

## Internet, work, and welfare: How digitalization affects Indonesia's Mompreneur

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**Abstract:** This study examines the influence of internet access on the likelihood of mothers becoming entrepreneurs, commonly referred to as mompreneurs, and explores the implications of mompreneurship for household welfare in Indonesia. Amid growing economic pressures, mothers are playing an increasingly vital role in sustaining household income, particularly as digital tools and internet connectivity open up new entrepreneurial opportunities. Utilizing secondary data from the 2023 National Socioeconomic Survey (SUSENAS), this study applies binary logistic and multinomial logistic regression models to assess the determinants of mompreneurship and its association with household poverty status. The findings reveal that internet access significantly increases the likelihood of mothers engaging in entrepreneurial activities by enhancing access to markets, information, and flexible business management. However, single mothers are less likely to become mompreneurs, primarily due to their greater need for stable and predictable income sources. While mompreneurship contributes to poverty reduction by generating supplementary income, it remains insufficient to elevate households into middle- or upper-income classes. These results highlight the importance of expanding affordable internet infrastructure and improving access to microcredit tailored to women-led businesses. Moreover, subsidized childcare and flexible work arrangements are crucial for overcoming structural barriers to economic participation.

**Keywords:** *Entrepreneurship, Indonesia, Internet, Family Welfare, Mompreneur.*

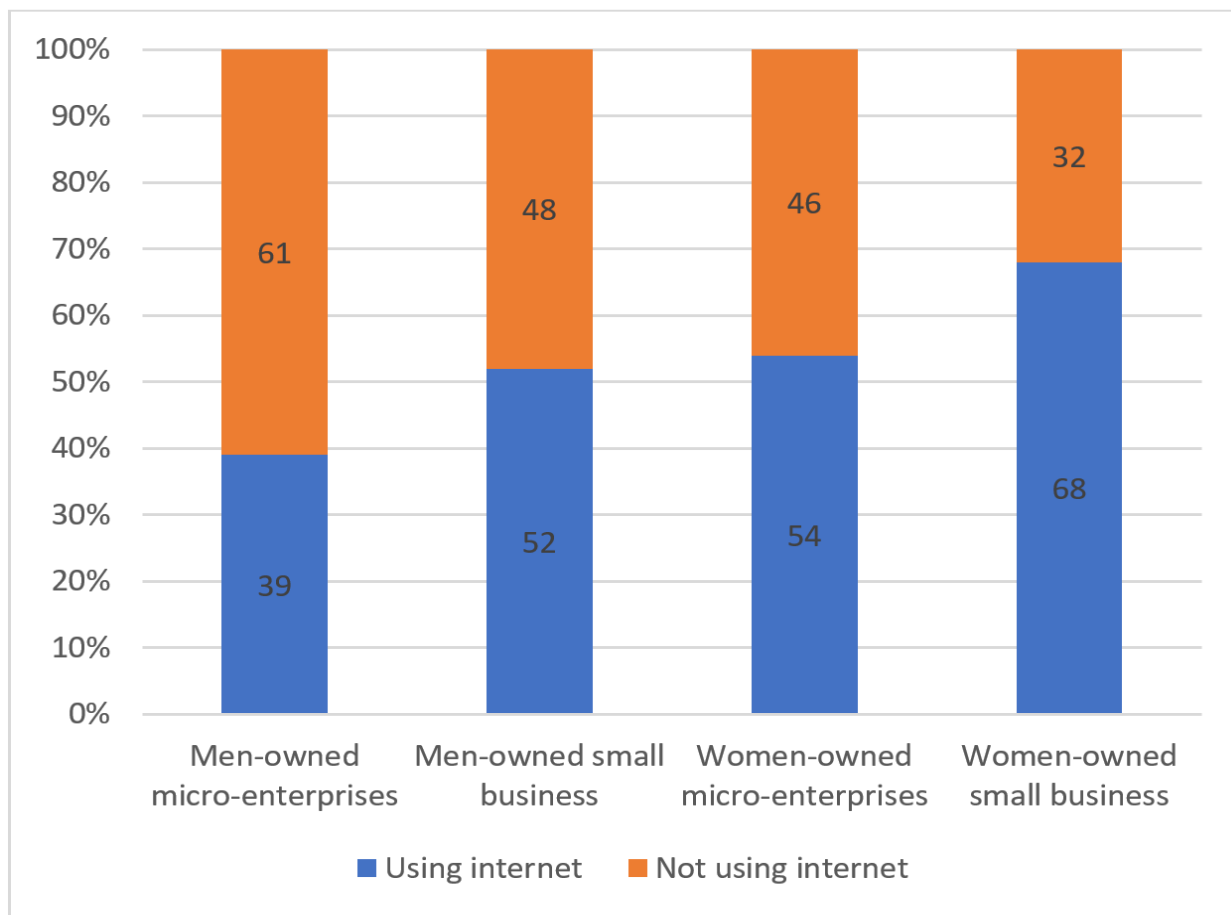
### 1. Introduction

The evolving social and economic landscape over the past decade has significantly reshaped the role of women within their households. Economic uncertainty, the demand for flexible work arrangements, and rising living costs have compelled families to seek alternative sources of income, thereby creating greater opportunities for mothers to contribute to household finances [1]. This environment has spurred the growth of home-based micro, small, and medium enterprises (MSMEs), often led by women. According to the Ministry of Cooperatives and Small and Medium Enterprises, women constitute a substantial portion of MSME operators in Indonesia, accounting for 52% of micro-enterprises, 56% of small enterprises, and 34% of medium enterprises [2].

Mothers who balance domestic responsibilities with entrepreneurial activities are often referred to as "mompreneurs." They navigate the dual pressures of caregiving and income generation, a challenge exacerbated during the shift to remote education during the COVID-19 pandemic [3, 4]. This dual role highlights the need for adaptability as women strive to meet both economic and familial obligations.

Simultaneously, the expansion of Indonesia's digital economy, driven by increased internet usage, has provided new entrepreneurial avenues for women [5]. During the pandemic, many women leveraged digital platforms for online business activities. A 2020 survey by Statistics Indonesia (BPS) reported that 48% of the Indonesian population accessed the internet, with 42% of micro-enterprises and

30% of small enterprises owned by women. Notably, 54% of women-owned micro-enterprises and 68% of women-owned small enterprises utilized the internet for sales, surpassing their male counterparts (see Figure 1.) [6].



**Figure 1.** Proportion of businesses using the internet to sell products, by business size and gender of business owner (percentage, n= 35,000).

**Source:** BPS [6].

The internet has also emerged as a significant enabler for women's entrepreneurship, providing avenues to generate supplementary household income [7]. Through increased access to online resources, Indonesian women are able to seek business opportunities, gain inspiration, and develop both online and offline businesses [8]. Furthermore, a study by Alatas, et al. [9] found that women entrepreneurs represent the second-largest occupational group among internet users in Indonesia, accounting for 12% of the total.

The internet has substantially expanded access to information, social networks, and online markets, which are crucial for mothers aspiring to initiate and grow businesses. International studies highlight that digital technologies not only empower women economically but also have profound implications for overall family welfare. Altinay, et al. [10] emphasized that digital technologies, particularly the internet and social media, serve as critical instruments in empowering mompreneurs, especially mothers of children with special needs in Cyprus. Their study illustrated that sufficient digital literacy enables

women to manage flexible businesses, mitigate the stress of dual roles, and enhance household economic stability. Similarly, Costin [11] identified the internet as a key driver for the growth of small businesses run by mompreneurs, demonstrating how information and communication technologies (ICT) allow women to efficiently manage home-based businesses without compromising family time.

Breen, et al. [12] further explored how women operating home-based enterprises leverage technology to balance multiple life roles, reporting increased life satisfaction and improved family well-being as outcomes of flexible work arrangements facilitated by the internet. Additionally, Malaquias, et al. [13] specifically examined how mompreneurs adopted internet-based technologies during the COVID-19 pandemic, finding that entrepreneurial orientation combined with digital tools enabled mothers to sustain family incomes while simultaneously managing domestic responsibilities.

Recent studies have increasingly emphasized the transformative role of digital technologies in enabling mothers to engage in entrepreneurship while maintaining family responsibilities. Firoz [14] highlights that mompreneurs achieve personal and family welfare through digital entrepreneurship, balancing emotional, financial, and social well-being via internet access. Similarly, Casteleijn-Osorno and Hytti [15] found that technology empowers mothers of children with special needs to sustain economic productivity without compromising caregiving duties.

In a broader social context, Weidhaas and Mompreneur [16] argues that mompreneurship represents resistance to conventional work structures that are unfriendly to family life, with the internet serving as a "space of autonomy" offering flexible work opportunities. Empirical evidence from Indonesia reinforces these findings. Nisa [17] demonstrates that the internet not only facilitates business promotion and transactions for stay-at-home mothers but also strengthens their role as agents of family transformation. Lestari [18] further shows that social media expands market access, enabling mothers to better manage their time, dual roles, and business operations, thus improving family quality of life.

Ajizah [19] stresses the critical role of digital skills in the success of home-based online businesses, positioning internet use as part of a broader strategy for family economic empowerment. Similarly, Sinambela and Sintani [20] argue that digitalization fosters inclusive economic opportunities, allowing mothers to access markets without substantial capital. Burhan and Hasanah [21] add that e-commerce adoption not only boosts family income but also enhances maternal involvement in household economic decisions, strengthening family resilience.

Overall, existing literature portrays the internet not merely as a business tool but as a catalyst for broader family welfare improvements. Digital engagement among mompreneurs leads to higher household incomes, reduced role-conflict stress, and stronger family cohesion. Nonetheless, achieving sustainable outcomes requires continued investment in digital skills training and social support structures.

These findings underscore the critical role of internet access in promoting women's entrepreneurship and enhancing household welfare, thereby highlighting the necessity for deeper empirical investigation within the Indonesian context. Motivated by these issues, this study aims to empirically examine the influence of internet usage on the emergence of mompreneurs as a pathway to achieving household economic independence. This research aligns with the views of scholars who emphasize that women's participation in economic activities significantly contributes to family welfare, particularly in the economic domain [22]. Accordingly, this study pursues two primary objectives; First to examine the role of internet usage in influencing mothers' participation in entrepreneurship, particularly among mothers with school-aged children in Indonesia, and second to analyse the impact of mompreneurship on household welfare.

## 2. Literature Review

Mompreneurship, where mothers blend domestic duties with entrepreneurial activities, has emerged as a unique model enabling women to balance family responsibilities and economic goals [23, 24]. In

essence, mompreneurs run their businesses from home or nearby locations by leveraging available resources while continuing as their children's primary caregivers. Globally, this term highlights women's ability to earn supplemental income without giving up household tasks, effectively bridging family needs with economic opportunities [25].

In practice, the internet is a crucial driver behind the rise and expansion of mompreneurs, as it opens up digital marketplaces and streamlines operations. For example, microenterprise owners in Malawi who adopted information and communication technologies (ICT) saw significant gains in financial, social, and informational capital, which diversified their income streams and boosted marketing efficiency [26]. Similarly, in Nepal, mobile technology and remote training programs enabled women to complete entrepreneurship courses without leaving home, positively influencing their control over household income [27]. In Indonesia, studies of digital mompreneurs during the COVID-19 pandemic show that online promotion strategies helped families maintain income flows despite global economic downturns [28].

Several studies in advanced economies also highlight specific contexts that influence mompreneurship. In the United States, Friedman, et al. [29] note that maker entrepreneurs, including mompreneurs who craft handmade goods, face logistical challenges and limited managerial expertise, even though digital technologies facilitate online sales and product innovation. Meanwhile, in France and other European countries, mompreneurs business online community networks to exchange business strategies, emotional support, and collaboration opportunities, making digital social capital a key determinant of entrepreneurial success [25]. Thus, despite relatively robust digital infrastructure, factors such as digital literacy and the availability of community support also shape the dynamics of mompreneurship growth in developed nations.

From the standpoint of family well-being, mompreneurship in advanced economies has been shown to contribute to higher household incomes and improved maternal psychological welfare. Ogren [30] research in the U.S. reports that the flexibility offered by online businesses can reduce role-conflict between domestic duties and business responsibilities, while strengthening family cohesion through mothers' active engagement in both spheres. Additionally, Hill, et al. [31] finds that rising rates of female entrepreneurship in the United Kingdom not only drive economic growth but also boost mothers' self-confidence and mental well-being. Consequently, the impact of digitalization on mompreneurship in developed countries is multifaceted, spanning macroeconomic benefits to the psychosocial welfare of families.

Although findings from advanced economies are highly informative, there remains a research gap in the developing countries, particularly Indonesian context. To date, studies in Indonesia have primarily been small-scale qualitative inquiries and have not integrated critical variables identified in advanced-economy research, such as internet usage, into a representative quantitative national model. For instance, digital literacy still varies widely across regions, and quantitative research that simultaneously assesses the influence of both social and digital capital access on mothers' decisions to start businesses is exceptionally rare [22, 32]. Therefore, this study aims to bridge that gap by leveraging national survey data and digital variables, particularly internet access, to identify the most significant digital determinants driving the emergence of mompreneurs and their effects on family well-being in Indonesia.

### 3. Material and Methods

This study employs a quantitative research approach to examine the influence of internet usage on mothers' participation in entrepreneurship and to assess its implications for household welfare in Indonesia. To address these research objectives, two regression models are utilized.

First, a binary logistic regression model is applied to investigate the factors influencing a mother's likelihood of participating in entrepreneurial activities. The dependent variable is binary, where 1 represents mothers engaged in entrepreneurship and 0 represents mothers who are not entrepreneurs.

Second, a multinomial logistic regression model is employed to evaluate the impact of entrepreneurship on household economic welfare. In this model, the dependent variable is categorical, comprising three mutually exclusive categories: (0) poor households, (1) vulnerable households or those transitioning to the middle class, and (2) middle and upper-class households. Multinomial logistic regression is appropriate for modeling probabilities across more than two outcome categories, enabling a nuanced analysis of welfare status transitions influenced by independent variables.

The data used in this research are secondary individual-level data obtained from the 2023 National Socioeconomic Survey (Survei Sosial Ekonomi Nasional, SUSENAS), conducted annually by Statistics Indonesia (Badan Pusat Statistik, BPS). SUSENAS is one of Indonesia's largest national household surveys, designed to provide comprehensive and nationally representative data on socioeconomic indicators. The 2023 SUSENAS covers a wide range of information, including demographic profiles, education levels, employment status, housing conditions, access to health services, and internet usage patterns. The survey employs a stratified two-stage sampling design to ensure representativeness at both provincial and national levels, with data collected from tens of thousands of households across urban and rural areas.

For this study, the unit of analysis is mothers who are of working age and have at least one school-aged child. The selection of this specific subgroup aligns with the research focus on entrepreneurs balancing entrepreneurial activities and childcare responsibilities. In the binary logistic regression model, the primary independent variable is the mother's internet usage for economic purposes, specifically whether she uses the internet for selling goods or services.

The unit of analysis in this study is mothers of working age who have at least one school-aged child. This subgroup is selected to align with the study's focus on the dual role of entrepreneurship and childcare responsibilities. The primary independent variable is whether the mother uses the internet for economic purposes, specifically for selling goods or services. The control variables include:

- Mother's age and its squared term to account for nonlinear effects;
- Marital status, categorized into "married" (reference category) and "not married" (including widowed, divorced, or never married);
- Education level of the mother, classified into completed  $\leq$  junior high school, completed senior high school, and completed tertiary education (reference category);
- Education level of the husband, categorized similarly;
- Presence of school-aged children in the household (yes/no);
- Number of children under five years old (balita) in the household;
- Whether the mother possesses personal savings (yes/no);
- Whether the mother has received business-related loans (yes/no);
- Number of assets owned by the household;
- Area of residence, classified as urban versus rural (rural as the reference category);
- Whether the household is located on the island of Java (yes/no).

These variables are selected to comprehensively capture the socio-economic and demographic factors that may influence both entrepreneurial participation and household welfare outcomes.

#### 4. Result and Discussion

To provide an overview of the characteristics of the sample, a descriptive analysis was conducted on the main variables of interest. The statistical summary Table 1 shows that the majority of households in the sample belong to either the vulnerable class or the emerging middle class. This distribution highlights the socioeconomic position of most respondents, who are at risk of economic shocks but are

also beginning to experience upward mobility. Furthermore, 43.9 percent of mothers are engaged in entrepreneurial activities, indicating considerable potential for strengthening self-employment-based economic development among women. Meanwhile, internet usage among mothers reaches 55.8 percent, reflecting a relatively high level of information technology utilization to support economic, educational, and social activities within households.

**Table 1.**  
Summary Statistics.

Variables	Definition	Mean	Std. Dev
Economic Status	0 = poor, 1 = vulnerable and emerging middle class, 2 = middle & upper class	1.154	0.527
Mother Entrepreneur	1 = mother is self-employed, 0 = otherwise	0.439	0.496
Mother Internet Usage	1 = mother uses internet, 0 = otherwise	0.558	0.497
Single Mother	1 = mother is married, 0 = mother is a single parent	0.833	0.373
Mother Savings Ownership	1 = mother has savings, 0 = otherwise	0.519	0.500
Mother Completed Higher Education	1 = mother graduated from university, 0 = otherwise	0.143	0.351
Mother Completed High School	1 = mother graduated from senior secondary school, 0 = otherwise	0.234	0.423
Mother Completed Junior High School	1 = mother graduated from junior secondary school, 0 = otherwise	0.173	0.378
Mother's Age	Age of mother in years (continuous)	45.874	11.551
Mother's Age Squared	Mother's age squared (continuous)	2237.84	1119.8
Urban Residence	1 = household lives in urban area, 0 = household lives in rural area	0.398	0.490
Household Size	Number of people residing in a household (continuous)	3.677	1.548
Residing in Java Island	1 = household lives in Java island, 0 = otherwise	0.300	0.458
Having Children	1 = mother has children, 0 = otherwise	0.770	0.421
Number of Children Under Five	Number of children under five years old in the household (continuous)	0.241	0.497
Mother Loan Ownership	1 = mother has an active loan, 0 = otherwise	0.033	0.179
Total Household Assets	Total number of household assets owned (continuous)	3.076	1.966

Other relevant variables that enrich the analysis include family status and mothers' educational attainment. The majority of mothers in the sample are married, accounting for 83.3 percent, suggesting a stable family structure among most households surveyed. Savings ownership among mothers stands at 51.9 percent, reflecting a moderate level of financial inclusion. On the other hand, educational attainment among mothers remains relatively low; only 14.3 percent have completed higher education, 23.4 percent have graduated from senior secondary school, and 17.3 percent have completed junior secondary education. This condition points to limitations in educational access that may affect long-term social and economic mobility within families.

Demographic and geographic characteristics also contribute to the social-economic context of the respondents. About 39.8 percent of households reside in urban areas, while 30 percent are located on Java Island, indicating diverse geographic distribution. Household sizes predominantly consist of three to four members, and 77 percent of mothers have children. Active loan ownership among mothers is notably low, recorded at only 3.3 percent, while the number of household assets shows variability, averaging around three types of assets.

#### 4.1. Impact of the Internet Usage on the Opportunities to Become Mompreneurs

The logistic regression results reveal several important determinants of mothers' likelihood to become entrepreneurs (mompreneurs) (see Table 2.). First, mother internet usage is positively and significantly associated with entrepreneurship across all groups, consistent with findings by McAdam,

et al. [33] who emphasize that digital access expands entrepreneurial opportunities by providing market information, networking, and e-commerce platforms. The effect is particularly stronger among single mothers and those residing in rural areas, suggesting that internet access may be a critical tool for mothers who have limited traditional employment opportunities.

Interestingly, being a single mother significantly decreases the probability of becoming a mompreneur. Single mothers face greater time and resource constraints, which may hinder their entrepreneurial activities, as also noted by Williams and Youssef [34] in the context of gendered entrepreneurship barriers. The effect is even more pronounced among mothers without children at home, highlighting how caregiving responsibilities and support networks interact with entrepreneurial engagement.

In addition, this phenomenon can be explained by the heightened economic pressures and responsibilities faced by single mothers, which drive them to prioritize employment options that offer greater income stability and predictability. Unlike entrepreneurship, which often involves income uncertainty, delayed returns, and higher risk exposure, formal wage employment provides more reliable financial security, which is critical for single mothers who serve as the sole economic providers for their households.

Research by Cañibano, et al. [35] supports this view, demonstrating that single mothers are more inclined to seek stable employment rather than engage in entrepreneurial activities due to the necessity of ensuring consistent household income and minimizing financial risk. Similarly, Sánchez-García, et al. [36] found that women with greater caregiving responsibilities, particularly single mothers, exhibit lower entrepreneurial intentions, as entrepreneurship is perceived as incompatible with the need for immediate, steady earnings and time predictability. These studies highlight that for single mothers, entrepreneurship may represent an unattractive option compared to wage employment, given the urgent demands of child-rearing, economic survival, and long-term financial planning.

On the other hand, the relationship between household financial conditions and mompreneurship reveals several important dynamics. Ownership of savings is found to have a negative and significant association with the likelihood of becoming a mompreneur, particularly among single mothers. This suggests that mothers with savings experience less financial pressure to seek alternative income sources through entrepreneurship, reinforcing Bhattarai, et al. [37] argument that necessity-driven entrepreneurship often emerges as a response to financial insecurity rather than the abundance of resources.

Educational background also plays a critical role. Mothers with higher education levels are less likely to engage in entrepreneurship, whereas those who completed only junior or senior high school are more inclined to pursue entrepreneurial activities. This pattern aligns with the findings of Estrin, et al. [38] which highlight that highly educated individuals typically favor formal sector employment opportunities, while those with intermediate education view self-employment as a more accessible economic strategy.

Age further influences entrepreneurial behaviour. The analysis shows a negative association between maternal age and mompreneurship, indicating that younger mothers are generally more entrepreneurial. This is consistent with Brush, et al. [39] who observed that entrepreneurial risk tolerance tends to decline with age. Nevertheless, the positive quadratic effect suggests a non-linear relationship, where mid-aged mothers are more likely to become entrepreneurs compared to their very young or older counterparts.

Geographical context also shapes entrepreneurial engagement. Urban residence is positively associated with mompreneurship, particularly among single mothers and mothers without children. This reflects better access to markets, business networks, and support services in urban areas, supporting the findings of Jennings and Brush [40] on the advantages of urban ecosystems for women's entrepreneurship. In contrast, while internet usage continues to promote entrepreneurship in rural

areas, broader structural barriers, such as limited consumer bases and weaker infrastructure, pose challenges to sustaining entrepreneurial activities.

Household size exhibits a small but positive effect, suggesting that larger families may foster entrepreneurship as a strategy to diversify household income streams, consistent with the findings of Lechmann and Wunder [41]. Together, these results illustrate the complex and multi-faceted nature of the factors influencing mothers' decisions to engage in entrepreneurial ventures.

Further analysis reveals that geographic location continues to play a significant role in shaping entrepreneurship. Residing on Java Island consistently shows a negative and significant association with the probability of becoming a mompreneur across all groups. This may reflect the higher competition and more attractive formal employment opportunities available in Java compared to other regions, reducing the incentive for women to pursue entrepreneurial activities. These findings align with McKenzie and Sansone [42] who argue that in densely populated and economically active areas, formal sector employment often dominates women's labor market choices, leaving less room for necessity-driven entrepreneurship.

Household composition also emerges as an important factor. This result suggests that the presence of dependents increases the need for flexible work arrangements, making entrepreneurship a more viable option despite its risks. Moreover, the number of children under five years old positively affects entrepreneurship across all models, reinforcing the idea that mothers of young children often seek income-generating activities that allow for greater control over their time and caregiving responsibilities. These findings are in line with the arguments of Kelley, et al. [43] who highlight that family demands can act as a catalyst for women's entrepreneurship, especially when childcare options are limited.

Financial variables, such as loan ownership and household assets, further underscore the economic motivations behind entrepreneurship. Mother's loan ownership is positively and significantly associated with entrepreneurship, particularly among single mothers and urban residents. This suggests that access to credit, even in the form of personal loans, can empower women to initiate entrepreneurial ventures, consistent with the findings of Aterido, et al. [44] who emphasize the role of credit accessibility in facilitating women's entry into business activities.

Additionally, total household assets have a positive and significant relationship with entrepreneurship across all groups, although the magnitude is relatively small. This indicates that while entrepreneurship may be partially driven by necessity, having a modest asset base still provides important resources to support business start-up activities. The relationship between asset accumulation and entrepreneurial capacity has also been documented by Robb and Coleman [45] who argue that even small asset buffers can enhance women's ability to withstand initial business risks.



**Table 2.**

Logit regression estimation of the Impact of Internet Use on the Opportunity of Mothers to Become Mompreneurs.

VARIABLES	All	Single Mother	Non-Single Mother	Have Children	No Children	Urban	Rural
Mother Internet Usage	0.0355***	0.0517***	-0.0451***	0.0338***	0.0350***	0.0236***	0.0358***
	-0.00292	-0.00319	-0.00667	-0.0033	-0.00626	-0.00498	-0.0036
Single Mother	-0.260***	-	-	-0.230***	-0.296***	-0.125***	-0.360***
	-0.00328	-	-	-0.00412	-0.00539	-0.0052	-0.00422
Mother Savings Ownership	-0.0154***	-0.0175***	-0.0231***	-0.0231***	0.00631	-0.0448***	0.00132
	-0.00245	-0.00273	-0.00544	-0.00281	-0.00503	-0.00402	-0.00307
Mother Completed Higher Education	-0.344***	-0.346***	-0.306***	-0.340***	-0.356***	-0.317***	-0.351***
	-0.00455	-0.005	-0.0102	-0.00507	-0.0105	-0.00647	-0.00662
Mother Completed High School	0.00762**	0.00993***	-0.00555	0.00948***	0.000471	0.0138***	0.00556
	-0.00316	-0.00344	-0.00747	-0.00352	-0.0073	-0.00497	-0.00412
Mother Completed Junior High School	0.0398***	0.0434***	0.0208***	0.0397***	0.0352***	0.0354***	0.0396***
	-0.00322	-0.00351	-0.00779	-0.00362	-0.00717	-0.00545	-0.00397
Mother's Age	-0.00445***	0.000169	0.00330**	-0.00379***	0.00359***	-0.00717***	-0.00338***
	-0.000694	-0.000842	-0.00162	-0.00101	-0.00127	-0.00123	-0.000843
Mother's Age Squared	8.42e-05***	2.77e-05***	2.39E-05	7.16e-05***	1.62E-05	0.000128***	6.17e-05***
	-7.21E-06	-9.05E-06	-1.50E-05	-1.11E-05	-1.19E-05	-1.29E-05	-8.72E-06
Urban Residence	0.0299***	0.0548***	-0.0820***	0.0289***	0.0339***	-	-
	-0.00253	-0.00278	-0.00551	-0.00291	-0.00512	-	-
Household Size	0.00352***	0.00452***	-0.000184	0.00582***	-0.00996***	0.00660***	0.00274**
	-0.00101	-0.00111	-0.00242	-0.0011	-0.00293	-0.00167	-0.00126
Residing in Java Island	-0.0393***	-0.0210***	-0.116***	-0.0297***	-0.0650***	-0.0405***	-0.0391***
	-0.00254	-0.00281	-0.00542	-0.00299	-0.00479	-0.00362	-0.00354
Having Children	0.00617*	0.0140***	-0.0243***	-	-	0.00391	0.00714
	-0.0036	-0.00411	-0.00722	-	-	-0.00585	-0.00455
Number of Children Under Five	0.0244***	0.0225***	0.0166*	0.0196***	0.0195	0.0238***	0.0224***
	-0.00273	-0.0029	-0.00867	-0.00288	-0.0156	-0.00444	-0.00344
Mother Loan Ownership	0.0300***	0.0377***	-0.00917	0.0288***	0.0377***	0.0246***	0.0311***
	-0.00612	-0.00661	-0.0147	-0.0068	-0.0141	-0.00932	-0.00802
Total Household Assets	0.0183***	0.0168***	0.0240***	0.0181***	0.0222***	0.00908***	0.0287***
	-0.000723	-0.000789	-0.00172	-0.000815	-0.00158	-0.00101	-0.00103
Observations	178,792	148,996	29,796	137,669	41,123	71,231	107,561

Note: Standard errors in parentheses.

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1.

Overall, the results highlight that family structure, financial access, and geographic location jointly influence mothers' decisions to engage in entrepreneurial activities. Single mothers, mothers with young children, and those outside Java Island exhibit distinct entrepreneurial dynamics, underscoring the need for nuanced policy support tailored to these varying contexts.

#### *4.2. Impact of Mompreneurs on the Economic Status of Family Welfare*

The estimation results presented in table 3 indicate that, overall, maternal entrepreneurship does not have a statistically significant effect on the likelihood of a household moving into the middle class compared to poor households, with a coefficient value of 0.0114. However, it slightly increases the probability of belonging to the vulnerable class, as indicated by a positive coefficient value of 0.0429, significant at the 10 percent level. Among internet users, maternal entrepreneurship significantly increases the likelihood of transitioning into both the middle class and the vulnerable class, with coefficient values of 0.0715 and 0.0763, respectively, both statistically significant at conventional levels. In contrast, for non-internet users, entrepreneurship only raises the probability of being in the vulnerable class, reflected by a coefficient value of 0.113 significant at the 1 percent level, without a significant effect on reaching the middle class, where the coefficient value is 0.0218. For married mothers, entrepreneurial status does not significantly affect household economic mobility, with coefficient values of 0.0155 for the middle class and 0.0119 for the vulnerable class, both statistically insignificant. In contrast, among single mothers, entrepreneurship is associated with a higher probability of being in the vulnerable class, with a coefficient value of 0.139 significant at the 5 percent level, although it remains statistically insignificant for reaching the middle class, where the coefficient is -0.0262.

Furthermore, the estimation results also indicate that maternal internet usage is strongly associated with improved household economic status. Overall, internet-using mothers are significantly more likely to transition into the middle class and the vulnerable class compared to poor households. Specifically, the coefficient value for transitioning into the middle class is 0.491, while for the vulnerable class it is 0.843, both statistically significant at the 1 percent level. Among internet users, internet usage by mothers consistently shows a positive and significant association with better economic outcomes. For non-internet users, the influence of maternal internet usage is, by definition, not estimable within the subgroup analysis, but comparative results indicate the vital role of internet access in enhancing household welfare. Further subgroup analyses show that for both married and single mothers, maternal internet usage maintains a positive and statistically significant impact. These findings suggest that internet access substantially amplifies mothers' economic opportunities and mobility prospects, underlining the transformative potential of digital inclusion in improving family welfare outcomes.

In addition to internet usage, maternal savings ownership is consistently associated with improved household economic status. Across all samples, mothers who own savings are more likely to transition into higher economic categories. In the full sample, savings ownership increases the probability of being in the middle class and in the vulnerable class. This positive association remains consistent across subgroups, with notable effects particularly among non-single mothers, and among internet users, suggesting the critical role of financial access in supporting household mobility.

**Table 3.**  
Multinomial Logit Estimation of the Impact of Mother Entrepreneur Status on Household Welfare.

Dependent Variable: Household Economic Status (Reference Category: Poor Households)	All		Internet User		Non-Internet User		Single Mother		Non Single Mother	
	Middle Class	Vulnerable	Middle Class	Vulnerable	Middle Class	Vulnerable	Middle Class	Vulnerable	Middle Class	Vulnerable
Mother Entrepreneur	0.0114 (0.0208)	0.0429* (0.0250)	0.0715** (0.0353)	0.0763* (0.0394)	-0.0218 (0.0259)	0.113*** (0.0350)	0.0155 (0.0223)	0.0119 (0.0271)	-0.0262 (0.0617)	0.139** (0.0701)
Mother Internet Usage	0.491*** (0.0259)	0.843*** (0.0317)					0.503*** (0.0274)	0.810*** (0.0345)	0.424*** (0.0793)	0.957*** (0.0880)
Single Mother	0.0747** (0.0325)	-0.0806** (0.0377)	0.349*** (0.0639)	0.312*** (0.0688)	-0.0223 (0.0378)	-0.263*** (0.0482)				
Mother Savings Ownership	0.0797*** (0.0213)	0.425*** (0.0259)	0.198*** (0.0355)	0.700*** (0.0407)	0.0112 (0.0265)	0.130*** (0.0351)	0.0578** (0.0231)	0.435*** (0.0286)	0.157*** (0.0554)	0.372*** (0.0632)
Mother Completed Higher Education	0.448*** (0.0527)	1.044*** (0.0572)	0.571*** (0.0673)	1.092*** (0.0726)	0.1390 (0.0957)	0.838*** (0.1160)	0.450*** (0.0550)	0.996*** (0.0602)	0.473** (0.1910)	1.294*** (0.1990)
Mother Completed High School	0.379*** (0.0307)	0.650*** (0.0360)	0.481*** (0.0448)	0.773*** (0.0508)	0.301*** (0.0434)	0.479*** (0.0554)	0.391*** (0.0326)	0.648*** (0.0388)	0.240*** (0.0918)	0.569*** (0.1010)
Mother Completed Junior High School	0.102*** (0.0277)	0.197*** (0.0344)	0.220*** (0.0448)	0.362*** (0.0524)	0.0542 (0.0356)	0.0913* (0.0477)	0.0978*** (0.0294)	0.182*** (0.0374)	0.156* (0.0838)	0.281*** (0.0947)
Mother's Age	0.0725*** (0.0055)	0.0872*** (0.0067)	0.0716*** (0.0130)	0.0789*** (0.0144)	0.0739*** (0.0068)	-0.0017 (0.0090)	0.0914*** (0.0065)	0.115*** (0.0084)	0.0956*** (0.0146)	0.141*** (0.0172)
Mother's Age Squared	-0.0007*** (0.0001)	-0.0010*** (0.0001)	-0.0006*** (0.0002)	-0.0007*** (0.0002)	-0.0007*** (0.0001)	-0.0003*** (0.0001)	-0.0010*** (0.0001)	-0.0013*** (0.0001)	-0.0009*** (0.0001)	-0.0013*** (0.0002)
Urban Residence	0.366*** (0.0247)	0.602*** (0.0283)	0.491*** (0.0376)	0.768*** (0.0414)	0.267*** (0.0324)	0.423*** (0.0411)	0.374*** (0.0268)	0.586*** (0.0310)	0.322*** (0.0646)	0.692*** (0.0716)
Household Size	-0.492*** (0.0074)	-1.220*** (0.0115)	-0.537*** (0.0134)	-1.305*** (0.0171)	-0.471*** (0.0090)	-1.136*** (0.0190)	-0.478*** (0.0081)	-1.159*** (0.0125)	-0.601*** (0.0201)	-1.603*** (0.0311)
Residing in Java Island	-0.932*** (0.0234)	-1.171*** (0.0274)	-0.913*** (0.0379)	-1.036*** (0.0418)	-0.926*** (0.0299)	-1.357*** (0.0397)	-0.956*** (0.0252)	-1.185*** (0.0299)	-0.771*** (0.0641)	-1.050*** (0.0713)
Having Children	-0.0026 (0.0361)	-0.396*** (0.0413)	-0.196** (0.0955)	-0.693*** (0.0984)	0.0126 (0.0400)	-0.258*** (0.0521)	0.0231 (0.0403)	-0.344*** (0.0464)	-0.0748 (0.0797)	-0.482*** (0.0911)
Number of Children Under Five	-0.244*** (0.0195)	-0.401*** (0.0273)	-0.170*** (0.0312)	-0.227*** (0.0374)	-0.281*** (0.0252)	-0.710*** (0.0624)	-0.248*** (0.0207)	-0.432*** (0.0287)	-0.200*** (0.0605)	-0.287*** (0.1020)

Mother Loan Ownership	0.141*** (0.0545)	0.129* (0.0665)	0.0737 (0.0813)	0.0883 (0.0942)	0.217*** (0.0734)	0.250** (0.0987)	0.142** (0.0579)	0.131* (0.0716)	0.1700 (0.1620)	0.1740 (0.1850)
Total Household Assets	0.527*** (0.0092)	1.103*** (0.0102)	0.556*** (0.0151)	1.192*** (0.0161)	0.515*** (0.0118)	0.918*** (0.0147)	0.517*** (0.0099)	1.093*** (0.0110)	0.631*** (0.0273)	1.225*** (0.0297)
Constant	1.330*** (0.1310)	0.2170 (0.1610)	1.568*** (0.2660)	0.3740 (0.2960)	1.359*** (0.1680)	3.383*** (0.2320)	0.989*** (0.1450)	-0.548*** (0.1850)	0.698* (0.4050)	-1.022** (0.4830)
Observations	178,792	178,792	99,837	99,837	78,955	78,955	148,996	148,996	29,796	29,796

**Note:** Standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Beyond financial behavior, maternal education also emerges as a strong predictor of household economic improvement. Completing higher education increases the likelihood of belonging to the middle class, and the vulnerable class. Similarly, completing high school is associated with better economic outcomes, for the middle class and for the vulnerable class. Completing junior high school also yields positive but smaller effects. These results highlight the strong cumulative advantage provided by higher educational attainment for mothers in enhancing family economic prospects. In terms of demographic characteristics, maternal age exhibits a non-linear relationship with household economic status. Older mothers are more likely to be in better economic classes, while the squared term of age is negative, confirming a concave effect. Lastly, maternal loan ownership shows mixed results. Although mothers with active loans have a higher probability of being in better economic categories in the full sample.

Household location and demographic characteristics also play important roles in shaping economic mobility. Living in an urban area is positively associated with higher economic status, with coefficient values of 0.366 for transitioning into the middle class and 0.602 for entering the vulnerable class, both significant at the 1 percent level. In contrast, residing in Java Island is negatively associated with better economic outcomes, as indicated by negative coefficients of -0.932 for the middle class and -1.171 for the vulnerable class, suggesting potential regional disparities. Household size shows a strong negative relationship with economic status, where larger households are less likely to transition into higher economic classes, reflected by coefficient values of -0.492 for the middle class and -1.220 for the vulnerable class. Similarly, having children reduces the likelihood of economic advancement, particularly for the vulnerable class, with a negative and significant effect. Moreover, the number of children under five years old in the household is negatively associated with economic status, confirming the economic burden of young dependents on household mobility.

Asset ownership within the household strongly correlates with improved economic status. The number of household assets is positively associated with the probability of transitioning into both the middle class and the vulnerable class, with coefficient values of 0.527 and 1.103, respectively, both highly significant at the 1 percent level. These findings emphasize that tangible asset accumulation serves as a critical foundation for achieving upward economic mobility among households, complementing the effects of maternal characteristics and demographic factors discussed earlier.

## 5. Conclusions

This study aimed to analyze two primary objectives: first, to assess the impact of internet usage on the probability of mothers becoming mompreneurs, and second, to evaluate the extent to which mompreneurship improves family welfare. The findings demonstrate that internet access significantly increases the likelihood of mothers engaging in entrepreneurial activities. Internet connectivity enables mothers to initiate small-scale businesses, access basic market information, and create income-generating opportunities that are compatible with their household responsibilities.

Further analysis shows notable differences across family structures. Single mothers are significantly less likely to become mompreneurs compared to non-single mothers, as the urgent need for stable and predictable income often steers them toward formal employment. In contrast, non-single mothers, particularly those with young children, show greater tendencies toward entrepreneurship, using it as a flexible solution to balance caregiving duties with income generation.

In terms of welfare outcomes, the study finds that while mompreneurship helps families escape poverty, it does not yet enable significant upward mobility into middle or higher economic classes. Most mompreneurs operate within a survival framework, constrained by limited business scale and financial resources.

Given these findings, policy efforts should focus on expanding affordable internet access for mothers, particularly in rural and underserved areas. In addition, improving mothers' basic digital and entrepreneurial skills and facilitating access to small-scale microcredit are critical steps. Targeted

support is also needed for single mothers, through initiatives that ease access to entrepreneurial resources while recognizing their greater need for income stability. Strengthening mompreneurship at the micro-level can serve as an effective strategy for building household resilience and promoting more inclusive economic participation.

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### Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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