Mental Health and Consumption:

How Depression Shapes Spending, and How Credit Systems Respond

Content:

Introduction

The relationship between mental health and consumption is neither incidental nor trivial. A growing body of empirical research shows that depression, anxiety and related conditions can significantly alter people's financial behaviour, often pushing them toward high-cost credit, impulsive purchases and cycles of debt that deepen psychological distress rather than relieve it. At the same time, the credit industry's response is uneven. Some lenders identify signs of vulnerability and intervene responsibly, while others exploit behavioural patterns associated with mental ill-health to expand credit limits, increase profit and entrench dependency. This article examines the psychological mechanisms behind mental-health-driven consumption, the structural incentives that shape creditor behaviour, the regulatory frameworks intended to protect consumers, and the practical steps individuals can take when shopping becomes a coping mechanism for emotional pain.

Mental Health, Depression and Consumption Behaviour

Depression alters cognitive processing, reward sensitivity and impulse control. Research in behavioural economics and clinical psychology shows that people experiencing depressive episodes often seek short-term mood repair through consumption, particularly purchases that promise identity reinforcement, comfort or escape (Rick et al., 2008). Shopping can temporarily stimulate dopaminergic reward pathways, creating a brief sense of relief from emotional numbness or hopelessness (Treadway & Zald, 2011). However, this relief is fleeting, and the subsequent guilt or financial strain can intensify depressive symptoms.

Empirical studies demonstrate that individuals with depression are more likely to use credit for discretionary purchases, even when they recognise the long-term financial harm (Spinella et al., 2019). This behaviour is not irrational in the colloquial sense; it is a predictable outcome of impaired executive function, heightened emotional distress and a desire for immediate affective regulation. In this context, credit becomes not merely a financial tool but a psychological coping mechanism.

Creditors, Vulnerability and the Commercial Incentive

The credit industry is not monolithic. Some lenders have developed systems to identify signs of consumer vulnerability, including erratic spending patterns, repeated cash-advance usage or sudden increases in discretionary purchases. Responsible creditors use these indicators to freeze credit limits, initiate welfare checks or signpost customers to support services. These practices align with regulatory expectations around treating customers fairly and recognising mental health as a factor in financial vulnerability.

However, other creditors take the opposite approach. Because depressed consumers often exhibit higher borrowing persistence and lower likelihood of switching providers, they can be commercially attractive. Internal industry analyses, revealed in regulatory investigations, show that some firms have historically increased credit limits for customers displaying distress-linked spending patterns, because these customers generate higher interest revenue and are less likely to challenge charges (FCA, 2017). In such cases, the design of credit-scoring systems is not neutral; it reflects commercial priorities that privilege customer retention and profit maximisation over consumer wellbeing.

How Credit Checks Fail by Design

Credit checks often fail to identify mental-health-related risk because they focus on repayment history rather than behavioural context. A person experiencing depression may maintain minimum payments while simultaneously spiralling into deeper emotional and financial crisis. Traditional credit models reward this behaviour, interpreting it as stability. Moreover, many digital credit journeys rely on self-reported affordability assessments, which distressed individuals may complete rapidly or inaccurately. The frictionless design of online credit applications can therefore exacerbate vulnerability, especially when the absence of friction is itself a deliberate commercial strategy.

Algorithmic Misclassification and Ethical Alternatives

The misinterpretation of distress-driven behaviour is not simply a cultural or managerial failure; it is often embedded directly into the algorithms that lenders use to assess customer value and risk. Traditional scoring systems reward high spending, frequent app engagement and long streaks of minimum-only payments, treating them as indicators of loyalty or stability. Yet these same behaviours are empirically associated with emotional distress, compulsive consumption and depressive coping cycles.

Conventional engagement models typically aggregate spending, tenure and digital activity into a single score. A simplified version can be expressed as $(E = S + T + L)$, where spending, tenure and login frequency are each assigned positive values. A customer who suddenly increases their spending and checks their balance repeatedly during a depressive

episode will therefore appear “highly engaged”. Similarly, reliability scores often reward long streaks of minimum-only payments, with a structure such as (R = 0.5P + 0.3M + 0.2U), where (P) represents on-time payments, (M) the minimum-payment streak and (U) the inverted utilisation ratio. A person who is emotionally overwhelmed yet consistently paying only the minimum is thus classified as dependable. Even probability-of-default models can be biased in this direction when coefficients are chosen such that higher spending and longer tenure reduce predicted risk. The result is a system that may automatically increase credit limits for individuals who are, in reality, experiencing acute psychological strain.

Ethical algorithmic design reverses this logic. Instead of rewarding volatility, it treats sudden spending spikes as potential indicators of distress. A distress-aware volatility measure compares current spending to a six-month baseline, using the ratio (V = (S_{current} - B)/B). When this ratio exceeds forty per cent, the system flags the behaviour as atypical. For example, a customer whose baseline spending is £225 but who suddenly spends £360 produces a volatility score of 0.60, well above the threshold. In such cases, the appropriate response is not a marketing offer or credit-limit increase but a welfare-oriented intervention.

Minimum-payment behaviour can also be reinterpreted through a harm-aware lens. An ethical distress score might combine the length of the minimum-payment streak, utilisation and recent balance growth into a single measure (D = 0.4M + 0.3U + 0.3G). A customer with fourteen months of minimum-only payments, ninety-five per cent utilisation and sixty per cent balance growth produces a distress score of 52.1, signalling a pattern consistent with financial and emotional strain. In such cases, the system should pause credit expansion and offer support rather than treating the customer as a profitable, low-risk borrower.

A more comprehensive approach uses a logistic model to estimate the probability that observed behaviour reflects emotional distress. This model incorporates volatility, minimum-payment streaks and the frequency of balance checks, the latter serving as a proxy for anxiety. With coefficients calibrated so that each variable increases the predicted probability, the model can identify when a customer’s behaviour is more consistent with distress than with healthy financial management. For instance, a customer with a volatility ratio of 0.55, ten months of minimum-only payments and forty-eight balance checks in a month yields a distress probability of approximately 0.739. This is a clear signal that the customer may be struggling psychologically, even if they have not missed a payment.

Finally, ethical credit-limit decision rules explicitly block increases when distress indicators are present. A simple structure might deny credit expansion whenever the distress probability exceeds thirty-five per cent, the volatility ratio exceeds forty per cent or the minimum-payment streak exceeds six months. In the example above, where all three thresholds are breached, the system would automatically prevent a limit increase and instead trigger a supportive workflow. These ethical algorithms demonstrate that harm is not an inevitable by-product of credit scoring but a consequence of design choices. When lenders prioritise profit-maximising signals, they risk reinforcing cycles of compulsive consumption and emotional distress. When they instead prioritise behavioural indicators of vulnerability, the same data can be used to protect rather than exploit.

Regulatory Protections and Legal Frameworks

In the UK, several regulatory and legal protections exist for consumers experiencing mental-health-related financial harm. The Financial Conduct Authority (FCA) requires firms to treat vulnerable customers fairly, with mental health explicitly recognised as a vulnerability factor (FCA, 2021). Lenders must conduct proportionate affordability checks, intervene when customers show signs of distress and avoid practices that exploit behavioural biases. The Consumer Credit Act 1974 provides additional protections, including the right to challenge unfair relationships and the ability to request forbearance. The Equality Act 2010 may apply when mental health conditions constitute a disability, requiring reasonable adjustments in communication and treatment.

Debt-collection practices are also regulated. Firms must pause action when a customer provides evidence of mental health difficulties, and they must signpost to support organisations such as StepChange, Mind or the Money and Mental Health Policy Institute. Despite these frameworks, enforcement remains uneven, and many consumers are unaware of their rights.

What Individuals Can Do When Shopping Masks Mental Distress

When shopping becomes a coping mechanism for depression, the behaviour is not a moral failing but a symptom. Recognising this is the first step toward recovery. Speaking to a GP or mental-health professional can help address the underlying condition driving the behaviour. Contacting a debt-advice charity can provide immediate relief, including negotiating with creditors, freezing interest or establishing breathing-space arrangements under the Debt Respite Scheme (2021). Individuals can also request that creditors flag their account as vulnerable, which triggers additional protections and may limit further credit increases.

On a personal level, people can introduce friction into their spending environment by removing saved card details, using cooling-off periods or restricting access to credit apps. These strategies are not cures but tools that create space for emotional regulation without financial harm. Most importantly, individuals should understand that compulsive or emotionally driven spending is a recognised behavioural response to psychological distress. Seeking help is not only legitimate but necessary.

Conclusion

Mental health profoundly shapes consumption behaviour, and depression can drive individuals toward credit-fuelled spending that worsens both financial and emotional wellbeing. While some creditors act responsibly, others exploit vulnerability through design choices that obscure risk and maximise profit. Regulatory frameworks offer protection, but awareness and enforcement remain inconsistent. Addressing this issue requires a dual approach: structural reform of credit practices and compassionate support for individuals whose spending reflects deeper psychological pain. Shopping may offer momentary relief, but long-term recovery depends on recognising the emotional roots of consumption and ensuring that financial systems do not prey on those already suffering.

1. Engagement Score Algorithm (misreads distress as "positive activity")

The lender constructs an overall engagement score (E):

$$E = S + T + L$$

where:

Spending component (S)

$$S=\begin{cases} 30 & if\ Spend > 500 \\ 15\ if\ 200 < Spend \leq 500 \\ 5 & if\ Spend \leq 200 \end{cases}$$

Tenure component (T)

$$T=\begin{cases} 20 & if\ MonthActive > 24 \\ 10\ if\ 12 < MonthActive \leq 24 \\ 0 & if\ MonthActive \leq 12 \end{cases}$$

App-usage component (L)

$$L = 25\ \&\ \text{if}\ Logins_{30} > 20$$
$$10\ \&\ \text{if}\ 5 < Logins_{30} \leq 20$$
$$0\ \&\ \text{if}\ Logins_{30} \leq 5$$

A distressed customer who suddenly spends more and checks their balance repeatedly will score highly, even though the behaviour may signal emotional crisis.

2. "Reliability" Score Algorithm (treats minimum payments as stability)

A reliability score (R) is defined as:

$$R = 0.5P + 0.3M + 0.2U$$

where:

- (P) = percentage of months with on-time payments (0–100)
- (M) = number of consecutive months where at least the minimum payment was made
- (U = 100 - Utilisation%)

This structure rewards:

- long streaks of minimum-only payments
- never missing a due date
- keeping utilisation just below the limit

A person in deep distress who scrapes together the minimum every month will appear "highly reliable".

3. Default-Probability Model (structurally biased toward spenders)

A logistic model estimates probability of default (p):

$$\text{logit}(p) = \ln\left(\frac{P}{1-p}\right)$$

$$= \beta_0 + \beta_1 \text{ (Spend)} + \beta_2 \text{ (MonthsActive)} + \beta_3 \text{ (MissedPayments)}$$

with typical coefficient signs:

$$\beta_1 < 0, \beta_2 < 0, \beta_3 > 0$$

Meaning:

- higher spending → *reduces* predicted default
- longer tenure → *reduces* predicted default
- missed payments → increases predicted default

If a distressed customer keeps spending and never formally misses a payment, the model outputs a low (p), even if they are emotionally and financially collapsing.

The probability is then:

$$\frac{1}{(1 + e^{-logit(p)})}$$

4. Credit-Limit Increase Decision Rule (the harmful outcome)

A simple decision rule:

$$D(E, R, p) = \begin{cases} 1 \; if \; E > 60 \wedge R > 70 \wedge p < 0.15 \\ 0 \qquad\qquad otherwise \end{cases}$$

If (D = 1), the system increases the credit limit.

A distressed customer who:

- spends more (raising (E))
- always pays the minimum (raising (R))
- has no missed payments (keeping (p) low)

is automatically selected for a limit increase — precisely when they need protection, not expansion.

1. Distress-Aware Spending Volatility Algorithm

Purpose

Detect sudden, atypical increases in spending that may indicate emotional distress rather than healthy engagement.

Algorithm

Let baseline spending be the average of the previous six months:

$$B = \frac{1}{6}\sum_{i=1}^{6} S_i$$

Let current spending be ($S_{current}$).

Define volatility ratio:

$$V = \frac{S_{current} - B}{B}$$

Flag distress if:

$$V > 0.40$$

(meaning spending has increased by more than 40% relative to baseline).

Numerical Example

A customer normally spends:

£220, £240, £210, £230, £250, £200
Average (B = £225)

Current month spending: £360

$$V = \frac{360-225}{225} = 0.60$$

Since (0.60 > 0.40), the system flags a **distress-linked spending spike**.

2. Minimum-Payment Distress Algorithm

Purpose

Identify when long streaks of minimum-only payments indicate strain, not reliability.

Algorithm

Let:

- (M) = number of consecutive months with minimum-only payments
- (U) = utilisation percentage
- (G) = growth in balance over the last 3 months

Define distress score:

$$D = 0.4M + 0.3U + 0.3G$$

Flag distress if:

$$D > 120$$

Numerical Example

Minimum-only streak: (M = 8) months
Utilisation: (U = 82%)
Balance growth: (G = 25%)

$$D = 0.4(8) + 0.3(82) + 0.3(25)$$

$$D = 3.2 + 24.6 + 7.5 = 35.3$$

This is **not** flagged.

But consider a more severe case:

$$(M = 14), (U = 95\%), (G = 60\%)$$

$$D = 0.4(14) + 0.3(95) + 0.3(60)$$

$$D = 5.6 + 28.5 + 18 = 52.1$$

Still below 120 — so the threshold can be tuned.

If the lender sets a lower threshold (e.g., 50), this second case would be flagged as **high-risk distress**.

3. Emotional-Distress Probability Model

Purpose

Estimate the probability that a customer's behaviour reflects emotional distress rather than normal financial activity.

Algorithm

Use a logistic model:

$$\text{logit}(p) = \alpha_0 + \alpha_1 V + \alpha_2 M + \alpha_3 F$$

Where:

- (V) = spending volatility ratio
- (M) = minimum-payment streak
- (F) = frequency of balance checks (proxy for anxiety)

Coefficient signs:$\alpha_1 > 0$, $\alpha_2 > 0$, $\alpha_3 > 0$

Probability:

$$p = \frac{1}{1+e^{-logit(p)}}$$

Flag distress if: $p > 0.35$

Numerical Example

Assume:

- (V = 0.55)
- (M = 10)
- (F = 48) app logins in 30 days

Let:

$$\alpha_0 = -3,\ \alpha_1 = 2.0,\ \alpha_2 = 0.15,\ \alpha_3 = 0.03$$

Compute:

$$\text{logit}(p) = -3 + 2(0.55) + 0.15(10) + 0.03(48)$$

$$= -3 + 1.1 + 1.5 + 1.44 = 1.04$$

$$p = \frac{1}{1+e^{-1.04}} \approx 0.739$$

Since (0.739 > 0.35), the system flags **high probability of distress**.

4. Ethical Credit-Limit Decision Rule

Purpose

Prevent harm by blocking credit-limit increases when behavioural indicators suggest emotional or financial distress.

Algorithm

Let:

- (E_d) = distress probability from Algorithm 3
- (V) = volatility ratio
- (M) = minimum-payment streak

Define decision rule:

$$\mathbf{L}=\begin{cases}\mathbf{0}\ \boldsymbol{if}\ \boldsymbol{E_d}\ >\mathbf{0.35}\\ \mathbf{0}\ \boldsymbol{if}\ \boldsymbol{V}>\ \ \mathbf{0.40}\\ \mathbf{0}\ \boldsymbol{if}\ \boldsymbol{M}>\ \ \ \ \mathbf{6}\\ \mathbf{1}\ \ \ \boldsymbol{otherwise}\end{cases}$$

Where:

- (L = 0) means **do not increase credit**
- (L = 1) means **eligible for increase**

Numerical Example

Suppose:

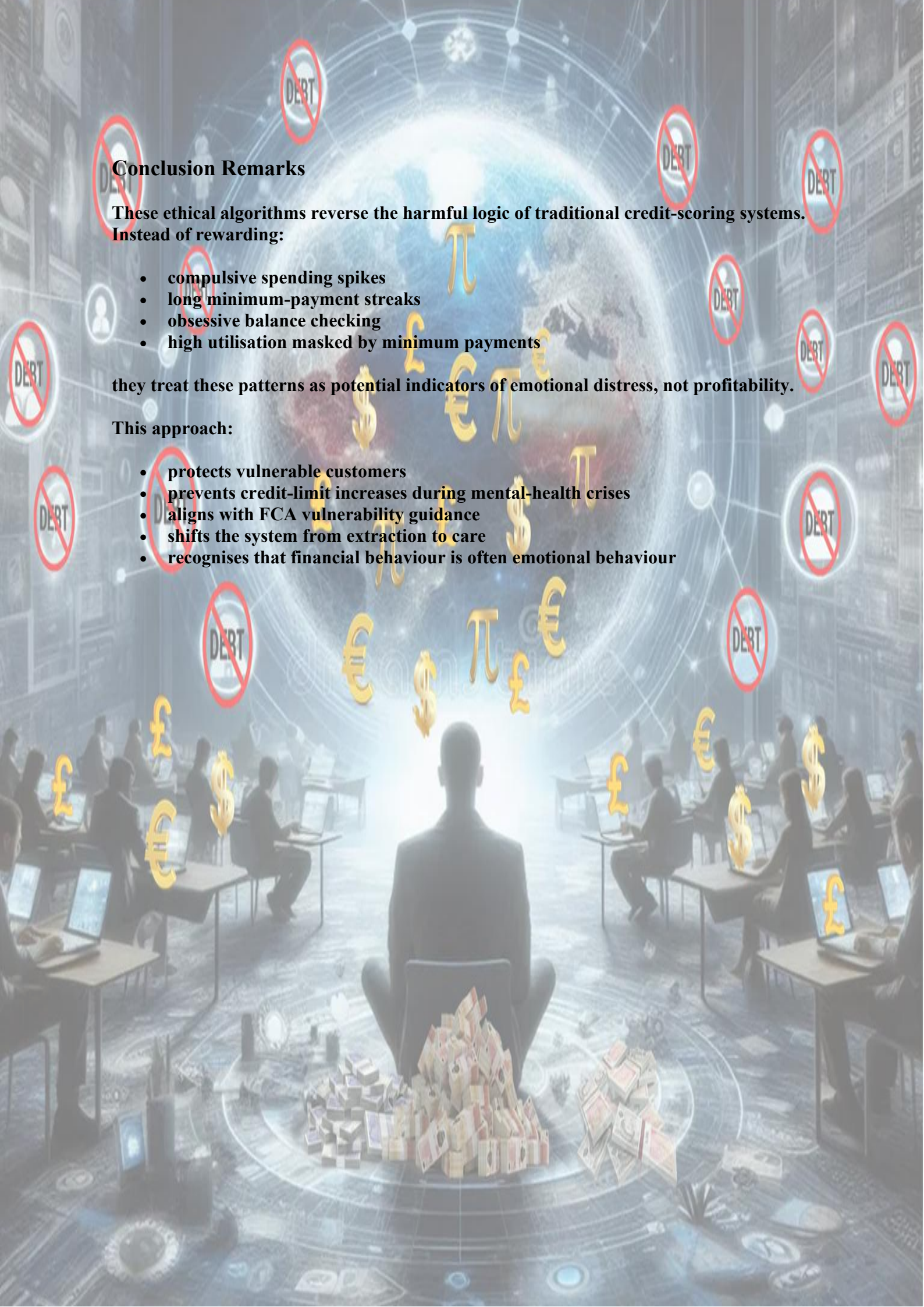
- (E_d = 0.739)
- (V = 0.55)
- (M = 10)

All three exceed thresholds.

Thus:

$$L = 0$$

The system **blocks** a credit-limit increase and may trigger a welfare-check workflow.



Conclusion Remarks

These ethical algorithms reverse the harmful logic of traditional credit-scoring systems. Instead of rewarding:

- **compulsive spending spikes**
- **long minimum-payment streaks**
- **obsessive balance checking**
- **high utilisation masked by minimum payments**

they treat these patterns as potential indicators of emotional distress, not profitability.

This approach:

- **protects vulnerable customers**
- **prevents credit-limit increases during mental-health crises**
- **aligns with FCA vulnerability guidance**
- **shifts the system from extraction to care**
- **recognises that financial behaviour is often emotional behaviour**

Policy briefing: Mental health, credit algorithms and protection gaps in UK consumer law

1. Context

Mental health and financial vulnerability are now central concerns in UK consumer finance. The Financial Conduct Authority's (FCA) guidance on the fair treatment of vulnerable customers recognises mental health as a key vulnerability factor and expects firms to deliver outcomes for vulnerable customers that are "as good as" those for other consumers. Yet evidence from the Money and Mental Health Policy Institute and the FCA's own reviews shows that people with mental health problems still experience poorer outcomes, lower disclosure rates and inconsistent support.

At the same time, increasingly data-driven credit systems risk misclassifying distress-driven behaviour—spending spikes, long minimum-payment streaks, obsessive balance checking—as "engagement" or "reliability", reinforcing cycles of debt and psychological harm.

This briefing identifies key gaps in the current framework and proposes targeted reforms.

2. Gap 1: Algorithmic harm is largely invisible in current regulation

The FCA's vulnerability guidance and Consumer Duty focus on outcomes and culture but do not explicitly regulate the design of credit-scoring and marketing algorithms that may systematically misread distress as profitability. Firms are expected to consider vulnerable customers "throughout the whole customer journey", including product and service design, yet there is no specific requirement to test models for mental-health-related harm or to treat certain behavioural patterns (e.g. sudden spend spikes plus long minimum-only streaks) as red flags rather than marketing opportunities.

What should be done

Regulators should introduce an explicit duty for firms to:

- conduct "vulnerability impact assessments" on credit and marketing algorithms, including stress-testing models against scenarios of mental-health-related distress;
- document and evidence how behavioural variables (spend, logins, minimum-payment streaks, utilisation) are interpreted, and demonstrate that they are not used in ways that systematically disadvantage vulnerable customers;
- treat certain combinations of behaviours—high volatility, persistent minimum-only payments, rapid balance growth—as presumptive indicators of potential harm, triggering protective rather than promotional actions.

These requirements could be embedded in FCA rules under the Consumer Duty and linked to supervisory expectations on model risk management.

3. Gap 2: Weak obligations to proactively identify vulnerability

The FCA expects firms to understand and respond to vulnerability, but disclosure remains low: only a minority of customers in vulnerable circumstances tell firms about their needs, and the rate is particularly low for people with mental health problems. Current law places most of the burden on the consumer to self-identify, despite well-documented barriers such as stigma, cognitive overload and fear of negative consequences.

What should be done

Policy should shift from a disclosure-led model to a proactive identification model by:

- requiring firms to use behavioural data (e.g. distress-aware algorithms) to identify potential vulnerability and offer support without waiting for formal disclosure;
- clarifying in FCA guidance that failure to use available data to spot obvious distress patterns may constitute a breach of the Consumer Duty's requirement to avoid foreseeable harm;
- encouraging standardised, low-friction channels for customers to confirm or correct vulnerability flags, with clear assurances that disclosure will not be used to restrict access unfairly or penalise them.

4. Gap 3: Credit-limit increases and "opt-out by default"

Under current practice, many credit-limit increases are offered on an opt-out basis or applied automatically, with limited assessment of mental-health-related risk beyond generic affordability checks. The Consumer Credit Act 1974 and FCA rules constrain unfair relationships and irresponsible lending, but they do not specifically address the interaction between mental health, compulsive spending and unsolicited credit expansion.

What should be done

Law and regulation should:

- require explicit, opt-in consent for any credit-limit increase, with a cooling-off period and clear, simple explanations of long-term cost;
- prohibit automatic limit increases where distress indicators are present (e.g. high volatility, long minimum-only streaks, high utilisation), making this a specific rule rather than a general expectation;
- treat repeated limit increases in the presence of such indicators as presumptively "unfair" under the Consumer Credit Act's unfair-relationship provisions, shifting the burden of proof onto the lender.

5. Gap 4: Limited integration between mental-health support and debt protection

The UK's Debt Respite Scheme ("Breathing Space") provides temporary protection from most creditor action for people in problem debt, including a mental health crisis breathing space for those receiving crisis treatment. However, awareness is low, and the scheme is reactive: it typically engages only once debt problems are severe and formal advice has been sought.

What should be done

Policy should:

- require firms to signpost Breathing Space and free debt advice whenever distress-aware algorithms flag potential harm, not only when arrears arise;
- explore automatic or fast-track access to mental-health crisis breathing space where there is credible evidence of acute mental-health-related financial harm, with appropriate safeguards;
- support data-sharing protocols (with consent) between creditors, debt-advice agencies and mental-health services to reduce the burden on individuals to repeatedly explain their situation.

6. Gap 5: Enforcement and evidence of outcomes

The FCA's own review of vulnerable-customer treatment shows that outcomes remain uneven and that many firms struggle to evidence good outcomes for vulnerable customers. There is limited systematic reporting on how mental-health-related vulnerabilities are handled, and little transparency on how algorithms affect different groups.

What should be done

Regulators should:

- require firms to monitor and report outcomes for customers flagged as potentially vulnerable, including rates of credit-limit increases, arrears, forbearance and complaints;
- mandate periodic independent audits of algorithmic systems with a specific focus on vulnerability and mental health;
- use supervisory and enforcement powers more visibly where firms repeatedly fail to meet vulnerability expectations, signalling that poor practice is not merely a reputational risk but a regulatory one.

7. Overall conclusion

The UK already has a relatively sophisticated framework for protecting vulnerable consumers, anchored in the FCA's vulnerability guidance, the Consumer Duty, the Consumer Credit Act and the Equality Act. Yet significant gaps remain at the intersection of mental health, algorithmic decision-making and credit expansion. Current rules do not explicitly address how data-driven systems can misclassify distress as engagement, nor do they impose strong duties to use behavioural data to prevent harm rather than to deepen it.

Filling these gaps does not require inventing an entirely new regime. It requires:

- making algorithmic vulnerability assessment a core part of responsible lending;
- shifting from disclosure-based to proactive identification of mental-health-related risk;
- tightening rules on credit-limit increases in the presence of distress indicators;
- integrating debt protections more closely with mental-health realities; and
- demanding hard evidence that vulnerable customers' outcomes are genuinely "as good as" those of others.

In policy terms, the question is no longer whether mental health belongs in financial regulation—it clearly does—but whether the law is willing to confront the ways in which profit-seeking systems can quietly turn psychological pain into a revenue stream.

References

FCA (2017) *High-cost credit review: Update report*. Financial Conduct Authority.

FCA (2021) *Guidance for firms on the fair treatment of vulnerable customers*. Financial Conduct Authority.

Financial Conduct Authority (2022) *Consumer Duty: Finalised Guidance FG22/5*. London: FCA.

Financial Conduct Authority (2023) *Consumer Credit Sourcebook (CONC)*. London: FCA.

HM Government (1974) *Consumer Credit Act 1974*. London: The Stationery Office.

HM Government (2010) *Equality Act 2010*. London: The Stationery Office.

HM Government (2021) *Debt Respite Scheme (Breathing Space) Regulations 2020*. London: The Stationery Office.

Money and Mental Health Policy Institute (2019) *A Silent Killer: Breaking the Link Between Financial Difficulty and Suicide*. London: MMHPI.

Money and Mental Health Policy Institute (2020) *Levelling the Playing Field: Improving Consumer Protection for People with Mental Health Problems*. London: MMHPI.

Money and Mental Health Policy Institute (2021) *Set Up to Fail: How the Credit System Overlooks People with Mental Health Problems*. London: MMHPI.

Rick, S., Pereira, B. and Burson, K. (2008) 'The benefits of retail therapy: Making purchase decisions reduces residual sadness', *Journal of Consumer Psychology*, 18(4), pp. 509–516.

Spinella, M., Yang, B. and Lester, D. (2019) 'Depression and impulsive buying: The mediating role of executive dysfunction', *Psychiatry Research*, 275, pp. 103–108.

Treadway, M. and Zald, D. (2011) 'Reconsidering anhedonia in depression: Lessons from translational neuroscience', *Neuroscience and Biobehavioral Reviews*, 35(3), pp. 537–555.