submission. The author declares no other conflicts of interest.

Use of AI tools. Searches and first-pass title-and-abstract screening in the original pipeline were performed with the large-language-model-assisted functions of SciSpace, and the supplementary search used Consensus. The eligibility audit, full-text decision records, and charting were prepared with generative AI assistance (ChatGPT, OpenAI), and the manuscript was drafted with generative AI assistance (Claude, Anthropic). The author directed these processes and is responsible for all decisions and content. AI tools are not listed as authors.

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Data availability. The fifteen original search exports (1,114 records), the SciSpace query log, and the original screening files are provided as a supplementary archive. The supplementary workbook reports the 734 records of the six exports reconstructed record by record, the 547-record deduplication crosswalk, the exact search log, supplementary discovery matches, and the decision record for all 178 audited reports, including reasons, decision basis, page locators, retrieval status, and the 18 reports awaiting full text. Retrieved article PDFs are not redistributed because of copyright.

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Appendix A. Exact Search Queries

Code	Exact query
DS1, DS4, L1, FT1	What is the impact of digital credit, app-based loans, mobile instant credit, and buy-now-pay-later services on household financial well-being, financial distress, over-indebtedness, and repayment difficulties [in Southeast Asian countries including Indonesia, Philippines, Vietnam, Thailand, Malaysia, Singapore, Myanmar, Cambodia, Laos, Brunei, and Timor-Leste?] (bracketed text in L1 and FT1 only)
DS2	regulatory impacts, consumer protection, and behavioral determinants of digital credit, app-based loans, mobile instant credit, and buy-now-pay-later on household debt dynamics, repayment behavior, financial distress, and over-indebtedness across different household types
DS3	comparative effects of digital lending formats (BNPL, app-based instant credit, mobile microloans) on household financial well-being, distress, and over-indebtedness across demographics and repayment behavior, including regulatory and consumer protection interventions

Code	Exact query
DS5, DS8, DS9, L2, FT2	[How do] borrower characteristics such as income level, financial literacy, employment status, and existing debt moderate the relationship between digital lending, mobile credit, fintech loans, and financial outcomes including consumption smoothing, emergency financing, debt stress, and multiple borrowing [among households in Southeast Asia?] (bracketed text in L2 and FT2 only)
DS6	how borrower demographics and financial behavior (e.g., income, financial literacy, credit history, employment stability, debt-to-income, savings behavior) moderate the impact of digital lending platforms and fintech credit on consumption smoothing, emergency financing, debt stress, repayment behavior, and incidences of multiple borrowing across different regions
DS7	regional regulatory and policy contexts moderating the influence of borrower traits (income, financial literacy, employment stability, debt) on digital lending and fintech credit outcomes (consumption smoothing, emergency financing, debt stress, repayment behavior, multiple borrowing) across diverse populations
GS1	("digital credit" OR "digital lending" OR "app-based loan" OR "mobile credit" OR "mobile instant credit" OR "buy now pay later" OR "BNPL" OR "fintech loan" OR "online lending") AND ("financial distress" OR "over-indebtedness" OR "financial well-being" OR "repayment difficulty" OR "debt stress" OR "multiple borrowing" OR "consumption smoothing" OR "financial resilience") AND (Indonesia OR Philippines OR Vietnam OR Thailand OR Malaysia OR Singapore OR Myanmar OR Cambodia OR Laos OR Brunei OR "Timor-Leste" OR "Southeast Asia" OR "South East Asia")
GS2	("digital credit" OR "mobile lending" OR "fintech credit" OR "digital loan" OR "cashless loan") AND ("borrower characteristics" OR "financial literacy" OR "income level" OR "employment status" OR "consumer protection" OR "interest rate cap" OR "credit limit" OR "disclosure requirement") AND (household OR consumer OR borrower) AND (Indonesia OR Philippines OR Vietnam OR Thailand OR Malaysia OR Singapore OR Myanmar OR Cambodia OR "Southeast Asia")
PM1	("digital credit"[Title/Abstract] OR "digital lending"[Title/Abstract] OR "mobile credit"[Title/Abstract] OR "fintech loan"[Title/Abstract] OR "buy now pay later"[Title/Abstract] OR "BNPL"[Title/Abstract]) AND ("financial distress"[Title/Abstract] OR "over-indebtedness"[Title/Abstract] OR "debt stress"[Title/Abstract] OR "financial well-being"[Title/Abstract] OR "financial resilience"[Title/Abstract]) AND (Indonesia[Title/Abstract] OR Philippines[Title/Abstract] OR Vietnam[Title/Abstract] OR Thailand[Title/Abstract] OR Malaysia[Title/Abstract] OR Singapore[Title/Abstract] OR Myanmar[Title/Abstract] OR Cambodia[Title/Abstract] OR "Southeast Asia"[Title/Abstract])
PM2	("digital credit"[Title/Abstract] OR "mobile lending"[Title/Abstract] OR "app-based loan"[Title/Abstract]) AND ("borrower characteristics"[Title/Abstract] OR "financial literacy"[Title/Abstract] OR "consumer protection"[Title/Abstract] OR "household debt"[Title/Abstract]) AND (Indonesia[Title/Abstract] OR Philippines[Title/Abstract] OR Vietnam[Title/Abstract] OR Thailand[Title/Abstract] OR Malaysia[Title/Abstract] OR "Southeast Asia"[Title/Abstract])
Rerank	digital credit app-based loans mobile instant credit buy-now-pay-later household financial distress over-indebtedness repayment difficulties borrower characteristics financial literacy consumer protection Southeast Asia Indonesia Philippines Vietnam Thailand Malaysia
S1 (Consensus)	"digital credit" household financial distress Southeast Asia Indonesia Philippines Malaysia Vietnam Thailand year:2010-2026
S2 (Consensus)	"buy now pay later" financial well-being repayment debt Indonesia Malaysia Philippines year:2010-2026

Code	Exact query
S3 (Consensus)	"online lending" financial distress over-indebtedness Philippines Indonesia Vietnam year:2010-2026
S4 (Consensus)	"mobile credit" household financial resilience Thailand Cambodia Laos Myanmar Singapore year:2010-2026
S5 (web)	"Digital Lending Efficacy on Debt Management of Wage Earners"

Note. Original queries are reproduced from the SciSpace query log, which records 18 queries run on 18 September 2026: nine Deep Search (DS), two Library (L), two Full Text (FT), two Google Scholar (GS), two PubMed (PM), and one combine-and-rerank query. DS1 and DS4, and DS5, DS8, and DS9, are repeated runs of identical text. PubMed queries returned no exported records.