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Shrinking Middle: Assessing financial vulnerability among Malaysia's M40 households

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Abstract
Malaysia's M40 group, traditionally viewed as economically stable, is increasingly vulnerable to financial pressures due to rising living costs, high household debt, and stagnant real wage growth. This paper examines the structural, behavioural, and policy-related determinants of M40 financial fragility by integrating household finance theory, behavioural economics, and the financial resilience framework. A conceptual model is proposed linking economic pressure, financial behaviour, resilience, and policy support. The findings highlight the growing risk of downward mobility among M40 households and emphasise the need for targeted social protection, behaviour-oriented financial literacy, and stronger institutional reforms to protect Malaysia's shrinking middle class.

Keywords: Financial vulnerability, M40 households, middle-income trap, financial resilience

1.0 Introduction

Malaysia's middle-income households, commonly categorised as the M40, constitute approximately 40 per cent of households and represent a crucial stabilising force for domestic demand and economic resilience. Historically, this group has embodied upward mobility, consumption strength, and sustained tax contributions. However, evidence suggests that the M40 are increasingly exposed to structural and behavioural pressures that elevate financial fragility. Rising cost-of-living burdens, stagnant real wage growth, and expanding household debt have weakened financial buffers and heightened vulnerability to economic shocks (BNM, 2024c).

Although Malaysia has recorded positive economic growth, structural disparities have limited the extent to which middle-income households' benefit. Recent national statistics provide clear evidence that financial vulnerability among Malaysia's M40 households is on the rise. Bank Negara Malaysia (BNM) reports that Malaysia's household debt-to-GDP ratio remained above 80 per cent in 2023, one of the highest levels in Asia, with middle-income households accounting for the largest share of debt servicing commitments, particularly mortgages and vehicle financing (BNM, 2024b).

Further, data from the Department of Statistics Malaysia (DOSM, 2023) indicates that real median income has grown slowly relative to inflation, especially in essential categories such as food, transportation, housing, healthcare, and education. Urban households, where a significant majority of the M40 reside, face compounded pressure due to higher price premiums and constraints in the urban housing market (Son & Ismail, 2024).

Household debt remains a central factor in M40 vulnerability. Malaysia continues to record one of the highest household debt-to-GDP ratios in Asia, driven primarily by mortgages and vehicle financing (BNM, 2024b). The increasingly common use of credit cards, instalment schemes, and personal loans reflects a shift from asset-oriented debt to consumption smoothing and coping strategies. Research shows that reliance on short-term credit increases fragility by reducing liquidity and creating persistent repayment burdens (OECD, 2020).

Behavioural dynamics aggravate these structural challenges. Middle-class households face intense lifestyle inflation pressures, aspirational spending norms, and social comparison mechanisms that drive expenditure beyond sustainable limits (Frank, 2013). Behavioural economics demonstrates that cognitive biases such as present bias, overconfidence, and anchoring frequently override rational decision-making, leading individuals to under-save and over-borrow despite adequate financial knowledge (Kahneman, 2011; Thaler & Sunstein, 2009). These tendencies are further amplified by digital consumerism and frictionless payment technologies.

Compounding these stressors is a structural gap in Malaysia's social protection framework. Existing welfare initiatives are predominantly targeted at the B40, while wealth-building mechanisms largely favour the T20. The M40, although a substantial contributor to the national tax base, receives comparatively limited direct assistance or protection against rising costs (World Bank, 2023). This leaves many M40 households neither poor enough to qualify for aid nor affluent enough to withstand financial shocks independently.

Collectively, these factors reveal a middle class operating under increasing economic strain and behavioural vulnerability. Accordingly, the central aim of this study is to develop an integrated conceptual framework that explains financial vulnerability among Malaysia's M40 households by linking economic pressure, financial behaviour, financial resilience, and policy support. By synthesising insights from household finance theory, behavioural economics, and the financial resilience framework, this study seeks to clarify the mechanisms that place middle-income households at risk of financial fragility despite relatively stable income levels.

2.0 Literature Review

Despite an expanding body of research on financial vulnerability, existing Malaysian studies predominantly focus on low-income (B40) households or examine isolated dimensions such as household debt, cost of living, or financial literacy. There remains a notable gap in integrative frameworks that explain how structural pressures, behavioural dynamics, and institutional factors interact to shape financial vulnerability among middle-income households. As a result, the M40 group is frequently treated as financially stable by default, despite growing empirical evidence to the contrary. This study addresses this gap by offering a multi-theoretical, policy-relevant conceptual framework tailored specifically to the financial realities of Malaysia's M40 households.

Recent household finance research has increasingly shifted from income-based risk assessments toward multidimensional vulnerability frameworks that incorporate debt sustainability, behavioural biases, and resilience capacity (OECD, 2020; World Bank, 2023). Post-2019 studies emphasise that middle-income households are particularly exposed to cost-of-living shocks and debt servicing stress, even when employment remains stable. These developments inform the present study's integrated framework and ensure alignment with contemporary theoretical advances.

2.1 Conceptualising Financial Vulnerability

Financial vulnerability refers to a household's limited ability to absorb and recover from financial disturbances. Lusardi et al. (2011) define financially fragile households as those that cannot raise a modest emergency sum, even when income levels are not categorically low. Financial vulnerability encompasses both objective dimensions, such as income volatility, debt levels, and liquidity constraints, and subjective dimensions, such as financial stress and insecurity (OECD, 2020).

Financial vulnerability can be conceptualised through the interaction of exposure, sensitivity, and resilience (Oyadeyi et al., 2024). Exposure refers to the likelihood of encountering financial stressors, sensitivity denotes the severity of impact, and resilience reflects the capacity to cope. Middle-income households often exhibit hidden vulnerability because income alone does not guarantee financial stability.

2.2 Rising Cost of Living

The cost of living has risen consistently across Malaysia, driven by structural shifts in food prices, real estate, transportation, and private sector service costs. Housing affordability is a critical concern, with price-to-income ratios exceeding internationally accepted affordability thresholds (BNM, 2024b). Urban households spend disproportionately more on rent or mortgage payments, thereby displacing savings and investment capacity (Khazanah Research Institute, 2022).

Additional pressures arise from childcare and private education, both of which are common among M40 families and significantly increase monthly commitments (World Bank, 2023). Healthcare costs have also escalated due to greater reliance on private providers and reductions in employer-sponsored medical benefits. These pressures collectively squeeze the M40's financial margins.

2.3 Household Debt and Middle-Class Aspirations

Household debt patterns profoundly shape the M40's financial landscape. Malaysian households hold one of the highest debt portfolios in the region, influenced by mortgages, car loans, credit cards, and personal financing. While mortgages serve long-term asset accumulation, vehicle and consumption debt contribute less to financial security.

The literature highlights that middle-class aspirations, particularly home ownership, lifestyle upgrading, and education investment are strongly linked to debt accumulation (Lee et al., 2021). Social comparison theory explains how individuals benchmark their consumption against perceived peers, leading them to adopt spending norms that may exceed their financial capacity (Festinger, 1954). This reinforces aspirational consumption behaviour, often financed through instalment-based credit.

2.4 Behavioural Determinants of Financial Stress

Behavioural economics provides key insights into why financially literate individuals still engage in suboptimal financial practices. Present bias leads to prioritisation of current wants over future needs, undermining saving discipline (Thaler & Sunstein, 2009). Overconfidence contributes to the underestimation of financial risks, particularly in credit management (Kahneman, 2011). Mental accounting causes inconsistent treatment of money across categories, distorting financial judgment (Thaler, 1999).

In the Malaysian context, studies show that behavioural factors significantly influence household budgeting, credit management, and saving behaviour across income groups (Sabri & Falahati, 2012). The integration of behavioural determinants is therefore essential to understanding M40 financial vulnerability.

2.5 Policy and Institutional Gaps

Malaysia's policy landscape contains systematic gaps that leave the M40 insufficiently supported. Welfare transfers and targeted subsidies primarily benefit B40, while tax reliefs and investment incentives tend to favour higher-income groups (World Bank, 2023). Existing tax deductions often fail to reflect real childcare, healthcare, and education costs borne by M40 households.

Financial education efforts, spread across Employees Provident Fund (EPF), Credit Counselling and Debt Management Agency (Agensi Kaunseling dan Pengurusan Kredit- AKPK), Malaysia Deposit Insurance Corporation (Perbadanan Insurans Deposit Malaysia-PIDM), Bank Negara Malaysia (BNM), and Ministry of Finance Malaysia (MOF), are fragmented and lack a unified behavioural framework. International evidence shows that fragmented financial education rarely produces sustainable behavioural change unless integrated with nudges or structured lifelong learning (OECD, 2020).

2.6 Theoretical Framework

Understanding financial vulnerability among Malaysia's M40 requires a multi-theoretical approach. The original manuscript drew on several conceptual strands, but this section consolidates them into a coherent and rigorous framework grounded in established literature.

The theoretical structure applied in this study integrates three dominant frameworks:

1. Household Finance Theory
2. Behavioural Economics Theory
3. Financial Resilience Framework

This integrated lens allows analysis of how structural constraints, cognitive processes, and resilience capacities jointly shape M40 financial outcomes.

Household Finance Theory

Household Finance Theory examines how families allocate resources, manage intertemporal consumption, and navigate liquidity constraints in the face of uncertainty (Campbell, 2006). It provides the structural foundation for understanding M40 vulnerability because it emphasises income flows and volatility, debt servicing obligations, consumption and saving trade-offs, liquidity limitations, and financial market imperfections

According to Campbell (2006), households experience vulnerability when structural constraints, such as low liquidity, high fixed commitments, or rigid monthly obligations, limit their capacity to adjust to shocks. Malaysia's M40 embodies these structural risks due to high mortgage and vehicle instalment commitments, income growth lagging behind inflation, and insufficient emergency savings relative to monthly expenditure.

The Malaysian household debt environment reinforces these structural pressures, as highlighted by BNM (2024c), which identifies the middle-income group as the most indebted segment in terms of debt-to-income ratio. Household finance literature, therefore, frames M40 vulnerability as a structural imbalance between rising liabilities and stagnant financial buffers.

Behavioural Economics Theory

Behavioural economics expands the analysis by explaining why many households make systematically suboptimal decisions even when they possess adequate knowledge. Classical rational-choice models cannot fully explain patterns such as credit misuse, under-saving, or lifestyle inflation.

Key behavioural biases relevant to the M40 include:

i. Present Bias
   Individuals disproportionately value immediate gratification over long-term benefits, leading to low savings, high credit utilisation, and difficulty maintaining financial discipline (Thaler & Sunstein, 2009)
ii. Overconfidence

People tend to underestimate financial risks and overestimate their ability to manage debt, weakening repayment discipline (Kahneman, 2011).

iii. Anchoring and Social Comparison
Middle-class Malaysians anchor their lifestyle expectations to perceived peer standards, thereby increasing aspirational consumption (Festinger, 1954).

iv. Mental Accounting
Households create artificial spending categories, often overspending on "lifestyle" while neglecting emergency savings (Thaler, 1999).

These cognitive patterns are highly relevant to urban M40 households, where lifestyle-based consumption norms dominate. Studies in Malaysia confirm that behavioural biases significantly influence budgeting, consumption, and savings behaviour (Sabri & Falahati, 2012). Therefore, behavioural economics provides the psychological and social dimension of M40 vulnerability, complementing structural insights from household finance theory.

2.7 Financial Resilience Framework

Financial resilience refers to a household's ability to absorb, adapt to, and recover from financial shocks. It is typically assessed using components such as emergency savings, liquidity availability, insurance protection, access to formal and informal support networks, and adaptive financial behaviours. Resilience could be conceptualised as a dynamic capacity shaped by both internal resources and external institutional support (Kempson & Poppe, 2018). Applying this framework to the Malaysian M40 highlights several weaknesses, including the inability to cover three months of expenses (BNM, 2024b), low insurance penetration beyond mandatory coverage, heavy reliance on credit during shocks, limited long-term retirement readiness, and inadequate social protection coverage (World Bank, 2023). The framework, therefore, identifies resilience deficits that heighten financial fragility when exposed to income shocks, medical emergencies, or inflationary pressures.

2.8 Conceptual Model

Based on the integrated framework, this study proposes a conceptual model that captures the interplay between structural, behavioural, and institutional dimensions. The model comprises four core constructs.

Construct 1: Economic Pressure

Economic pressure refers to structural financial burdens that constrain household liquidity and elevate financial vulnerability. It includes persistent cost-of-living increases, stagnant wage growth relative to inflation, high fixed commitments (housing, vehicle financing), rising childcare, healthcare, and education costs, and rising debt-servicing ratios. Empirical evidence from DOSM (2023) shows that M40 households experience declining real disposable income, making them highly sensitive to inflation and economic shocks.

Construct 2: Financial Behaviour

Financial behaviour encompasses consumption patterns, saving practices, credit usage, and behavioural tendencies. Behaviour serves as a mediating pathway between economic pressure and resilience. Key behavioural mechanisms include impulsive or lifestyle-driven spending, reliance on instalment-based credit, inconsistent savings discipline, and cognitive biases that affect financial judgement. Behavioural research demonstrates that, even when households face similar economic pressures, behavioural patterns determine the degree of vulnerability they experience (Thaler & Sunstein, 2009).

Construct 3: Financial Resilience

Financial resilience represents the household's capacity to manage financial pressures and absorb shocks. It includes emergency savings adequacy, insurance coverage, adaptive financial strategies, liquidity buffer availability, and access to institutional or informal support. Lower resilience increases the likelihood that economic pressure will lead to vulnerability.

Construct 4: Policy Support

Policy support moderates the impact of economic pressure by reducing cost burdens, supporting income stability, and strengthening resilience. Examples include targeted tax reliefs, social protection measures, credit regulation, financial capability programmes, and retirement and insurance incentives. The World Bank (2023) notes that Malaysia's social protection architecture inadequately covers the M40 group, thereby increasing their exposure to shocks.

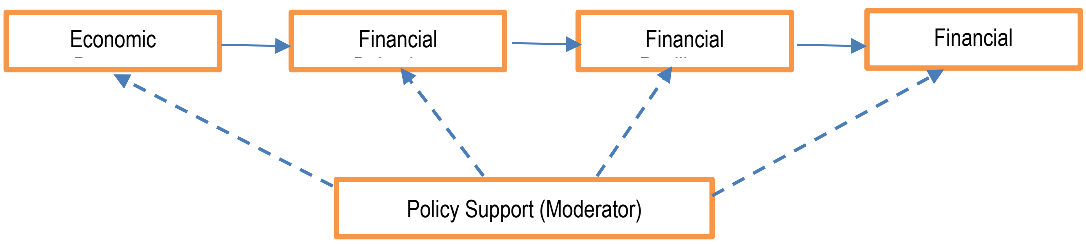

Figure 1: Conceptual Framework of Financial Vulnerability among M40 Households

This framework (Firgure 1) is conceptual in nature and is derived entirely from secondary literature. It is intended to guide future empirical testing rather than provide causal inference at this stage of research.

2.8 Proposed Relationships

Proposition 1 (P1): Economic pressure has a direct positive relationship with financial vulnerability.
Proposition 2 (P2): Financial behaviour mediates the relationship between economic pressure and financial resilience.
Proposition 3 (P3): Policy support moderates the relationship between economic pressure and resilience, such that strong institutional support reduces vulnerability.
Proposition 4 (P4): Financial resilience negatively predicts financial vulnerability.

3.0 Methodology

This paper employs a conceptual, literature-based research design that relies entirely on secondary data and published literature. No primary data was collected. The study followed three steps.

First, relevant literature was identified through academic databases (i.e., Scopus, WoS, Google Scholar) and key institutional reports from BNM, DOSM, the World Bank, the OECD, and EPF. Keywords included financial vulnerability, M40, household finance, cost of living, and financial behaviour. The review primarily covers literature published **between 2010 and 2025**, with particular emphasis on **post-2019 studies** to ensure contemporary relevance following structural shifts in household finance, inflation dynamics, and post-pandemic vulnerabilities.

Second, the selected materials were reviewed and synthesised to identify themes related to structural pressures, behavioural determinants, and policy gaps affecting Malaysia's M40 households.

Third, insights from the literature were integrated using Household Finance Theory, Behavioural Economics, and the Financial Resilience Framework to develop the conceptual model and propositions presented in this paper. This conceptual approach is suitable as it consolidates existing knowledge to provide a new theoretical understanding of M40 financial vulnerability.

Finally, the selected literature was analysed using a thematic synthesis approach, categorising findings into four key themes: (i) economic pressure, (ii) financial behaviour, (iii) financial resilience, and (iv) policy support. These themes were then integrated using Household Finance Theory, Behavioural Economics, and the Financial Resilience Framework to construct the conceptual model and propositions.

4.0 Findings

The synthesis of structural, behavioural, and institutional determinants reveals that Malaysia's M40 households are subject to a complex configuration of pressures that collectively elevate financial vulnerability. Overall, the conceptual analysis identifies four dominant contributors to financial vulnerability among Malaysia's M40 households. First, structural economic pressures from rising living costs and high fixed debt commitments significantly constrain household liquidity (**P1**). Second, financial behaviour, particularly present bias and aspirational consumption, mediates the translation of economic pressure into vulnerability (**P2**). Third, weak financial resilience, reflected in inadequate emergency savings and insurance coverage, heightens sensitivity to shocks (**P2**). Finally, institutional and policy gaps leave the M40 insufficiently protected despite its exposure to systemic risks (**P3**). These findings collectively support the development of an integrated conceptual framework (**P4**). The discussion below deepens the interpretation of the conceptual model by drawing on empirical and theoretical insights established in the literature. The combination of high structural pressure, behavioural vulnerabilities, low resilience, and insufficient policy support forms a reinforcing cycle that elevates the likelihood of downward mobility into the B40.

4.1 Structural Constraints and Economic Pressure

Economic pressure is the primary and most persistent driver of M40 financial fragility. DOSM (2023) highlights that although nominal incomes have risen, real income growth has been largely stagnant when adjusted for inflation. The disproportionate rise in urban living costs, especially food, transportation, rent, and home ownership, creates misalignment between earnings and expenditure. BNM consistently reports that mortgage and vehicle financing are the largest expenditure categories for middle-income households, thereby restricting liquidity and increasing exposure to shocks. The lack of affordable housing, documented extensively by Khazanah Research Institute (2022), continues to push M40 households into long-term commitments that compromise savings capacity.

4.2 Behavioural Patterns and Consumption Choices

Behavioural tendencies deepen the financial strain created by structural constraints. The literature shows that middle-class households frequently engage in aspirational consumption driven by social comparison (Festinger, 1954) and anchored expectations of a "middle-class lifestyle" (Frank, 2013). In Malaysia, this includes private schooling, branded goods, leisure travel, and automobile upgrades. These expectations are amplified by digital platforms that normalise the visibility of consumption and accelerate social comparison.

Behavioural biases are significant predictors of poor financial outcomes. Present bias leads individuals to prioritise short-term desires, resulting in low savings despite rising household incomes (Thaler & Sunstein, 2009). Overconfidence leads to underestimating debt risks and overestimating repayment ability (Kahneman, 2011). Mental accounting encourages inconsistent budgeting practices, while affective influences, such as stress and emotional spending, contribute to suboptimal decision-making. Behavioural factors are particularly salient among Malaysian households, where cultural norms emphasise social status, family expectations, and consumption signaling (Sabri & Falahati, 2012; Nawi et al., 2024). Consequently, behavioural dynamics act as an accelerant, transforming structural pressure into acute financial vulnerability.

4.3 Weak Financial Resilience

Financial resilience among the M40 is generally limited. Many households lack the recommended three to six months of emergency savings, as highlighted by BNM (2024c). Liquidity buffers are weakened by high fixed commitments and reliance on credit to manage short-term expenses. Insurance penetration outside mandated coverage (e.g., motor insurance) remains low; thus, a medical emergency or income shock could destabilise financial stability.

Ready to retirement is also a concern. EPF withdrawals during the COVID-19 pandemic significantly reduced long-term balances, increasing the risk of old-age insecurity for middle-income households (EPF, 2022). While EPF savings were intended as a long-term safety net, the lack of alternative emergency buffers forced households to liquidate future-oriented funds to address immediate financial needs.

4.4 Institutional and Policy Gaps

A persistent theme across empirical research is the inadequate alignment of policy support with the needs of middle-income households. Social protection programmes in Malaysia have traditionally focused on the B40, while wealth-building incentives, such as capital gains, investment allowances, and asset-based policies, favour higher-income groups (World Bank, 2023). The M40 frequently fall into a policy gap, receiving limited targeted support despite rising exposure to financial risks.

Furthermore, financial capability initiatives across institutions (EPF, AKPK, PIDM, BNM) lack integration and continuity. OECD (2020) emphasises that uncoordinated financial education efforts typically fail to produce behavioural change unless supported by systemic nudges or default mechanisms.

5.0 Discussion

The findings of this study are consistent with prior research highlighting the role of debt exposure and cost-of-living pressures in shaping household vulnerability (Lusardi et al., 2011; OECD, 2020). However, this study extends existing literature by explicitly focusing on middle-income households and integrating behavioural and institutional dimensions that are often overlooked. Unlike studies that treat financial vulnerability primarily as an income-based phenomenon, this research demonstrates that middle-income households may experience significant fragility due to structural commitments, behavioural biases, and limited policy support. Strengthening Malaysia's M40's financial position requires coordinated reforms that address structural, behavioural, and institutional sources of vulnerability. Structurally, current income classifications do not reflect real cost-of-living variations, particularly in urban areas where most M40 households reside.

Beyond Malaysia, the proposed conceptual framework is relevant to middle-income households in other emerging and upper-middle-income economies facing similar challenges, including rising urban living costs, high household debt, and uneven social protection coverage. The framework provides a transferable analytical lens for comparative research across regions such as Southeast Asia, Latin America, and Eastern Europe.

A cost-of-living–adjusted income system, together with wage-productivity alignment and the creation of higher-quality jobs, would better capture actual financial pressures and restore purchasing power. Housing affordability remains a critical issue, as the limited supply of genuinely affordable units continues to push families into long-term debt commitments. Addressing this requires closer public–private collaboration, regulation of speculative activity, and more substantial incentives for affordable home development. Behavioural factors also deepen financial strain; therefore, interventions such as automated savings mechanisms, payroll deductions, and digital spending nudges are essential to counteract present bias and reduce impulsive consumption. These efforts should be supported by workplace-based financial wellness programmes suited to the salaried nature of the M40 group. Existing social protection arrangements also fall short for the M40, particularly in healthcare, childcare, and education, and current financial education initiatives remain fragmented across agencies.

6.0 Conclusion and Recommendations

This study develops an integrated conceptual framework to explain financial vulnerability among Malaysia's M40 households by synthesising household finance theory, behavioural economics, and the financial resilience framework. The analysis demonstrates that middle-income financial vulnerability is driven not solely by income constraints but by a complex interaction of structural economic pressure, behavioural decision-making, limited resilience capacity, and institutional gaps in policy support.

Several limitations should be acknowledged. First, the study is conceptual in nature and does not empirically test the proposed relationships. Second, the framework is developed within the Malaysian context, which may limit generalisability without contextual adaptation. Despite these limitations, the study provides a strong theoretical foundation for future research.

From a policy perspective, the findings highlight the need for more inclusive social protection, stronger cost-of-living interventions, behaviourally informed financial capability programmes, and improved credit regulation targeting middle-income households. Future research should empirically validate the proposed framework using quantitative or mixed-method approaches, extend the model to cross-country comparisons, and explore longitudinal dynamics of middle-class financial vulnerability.

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Paper Contribution to Related Field of Study

This paper contributes to the growing scholarship on household finance, behavioural economics, and social policy by offering an integrated conceptual framework that explains the rising financial vulnerability of Malaysia's M40 households. First, it advances theoretical understanding by synthesising Household Finance Theory, Behavioural Economics, and the Financial Resilience Framework into a unified model. This integration highlights how structural pressures, behavioural biases, and institutional gaps interact to shape middle-income fragility, an area often overlooked in Malaysian financial vulnerability research, which tends to focus primarily on the B40 group.

Second, the paper contributes conceptually by proposing a multi-dimensional model that links economic pressure, financial behaviour, policy support, and resilience outcomes. This model provides a structured basis for future empirical work and offers researchers a clearer analytical lens for examining middle-class insecurity across different socioeconomic contexts.

Third, the study provides a policy-relevant contribution by identifying specific institutional blind spots affecting the M40, including gaps in social protection, housing affordability, credit regulation, and financial education. By emphasising the "missing middle" in national policy design, the paper supports ongoing policy debates on inclusive social protection and cost-of-living reforms.

Finally, the paper broadens international discourse on middle-class vulnerability by situating Malaysia's M40 experience within global patterns of rising living costs, debt dependence, and weakened financial buffers. The framework and insights presented can be adapted for comparative studies across emerging economies facing similar structural and behavioural challenges.

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