

Economic Impact of Financial Empowerment: Analyzing Saudi Working Women's Savings, Spendings, and Investment Patterns

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Abstract

As nations strive to achieve sustainable development, growth and equality, understanding the working women's economic behaviors remains imperative. Thus, the main objective of this research is to understand and analyze working women's economic behaviors or financial decision making by their major demographic variables for instance age, education, marital status, occupation, income etc. The study employed a quantitative research design; data were collected through a structured questionnaire administered via simple random sampling to a cohort of working women across diverse sectors of Saudi Arabia. A sample of 405 women participated in the study, ANOVA test and t-test technique samples are used to assess the statistical significance of the parameters. Empirical analysis reveals that education level, occupational sector, and income strata exert statistically significant positive correlations with women's financial behaviors, particularly in spending, saving, and investment practices. These findings underscore the critical role of women's economic agency in uplifting national development goals, offering empirical evidence that equitable access to education and labor market opportunities amplifies fiscal participation and wealth generation. Therefore, these distinct patterns in working women's financial behaviors, particularly the central role of income and occupation in driving saving and investment, while maintain expenditure, directly translate into the broader Economic Impact of Financial Empowerment of Women. The insights hold substantive policy relevance for stakeholders in developing economies for their macroeconomic and sustainable development.

Keywords: Economic Development, Expenditure, Financial Empowerment, Saving, Investment, Working Women.

Introduction

As per the report of Saudi Arabia's Vision 2030, it has prioritized women's empowerment as a cornerstone of its economic and social reform agenda. Key changes since 2016, such as granting women the right to drive, travel independently, and access legal systems equitably, underscore a significant societal shift (1). A sharp decline in female unemployment, as captured by the Women's Labor Force Survey, signals major gains for Saudi women in the workforce. This improvement was particularly pronounced in Q4 2022, with the rate falling to 15.4%—well below the levels seen in 2021, 2020, and 2019 (2). These policy reforms have directly catalyzed a significant rise in female labor force participation and their advancement into leadership positions. This trajectory is expected to continue as part of the economic diversification agenda, further amplifying women's contributions to the national economy. The efficacy of these measures is

quantitatively demonstrated by the dramatic increase in female labor force participation, which rose from 17% in 2017 to 35.5% in 2023. Notably, this achievement has already exceeded the original Vision 2030 target of 30%, prompting the establishment of a more ambitious new goal of 40% (1). In the second quarter of 2024, the labor market indicators in the Kingdom showed an increase in the labor force participation rate for Saudi females by 0.8 percentage points, reaching 36.2%. Additionally, the employment to population ratio of Saudi females increased by 0.5 percentage points reaching 31.3% (3). Ammer and Aldhyani reported that Saudi Arabia's Vision 2030 framework is catalyzing a strategic transition toward a sustainable economic model, predicated on diversifying national revenue streams and preparing for a post-oil era. The successful execution of this structural transformation is contingent upon the societal capacity to adapt

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socioeconomic changes (4). According to Forbes Middle East report, household savings constitute a fundamental pillar for stimulating sustained economic growth, serving as a critical foundation for national development and reducing dependency on external financing. Representing a substantial component of national savings in both developed and developing economies, they are essential for long-term economic stability. Empirical evidence from Saudi Arabia, however, indicates a concerning trend. The General Authority for Statistics (GASTAT) conducts a quinquennial Household Income and Expenditure Survey, with the 2018 iteration revealing a pronounced decline in household savings. This trajectory is primarily attributed to a significant divergence between income growth and consumption patterns; between 2007 and 2018, the average monthly household income saw a modest increase of 5.3% (rising from \$3,749 to \$3,946), while average monthly consumption expenditures grew precipitously by 38.6% (from \$2,801 to \$3,882).

Consequently, Saudi Arabia's household saving rate was recorded at a critically low 1.6% in 2018, ranking among the lowest in the G20 and falling substantially below the global benchmark of 10% deemed necessary for long-term financial resilience. This phenomenon is underpinned by a confluence of factors, including inadequate financial literacy, a scarcity of disaggregated savings data in secondary sources, and a limited availability of diverse savings products within the financial market (5,6).

Authors Ammer and Aldhyani mentioned again that employment has increased very rapidly, effective management and rationalization of personal expenditure are critical for enabling subsequent savings and investment. This entails deliberate consideration of both the nature of purchases and the allocation of financial resources. Furthermore, this objective aligns with the national economic strategy outlined in Vision 2030, which explicitly targets a household savings rate of 10% to enhance overall quality of life. This benchmark is consistent with prevailing global standards for fostering long-term financial security and economic resilience (4). KPMG's Analysis of Household Savings in Saudi Arabia report added that was published in 2020, implementing policy initiatives that are driven by

behavioral characteristics of households can help improve the country's saving rate (5). In addition, a study of World Bank stated that it is imperative to understand women's income and expenditure pattern in Saudi Arabia, as there is a scarcity of research for kingdom on the critical issue of expenditure, domestic savings, and investment pattern. Hence, this is a pioneering study exploring important aspects of the economic development. Because Saudi women contribute significantly to the country's economy. Reforms, such as allowing women to work in previously male-dominated sectors, have led to their increased participation in the labor market. Their engagement positively impacts the GDP and overall economic growth (6, 7). Empowering women is a central part of this vision. By providing equal opportunities, the government encourages women to participate in various fields, including leadership and entrepreneurship (8). Because based on the report of Labor Force Survey (Fourth Quarter 2022) General Authority for Statistics, shows that more women in Saudi Arabia are finding jobs. The number of working women compared to the total population rose from 27.6% to 30.4% in just one year. Also, the number of women who are either working or looking for work increased slightly to 36%. Also, Al-Rashdi and Abdelwahed argued that this growth in women working in both government and private companies is a major change. It is helping to fight poverty and is also boosting the country's economy (9).

Based on the above background, the principal objective of this study is to analyze the impact of demographic factors on the financial behaviors (saving, spending, and investment) of working women.

Above authors further mentioned that the Saudi Arabian government has launched numerous initiatives to advance women's empowerment, focusing on entrepreneurship, legal rights, and public involvement as key components of national progress. Through comprehensive regulatory and policy reforms, women participating across all economic sectors. Their inclusion is considered essential for unlocking the nation's full economic potential and strengthening competitiveness, both within the hydrocarbon industry and broader markets, in alignment with the goals of Vision 2030. Furthermore, in terms of Saudi women, they

exhibit high levels of self-efficacy and ambition. They display confidence in their ability to complete challenging tasks, achieve personally significant outcomes, and persevere through obstacles. This self-assurance supports their belief that they can succeed in their endeavors and perform effectively even under difficult conditions (9). Authors depicted those key economic factors—including household income, expenditure patterns, savings, and investments in human capital—are fundamental to enhancing women's empowerment. This empowerment manifests across three critical dimensions: economic independence, influence within the family, and socio-cultural autonomy. These factors are interconnected. For instance, from an economic perspective, higher income and the ability to save provide women with greater financial security. This economic strength, in turn, strengthens their decision-making power at home (familial empowerment) and increases their standing and participation in community life (socio-cultural empowerment). Ultimately, the combination of social, political, economic, and psychological factors is essential for comprehensively strengthening women's status in all societies (9). Khan et al. write that Nobel Laureate Ester Duflo makes a compelling case that when women become empowered – have a voice in making important economic decisions of their households. A myriad of empirical papers have documented a positive association between women's earning and their authority over spending in traditional homemaker areas such as food, and clothing in poor nations (10). Moreover, Batool and Batool found that Empirical studies shows that education, employment, and personal income are key determinants that collectively enhance a woman's economic bargaining power within her household. This influence, however, is not absolute; research suggests that even women from middle and upper-class backgrounds may experience limited autonomy in domestic decision-making if they possess lower levels of education or are in less secure employment. Conversely, a woman's economic agency is significantly strengthened when she is economically active, earns a higher income, and maintains personal savings. The act of contributing financially to the family not only increases her economic power but also substantially strengthens her bargaining position

in household matters. This control over economic resources is a critical mechanism that directly supplements and enables her overall empowerment (11). A myriad of empirical papers have documented a positive association between women's earning and their authority over spending in traditional homemaker areas such as food, and clothing in poor nations (10).

A review of existing research by Batool and Batool confirms that education and personal income are direct sources of women's empowerment but also contribute indirectly by strengthening self-esteem. While the importance of education has been widely studied, its indirect effect—through both income and self-esteem—on empowerment remains unexplored. Education improves employment opportunities and fosters greater self-esteem, independence, confidence in decision-making, and awareness of rights—all of which support the overall empowerment of women (11). Saudi women recognize the significant economic advantages provided by microfinance initiatives, loan accessibility, and employment opportunities. These resources directly enhance their purchasing power and foster greater economic stability. Furthermore, the consequent rise in financial earnings leads to a substantial increase in personal savings. This economic progress, coupled with strong confidence in the government's social support systems, contributes to their overall personal satisfaction and well-being (9).

Moreover, Ali *et al.* mentioned that Saudi society is undergoing a rapid transformation, supported by a series of strategic government initiatives designed to increase women's involvement in the labor market. These efforts have created new opportunities, and Saudi women are increasingly motivated to contribute actively to the Kingdom's socioeconomic progress. (12). Authors KJ and PS argued, as economic development is among the most vital factors affecting the quality of life that people lead in a country. Three variables that measure the growth of an economy are Income, Saving and Investment (13). There miscellaneous literature existing globally has been reconnoitered to recognize the individual's economic behaviors (14-23), these studies analyzed by major demographic variables for instance age, education, marital status, occupation, income etc. to assess the economic or financial decision making.

Hence, this study has formulated the following hypotheses based on related research:

H₀₁: Age has a significant influence on saving and investment.

H₀₂: Marital status has a significant influence on saving and investment.

H₀₃: Education status has a significant influence on saving and investment.

H₀₄: Occupation has a significant influence on saving and investment.

H₀₅: Income level has a significant influence on saving and investment.

Methodology

Sampling and Data Collection

This choice was made due to our focus on prospective early adopters within the target demographic. The researcher employed convenience sampling as the sample method. The completion of the form took place within the time frame of April 2024 to April 2025, and it was conducted through an online platform that ensured anonymity of the participants. A total of 405 forms were collected, with 14 forms being excluded due to incomplete information. The design of the survey questionnaire was informed by the literature review, and the research model was developed from them. Based on various research, author has divided the Questionnaire into three major parts; 1. Demographic question that consists of age, gender, nationality, city, qualification, major, marital status etc., 2. Occupation related question that consists of nature of job (Business, Part-time job, Full-time private job, Full-time government job , job sector (Primary, Secondary, Tertiary, Quaternary sector and its subsectors) current profile etc. included, 3. Third part of questions are focused on Income level, budget making, expenditure pattern, influencing factors of expenditure, saving and investment pattern as well as loan etc.

Measurement of Variables

The MCQs and Likert scale has been employed to assess the items pertaining to each characteristic,

with a range of responses from 1 (indicating strong disagreement) to 7 (indicating strong agreement). The variables employed in this study were modified from prior research to suit the specific circumstances of this investigation.

Data Analysis

The software package IBM-SPSS was employed in this study. A Study on Validity and Reliability Applying the varimax-rotation method with Kaiser Normalization (table 6), that provides the outcomes of the major component analysis for each of the chosen items. KMO represent the sample adequacy of data, if variable value more than 0.7 it means the variable represent the sample data of the study. In this study, data was analysed using multivariate regression and correlation. Study focused for correlations between all the research variables by analysing the data that has obtained. Data on the effects of saving, investing, and spending variables became crystal evident as a result (table5). The research hypotheses were tested through utilizing a ANOVA test, and t-test technique samples to assess the statistical significance of the parameters. The use of ANOVA test, and t-test are deemed suitable in cases when the primary aim of the research is to forecast and ascertain the factors that influence Saudi women's savings, spending, and investment patterns.

Results

Employing quantitative data investigation, study looked at all the survey results. Using an online questionnaire in Google Forms, 391 people completed the survey. To get the study's conclusions, the data was collated and analyzed. The results' specifics are laid forth in the tables below.

This section shows the sample participants of the respondents who filled out the questionnaires. Table 1 summaries the responses based on demographic characteristics that were chosen for the studies. The data presented here is based on primary sources.

Table 1: Baseline Data of the Participants (N= 391

Basis	Categories	F	%
Gender	Female	391	100
Nationality	Saudi	323	82.60
	Non-Saudi	68	17.40
Marital Status	Unmarried	127	32.48

Age Group	Married	112	28.64
	Widowed	78	19.95
	Divorced	74	18.93
	18-24	78	19.94
	25-34	157	40.15
	35-44	105	26.86
	45-54	35	8.96
Educational Qualification	55 and above	16	4.09
	High School	27	6.91
	Intermediate	38	9.72
	Bachelors	178	45.53
	Masters	97	24.80
Occupational Status	Ph. D	51	13.04
	Business	78	19.94
	Part-time job	91	23.27
	Full-time private job	105	26.86
	Full-time government job	117	29.93
Monthly Income	Above 3000 SAR	41	10.48
	Above 5000 SAR	98	25.06
	Above 10000 SAR	84	21.48
	Above 20000 SAR	112	28.65
	Above 25000 SAR	56	14.33

Based on covering categories such as Gender, Nationality, Age group, educational attainment, occupation status, and monthly income, among other pertinent facts, Table-1 provides a summary of the contributors' demographic traits for the female respondents.

According to the statistics, out of the total number of responses, 391 were female. According to the findings Saudi (82.60 %) and non-Saudi (17.40 %) population represent the Nationality. As per findings on the bases of Age group, a significant proportion of participants (40.15) fell within the age range of 25 to 34. Additionally, 19.94 % of respondents were aged between 18 to 24, while 26.86 % were the age of 35 to 44. Furthermore, 8.96 % of females surveyed were in the age bracket of 45 to 54 years old. Lastly, 4.09 % of females surveyed were in the age bracket of 55 and above. Following the completion of their studies, 6.91% of

the participants reported having completed high school, 9.72% having passed intermediate, 45.5% having graduated, 24.80% having earned a master's degree, and 14.04% having earned a doctorate.

Based on their occupation, those surveyed are divided into four groups: those who work for the company directly (19.94%), those who work part-time (23.27%), those who work full-time for the private sector (26.66%), and those who work for the government (26.66%).

Afterwards the female people's monthly income, 10.48% of participants reported having an income of more than 3000 SAR, 25.06% disclosed having an income of more than 5000 SAR, 21.48% disclosed having an income of more than 10,000 SAR, 28.55% stated having an income of more than 20,000 SAR, and 14.33% stated having an income of more than 25000 SAR.

Table 2: Group Statistics

Demographic	Item	Mean	Standard Deviation
Marital Status	Saving	3.8	0.67
	Expenditure	2.7	0.32
	Investment	4.1	0.54
Age	Saving	4.5	0.63
	Expenditure	3.0	0.28
	Investment	4.4	0.58
Income	Saving	5.5	0.57

Occupation	Expenditure	3.6	0.21
	Investment	4.4	0.71
	Saving	4.9	0.59
	Expenditure	3.2	0.30
Education	Investment	5	0.48
	Saving	4.7	0.69
	Expenditure	3.2	0.21
	Investment	4.8	0.74

Investors' positive reactions to investment avenues are shown by mean values greater than 3.5, as shown in Table 2 which includes all components in each construct. In this study, the researcher utilized a seven-point Likert scale that goes from "Strongly Disagree" (1) to "Strongly Agree" (7). That is to say, the statements all provide a thorough justification of the theoretical assumptions they are based on.

Investment is an asset acquired or invested in to build wealth and save money from the hard-earned income or appreciation. Investment is primarily to obtain an additional source of income or gain profit from the investment over a specific period. In the case of KSA, women have become more involved

in investments, especially as the country has progressed towards gender equity in the past few years. Saudi Vision 2030, among other initiatives, has provided Saudi women more opportunities to participate in business, finance and investment than ever before.

Expenditure patterns of Saudi women can vary according to factors such as marital status, age, income, occupation, location, and personal preferences; however, several general trends are visible in Fashion and Beauty Products, Jewelry, and Health and Fitness have developed in recent years, particularly in the wake of Saudi Arabia's economic and social transformation.

Table 3: How Much Do You Save Monthly?

Monthly saving	No of female
0 %	0
10-20%	121
20-40 %	78
30-40 %	51
40-60 %	44
60-80 %	28

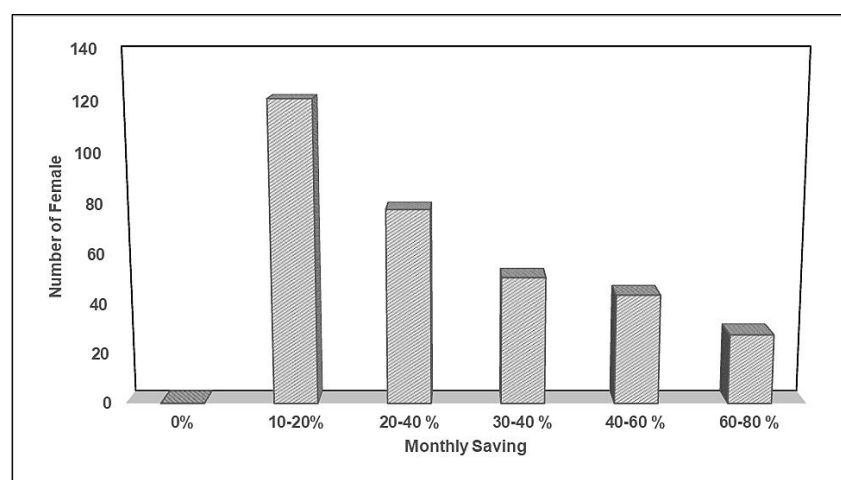


Figure 1: How Much Do You Save Monthly?

The image Figure 1 and Table 3, effectively illustrates the distribution of savings habits among the surveyed females. The combination of the table and the bar graph makes the data easy to

understand and compare. The figure1 displays data related to monthly savings percentages among a group of females. A simple table-3 listing the percentage ranges of monthly savings (e.g., 10-

20%, 20-40%, 40-60%, 60-80%) and the corresponding number of females falling within each range. A visual representation in table-3 of the same data, with the x-axis showing the percentage ranges and the y-axis showing the number of females. The height of each bar corresponds to the number of females in that savings range. The largest number of females (121)

saves between 10-20% of their monthly income. As the percentage of monthly savings increases, the number of females in each bracket generally decreases. This suggests that fewer women are able to save larger percentages of their income. No females reported saving 0% of their monthly income.

Table 4: Investment of Money

Monthly Investment	No of Female
I don't invest	17
I invest in bank's saving account/ fixed deposit etc	113
I invest in gold or other valuables	87
I invest in business	65
I invest in real estate	45

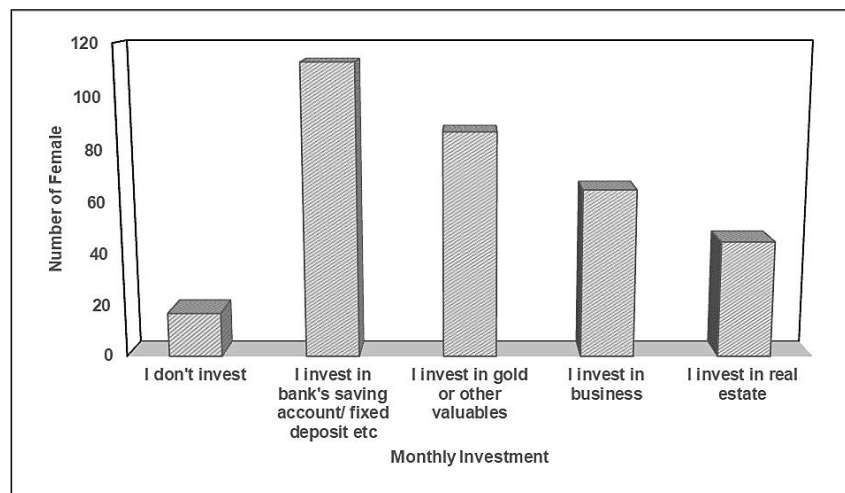


Figure 2: Investment of Money

In Figure 2 corresponding bar chart visualizing the investment choices of a group of females. X-axis (Horizontal): Displays the different investment options, matching the "Investment" column in the table. Y-axis (Vertical): Represents the "No. of female"

Table 4 presents under, I don't invest: 17 females reported not investing at all. I invest in bank's saving account/fixed deposit etc.: 113 females invest in these traditional banking products. I invest in gold or other valuables: 87 females invest

in gold or other valuables. I invest in business: 65 females invest in businesses. I invest in real estate: 45 females invest in real estate.

The most popular investment choice among the females surveyed is bank savings accounts or fixed deposits, with 113 respondents. Not investing at all is the least common option, with only 17 females reporting this. Gold and other valuables are also a popular investment choice, followed by business and then real estate.

Table 5: Correlation between Variables

Items	Saving	Expenditure	Investment	Marital status	Age	Education	Income	Occupation
Saving	1							
Expenditure	-0.32	1						
Investment	0.61	-0.21	1					
Marital status	0.43	0.11	0.19	1				
Age	0.31	0.39	0.11	0.09	1			

Education	0.42	0.22	0.44	0.26	0.13	1		
Income	0.67	0.54	0.30	0.20	0.39	0.24	1	
Occupation	0.56	0.29	0.19	0.31	0.41	0.32	0.18	1

** Correlation is significant at the 0.01 level (2 tailed)

*Correlation is significant at the 0.05 level (2 tailed)

Using (SPSS), the data was analyzed using multivariate regression and correlation. We looked for correlations between all of the research variables by analyzing the data that had obtained. In Table 5, effects of saving, investing, and spending variables became crystal evident as a result. Correlation coefficients range from -1 to +1.

+1: Perfect positive correlation (as one variable increases, the other increases proportionally). **-1:** Perfect negative correlation (as one variable increases, the other decreases proportionally). **0:** No linear correlation.

In table 5, the correlation between "Saving" and "Expenditure" is -0.32, indicating a moderate negative correlation. As savings increase, expenditure tends to decrease somewhat. The correlation between "investment" and

"Expenditure" is -0.21, indicating a low negative correlation. As investment increase, expenditure tends to decrease somewhat. The correlation between "saving" and "investment" is 0.66, indicating a high positive correlation. As investment increase, saving tends to increase somewhat.

On the bases of Age, Marital status, and education showing less positive relationship, but income and occupation showing high positive relationship. On the bases of Marital status, Age and education are showing less positive relationship, but income and occupation showing high positive relationship. On the bases of education, Age and marital showing less positive relationship, but income and occupation showing high positive relationship.

Table 6: KMO and Bartlett's Test

Constructs	No. of Items	Cronbach alpha	KMO of Adequacy	Measure Sample	Bartlett's Test of Sphericity Chi-square	Bartlett's Test of Sphericity Significance
Marital Status	3	0.78	0.765		711.65	0.00
Age	3	0.754	0.743		611.22	0.00
Income	3	0.81	0.711		645.22	0.00
Occupation	4	0.72	0.780		598.45	0.00
Education	4	0.70	0.772		690.70	0.00
Saving	3	0.79	0.811		587.90	0.00
Expenditure	5	0.83	0.711		721.98	0.00
Investment	4	0.85	0.766		765.82	0.00

A Study on Validity and Reliability Applying the varimax-rotation method with Kaiser Normalization. Table 6 details the outcomes of the main component analysis for each of the chosen items. KMO represent the sample adequacy of data, if variable value more than 0.7 it means the variable represent the sample data of the study. In this table -6, all the demographic variable and saving, expenditure and income showing KMO value more than 0.7. Several instances of KMO values represent as follows Marital Status (0.765), Age (0.743), income (0.711), Occupation (0.780), Education (0.772), Saving (0.811), Expenditure (0.711), and Investment (0.766).

Cronbach's alpha is a measure of internal consistency, that is, how closely related a set of items are as a group. It is considered to be a measure of scale reliability. Several instances of Cronbach's alpha value represent as follows Marital Status (0.78), Age (0.754), income (0.81), Occupation (0.72), Education (0.70), Saving (0.79), Expenditure (0.83), and Investment (0.85).

Bartlett's test tests the hypothesis that our samples have equal variances. If the Chi- Square test is significant ($p < 0.05$), then we can reject the null hypothesis and assume that variances are unequal. In table 6, all the variables showing significance value.

Table 7: Impact of Income on the Saving of Working Female

Hypothesis	Path	B	t-value	p-value	Result
Ho1	Income of working female → Saving of working female	0.32	2.61	P≤0.005	Supported

The table 7 results examining how income of working female effects the saving of working female. In statistical analysis, particularly regression, beta coefficients indicate the strength and direction of the relationship between variables. A value of 0.32 suggests a positive

relationship. As income of working female increases, same way the saving of working female also tends to increase. T-statistic, which is used to determine the statistical significance. A t-value of 2.61 is relatively high, suggesting a strong relationship.

Table 8: Impact of Income on the Investment of Working Female

Hypothesis	Path	B	t-value	p-value	Result
Ho2	Income of working female → investment of working female	0.39	2.98	P≤0.005	Supported

The Table 8 results examining how income of working female effects the investment of working female. In statistical analysis, particularly regression, beta coefficients indicate the strength and direction of the relationship between variables. A value of 0.39 suggests a positive

relationship. As income of working female increases, same way the investment of working female) also tends to increase. T-statistic, which is used to determine the statistical significance. A t-value of 2.98 is relatively high, suggesting a strong relationship.

Table 9: Marital Status as an Independent Variable by using one-way ANOVA

Factors	Sum of Squares	D.F	Mean Square	F	Sig.
Saving	Between Groups	4.690	2	2.345	6.084 P<0.01
	Within Groups	142.617	389	276	
	Total	147.306	319		
Expenditure	Between Groups	11.763	2	5.882	33.322 P<0.01
	Within Groups	73.327	389	.142	
	Total	85.091	319		
Investment	Between Groups	2.096	2	1.048	11.280 P<0.01
	Within Groups	79.730	389	.155	
	Total	81.827	319		

As seen in the ANOVA results in Table 9, Ho1 is accepted. With a p-value (probability value) below 0.005, the value becomes statistically significant.

Savings, spending, and investment have varied greatly according to status, as shown by these results.

Table 10: Age as an Independent Variable using one-way ANOVA

Factors	Sum of Squares	D.F	Mean Square	F	Sig.
Saving	Between Groups	4.690	2	2.345	6.931 P<0.01
	Within Groups	142.617	389	276	
	Total	147.306	391		
Expenditure	Between Groups	11.763	2	5.882	1.507 P>0.05
	Within Groups	73.327	389	.142	
	Total	85.091	391		
Investment	Between Groups	2.096	2	1.048	19.794 P<0.01
	Within Groups	79.730	389	.155	
	Total	81.827	391		

In accordance with the outcomes of the ANOVA in Table 10, Ho2 is approved. The value is significant as the p-value is below 0.005. These outcomes

indicate that saving and investment considerably vary with age. Conversely, the expenditure is not significant as the p-value exceeds 0.005.

Table 11: Education as an Independent Variable using one-way ANOVA

Factors	Sum of Squares		D.F	Mean Square	F	Sig.
Saving	Between Groups	4.690	2	2.345	7.280	P<0.01
	Within Groups	142.617	389	276		
	Total	147.306	391			
Expenditure	Between Groups	11.763	2	5.882	19.190	P<0.01
	Within Groups	73.327	389	.142		
	Total	85.091	391			
Investment	Between Groups	2.096	2	1.048	4.083	P<0.01
	Within Groups	79.730	389	.155		
	Total	81.827	391			

As seen in the ANOVA results shown in Table 11, Ho3 is accepted. With a p-value (probability value) below 0.005, the value becomes statistically significant. The results show that education has a major impact on spending, saving, and investment.

Table 12: Occupation as an Independent Variable using one-way ANOVA

Factors	Sum of Squares		D.F	Mean Square	F	Sig.
Saving	Between Groups	4.690	2	2.345	3.194	P<0.01
	Within Groups	142.617	389	276		
	Total	147.306	391			
Expenditure	Between Groups	11.763	2	5.882	21.679	P<0.01
	Within Groups	73.327	389	.142		
	Total	85.091	391			
Investment	Between Groups	2.096	2	1.048	5.007	P<0.01
	Within Groups	79.730	389	.155		
	Total	81.827	391			

In accordance with the ANOVA results in Table 12, the null hypothesis Ho4 is accepted. The outcome is significant as the p-value is below 0.005. These outcomes indicate that saving, expenditure, and investment possess dramatically varied by occupation.

Table 13: Income as an Independent Variable using one-way ANOVA

Factors	Sum of Squares		D.F	Mean Square	F	Sig.
Saving	Between Groups	4.690	2	2.345	13.084	P<0.01
	Within Groups	142.617	389	276		
	Total	147.306	391			
Expenditure	Between Groups	11.763	2	5.882	5.320	P<0.01
	Within Groups	73.327	389	.142		
	Total	85.091	391			
Investment	Between Groups	2.096	2	1.048	7.089	P<0.01
	Within Groups	79.730	389	.155		
	Total	81.827	391			

In accordance with the ANOVA results in Table 13, the null hypothesis Ho5 is accepted. The outcome is significant as the p-value is below 0.005. These outcomes indicate that saving, expenditure, and investment possess dramatically varied by income.

Discussion

Multivariate analysis reveals key relationships between financial behaviors of working female. Saving and Expenditure exhibit a moderate negative correlation ($r = -0.32$), indicating that higher savings tend to coincide with lower spending, as this outcome is consistent by a study (4), that effective management and rationalization of personal expenditure are critical for enabling subsequent savings and investment. Similarly, Investment and Expenditure show a weaker negative correlation ($r = -0.21$). Conversely, Saving and Investment shows a strong positive correlation ($r = 0.66$), meaning increases in investment are associated with increases in saving. Demographic factors (Age, Marital Status, Education) showed weaker positive relationships with these financial variables, while Income and Occupation demonstrated stronger positive associations as this result supported by a few researches (9-11) that higher income and the ability to save provide women with greater financial security as well as education enhances employment opportunities and fosters greater self-esteem, independence, confidence in decision-making, and awareness of rights—all of which support the overall empowerment of women.

Regression analysis showed that higher income is linked to more saving and investment, and both results are statistically significant. ANOVA tests revealed that financial behaviors like saving, spending, and investing differ across demographic groups. Socioeconomic status, age, education, occupation, and income level all have a significant impact on these behaviors, with p-values below 0.005. However, age did not significantly affect expenditure.

Conclusion

The study uncovers specific tendencies in the financial behaviors of working females. Key findings indicate a robust positive link between saving and investment, while both saving and investment displays negative relationships with expenditure. Income has emerged as a substantial determinant, forecasting higher levels of both saving and investment. Furthermore, demographic factors play a crucial role. Income level and occupation exhibits strong positive relationships with financial behaviors and are related with significant variations in saving, expenditure, and

investment across groups. While age significantly influences saving and investment (but not expenditure), marital status and education show weaker overall relationships. These results highlight the interconnected nature of saving, investment, and spending, heavily influenced by income, occupation, and socioeconomic status. Distinct patterns in the financial behaviors of working women, especially the influence of income and occupation on saving and investment while maintaining expenditure, directly contribute to the broader economic impact of women's financial empowerment. Increasing women's income and access to higher-skilled occupations fundamentally modifies these behavioral determinants. This process promotes economic growth by expanding investment capacity, improving household financial stability, and facilitating more efficient resource allocation within the economy. These outcomes underscore the essential relationship between women's financial empowerment and broader macroeconomic benefits. Therefore, these distinct patterns in working women's financial behaviors, particularly the central role of income and occupation in driving saving and investment, while maintain expenditure, directly translate into the broader Economic Impact of Financial Empowerment of Women. By enhancing female income and access to higher-skilled occupations, financial empowerment fundamentally alters these key behavioral drivers. Ultimately, this drives economic growth through increased investment capacity, enhanced financial stability for households, and a more efficient allocation of resources within the economy, solidifying the critical link between empowering women financially and obtaining wider macroeconomic benefits.

Policy Suggestions and Direction for Future Research

The Saudi vision 2030 incorporates sustainable economic leadership for Saudi women with a mission to stimulate the economic participation of women in all fields of public and private associations and to provide women with opportunities for entrepreneurship and self-employment and the objective is to enhance the participation of women in the labor market, the active role of women in trade and investment in the private sector and enhance women's banking

capabilities (25). In this context policies can be more focused on programs such as wage supplements, skills training for higher-paying jobs, subsidized childcare to reduce employment barriers etc. As saving and investment show a strong positive correlation ($r=0.66$), suggesting they often increase together. Therefore, policies related to financial agencies can promote more accessible financial products that combine saving mechanisms with simple; low-barrier entry investment options financial literacy programs should emphasize the synergy between saving and investing. In terms of Education, policy should also design age-specific financial education and planning services. Focus investment guidance and long-term saving products (like pensions) towards older working women, while younger women might benefit more from budgeting tools alongside foundational financial education. As job-holder women in developing countries are now becoming aware of making investment in shares mutual funds, insurance and fixed deposits, however, the aged women prefer investment in the real estate. So, financial institutions must introduce some schemes of investment based on segmentation of the age and marital status to acquire more funds (24).

Future research should focus on working women and address existing knowledge gaps identified in related studies. Researchers are encouraged to disaggregate demographic variables such as age, marital status, and income to analyze non-linear relationships and intersectional effects. Additionally, studies should investigate the influence of financial instruments on savings behavior, examine behavioral and psychological determinants, and compare urban and rural patterns in savings and investment.

Limitations of the Study

This study encountered a limitation that can be addressed in future studies. as researcher received adequate responses to make a good study, however, more samples were expected. The major reason behind this is a voluntarily response to a survey. and respondents were not forced to fill the questionnaire.

Abbreviations

ANOVA: Analysis of Variance, G20: Group of Twenty, GASTAT: General Authority for Statistics, GDP: Gross domestic product, KMO: Kaiser-Meyer-

Olkin, KPMG: Klynveld Peat Marwick Goerdeler, KSA: Kingdom of Saudi Arabia, MCQ: Multiple Choice Question, SPSS: Statistical Package for the Social Sciences.

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Author Contributions

The author confirms sole responsibility for entire preparation of manuscript.

Conflict of Interest

The authors declare that they have no conflicts of interest to report regarding the present study.

Declaration of Artificial Intelligence (AI) Assistance

The authors declare that they did not use AI-assisted tools (ChatGPT, OpenAI, etc) during the writing process.

Ethics Approval

Consent was obtained from all survey participants, ensured voluntary participation no respondents under the age of 18 were included. Data collected was completely anonymized.

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