# Indian Households Finance: An analysis of Stocks vs. Flows- Extended Abstract

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#### Abstract

How do households allocate their income across different financial assets? Is it governed by culture or rational choice or both? Past studies on India have highlighted that households have low investment in financial assets but they invest heavily in gold and real estate. Using the CMIE Households Consumer Pyramids data, we show that while households may hold high stock of gold and real estate, but in terms of flows, a majority of households choose to invest in financial assets. This reflects that household investments decisions vary distinctly along the intensive and extensive margins. But what explains this behavior? We show that households continue to accumulate gold or real estate but use basic financial assets in transition to purchase these other assets. Using district level rainfall shocks as a source of exogenous variation in household incomes, we find that one positive rainfall shock (yearly frequency) increases households' likelihood of investing in all assets. However, two consecutive positive rainfall shocks decreases households' likelihood of investing in financial assets, while increasing their likelihood of investing in gold and real estate.

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### 1 Introduction

How do households allocate their income across different financial assets? Is it governed by culture or rational choice or both? The Household Committee Report published by RBI (2017) shows that a significant portion of household wealth is locked in physical assets (gold and real estate) and significant welfare gains can be achieved if Indian households balance their portfolio like their counterparts in other developed/developing countries.<sup>1</sup>

While this is a valid observation on the intensive margin, there is no discussion on the household behavior in asset portfolio choice on the extensive margin. Like most asset portfolio choice literature, the analysis in the Household Finance Committee report was also restricted to the intensive margin, given that data on household wealth holdings is mostly available only on stocks. Having information on stock of assets can hide current trends in asset choices, since changes in flows can take a long time to get reflected in the data on stocks. Thus, using stock data to understand the financial landscape in case of developing countries will completely miss transitory behavioral shift among households.

To address this limitation, we revisit the household asset choice problem using information on the extensive margin. We utilize a new database on Indian households called the CMIE Households Consumer Pyramids to answer the question on current asset allocation of households. This data is an unbalanced panel and covers three years and four months over ten survey rounds (2014-2017). It provides a large sample of households which are followed over time and can be used to examine their preferred asset allocations, in terms of flows.

The Consumer Pyramids data does not give us information on the total investment in any period, but we know whether a household invested in a particular asset class or not. Using this, we measure household investments in

<sup>&</sup>lt;sup>1</sup> See RBI Report of the Household Finance Committee, 2017.

various assets on the extensive margin. We classify assets into four groups-gold, real estate, financial assets and risky assets. While Fixed Deposit, Life Insurance, Post Office Savings, Kisan Vikas Patra etc are clubbed under financial assets, shares and mutual funds are covered under risky assets. Roughly 65% of the households invested in at least one asset during the three years and four month period of the data coverage. The results suggest a very different picture on the portfolio choice of Indian households on the extensive margin.

In the first part of the paper we focus on understanding the trends and stylized facts for households along the life-cycle and for different income quintiles. The major findings are as follows. First, asset choice for different age or income groups seems very similar on the extensive margin. Second, out of those households that invest, more than 50% choose to save only in financial assets. Third, investment in physical assets (gold and real estate) is still high among households but those who invest in physical assets, also invest in financial assets. In fact, the share of households investing in all three asset classes i.e. gold, real estate and financial assets, is second highest, after the share of those who only invest in financial assets. Fourth, households investing only in gold or in real estate are very few in number. These observations suggest that although most households that invest in assets hold a higher proportion of their wealth stock in gold and real estate, a majority of such households also invest in financial assets at least in the short run. Finally, risky investment in stocks and mutual funds is done only by a meagre number of households. This implies that participation in most asset markets is not a big hurdle, except in the case of risky assets.

The major takeaway from these results is that the households do invest in financial assets, at least on the extensive margin. Also, the investment in gold and real estate is done by those households who have already invested in some sort of financial asset. This implies that households are not as disconnected from financial assets as one would think by looking through the data available

on intensive margin.

In the second part of the paper we try to understand the mechanism that generate this household behavior on the extensive margin. In particular, we use rainfall shocks as a source of exogenous variation to household incomes.<sup>2</sup>

Using a linear probability model we find that a single positive rainfall shock (yearly frequency) increases the probability of a household to buy any financial asset - basic financial asset, gold or real estate. This holds true across all income quintiles, suggesting that a temporary positive shock to incomes induces households to purchase all types of assets. However there is no significant impact of this shock on participation in risky financial assets.

On the other hand in case of two consecutive positive income shocks, which can be considered as a persistent shock to incomes (or momentum effect), the asset choices are very different. We find that after two consecutive positive income shocks the probability of buying basic financial assets falls, but the probability of buying gold or real estate goes up. This result implies that households continue to desire accumulating gold or real estate, but use basic financial assets as a transitory asset to facilitate future purchases of gold or real estate. We also find similar increases in the probability of purchasing durable goods, thereby suggesting the presence of consumption smoothing motives. There is however no significant effect of persistent income shocks on risky financial assets.

#### 2 Data

As mentioned in the introduction, the household level Consumer Pyramid Data from CMIE is used for most of the analysis in this paper. CMIE conducts this survey every four months since May 2014, thus giving us three rounds of survey each year. For this paper, We use ten rounds of data span-

 $<sup>^2</sup>$  For this, we merge the Consumer Pyramids database for the period 2014 and 2017, along with district level data on rainfall.

ning from May 2014-August 2017. The survey covers around 174 thousand unique households during this time, giving us more than 1.25 million observations. Although, it is an unbalanced panel, it still follows more than 40,000 households each period, which can be leveraged to understand the investment behavior at the household level.

Within the consumer pyramids data, we use the "Household Amenities, Assets & Liabilities" section of the survey to construct our main variables of interest. We use the information from survey questions like "Has saved in Gold" to construct our main variable of interest. If a household has bought gold in the four months preceding the survey, then this variable takes a value 1, otherwise 0. Similarly there are questions on other assets which we use to construct our main variables of interest. Instead of using each individual asset (as reported under various questions), separately, we combine assets to construct four major classes of assets- gold, real estate, financial assets and risky assets.

While gold and real estate purchases are covered under one question, the other two asset classes combine a few assets together. Fixed Deposit, Life Insurance, Post Office Savings and Kisan Vikas Patra are put together under the financial asset class. These can be considered as basic financial assets, both in terms of geographic coverage as well as household familiarity. We find that Fixed Deposit, Life Insurance and provident fund are the three major investments. While around 2/5th of the households invested in the first two, around 1/4th invested in provident fund. The last asset class – risky assets comprises of shares and mutual funds and has a very low coverage among Indian households.

In the last section of this paper, we use rainfall shocks at the district level to construct exogeneous income shocks for households. We use rainfall data from European Centre for Medium-Range Weather Forecasts (ECMWF) for the period 1980-2018 to construct the rainfall shock variable at an yearly frequency. The data is reported at  $0.75 \times 0.75$  grid-level, which we average at

the district level using the Census 2011 classification for districts. We obtain rainfall data for the 1980-2018 period and use it to classify each district-year as a positive (negative) rainfall shock if the annual rainfall incidence exceeds (is below) the long-term district median.

## 3 Asset Holding Pattern

In this section, we use the consumer pyramid data to document the household asset choice behaviour on the extensive margin- both for flows as well as outstanding levels. We also provide the results for income quintiles as well as over the life-cycle (based on household head).

#### 3.1 Flows on the extensive margin

The summary of household investment flow on the extensive margin is given in Table I. If a household invested in a particular asset class at least once during the data period covering three year and four months, the investment in that asset class is assigned the value 1. Out of some 174,223 unique households, two-thirds invested in at least one asset during this period. We find that out of all asset classes, most households invested in financial assets. Since there are four asset classes to choose from, households can invest in 4! ways, but they invest only over 8 sets. The important highlights of investment on the extensive margin are:

- 1. More households invest in financial assets than in any other asset class. A total of 54.75% households invested only in financial assets during this period. This implies that financial assets are the first class of asset holdings for most households.
- 2. Out of the households which bought physical assets, most of them also invested in financial assets. A total of 28.63% of investor households bought all three assets- gold, real estate and financial assets. This is followed by

those who bought gold and financial assets or real estate and financial assets.

3. There are only around 4% households which primarily invested in gold, real estate or both. It implies that on the extensive margin, households are not primarily dependent on physical assets for investment.

Table I: Flow Asset Holding Pattern of households

Asset Holding Type	Total Households	% share
		(out of Investors)
Financial	62,329	54.75
Gold, Real Estate, Financial	$32,\!592$	28.63
Gold, Financial	7,011	6.16
Real Estate, Financial	$5,\!177$	4.55
Gold, Real Estate	2,463	2.16
Real Estate	1,732	1.52
Gold, Real Estate, Financial, Risky	753	0.66
Gold	741	0.65
Total Investor Households	113,849	100
Total Households	174,223	

4. Less than 1% households invested in all four asset classes. However the share of these households is higher than those who only invested in risky assets. The coverage of the latter is abysmally low across Indian households.

In summary these results suggest that since more than 50% households only invest in financial assets on the extensive margin, they also have a zero investment in gold or real estate on the intensive margin. This implies that solely relying on stock level information to understand household investments might provided an erronous understanding of the asset portfolio choices of households. Based on Table I one can conclude that financial asset class is the first choice of households when it comes to investment, unlike what we find solely by studying the stock data.

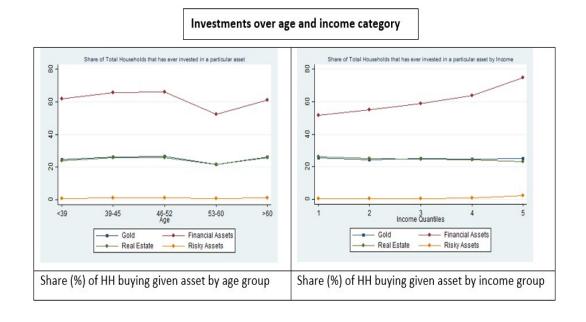


Figure 1: Flow investment over age and income (% of households)

Moreover, this behavior is consistent across all age groups and income quintiles as well. In terms of percentage share of households buying assets, Figure 1 suggests that investment in gold and real estate is more or less flat across all age cohorts as well as income quintiles. However, the share of total households investing in financial assets is steadily increasing with income quintiles, whereas the share of households investing in gold and real estate is marginally falling <sup>3</sup>.

 $<sup>^3</sup>$  The sum of percentage share in the figure can be more than 100% as the same household can be

### 3.2 Outstanding stocks on the extensive margin

Table II presents the asset holding patterns of households, in terms of outstanding assets during the three years and four months period of the consumer pyramids data. In this case, the results are based on whether a household has an outstanding investment in a given asset or not. If a household reported outstanding asset in any of the ten survey rounds, we count it's outstanding position in a given asset as 1, or 0 otherwise.

Table II: Outstanding Asset Holding Pattern of households

Asset Holding Type	Total Households	% share	
		(out of Investors)	
Gold, Real Estate, Financial	112,155	64.56	
Gold, Real Estate, Financial, Risky	27,153	15.63	
Real Estate, Financial	13,952	8.03	
Gold, Real Estate	5,983	3.44	
Financial	4,994	2.87	
Real Estate	4,160	2.39	
Real Estate, Financial, Risky	2,275	1.31	
Financial, Risky	1,290	0.74	
Total Investor Households	173,714	100	
Total Households	174,223		

Unlike the case of flows, we now find that most households have some form of investment when it comes to stocks. The most preferred combination is gold, real estate and financial assets where 64.5% of households have some outstanding investment. Another 15.6% households hold outstanding stocks in all four asset classes. Once again, Table II shows that most households have outstanding investments in financial assets, which exceeds the investment in physical assets.

counted twice if it buys both gold and financial asset and similarly for other asset combinations.

The results reported in Table II are consistent with other studies on household portfolio choice in India. The participation is found to be very high in physical assets like gold and real estate. However, if one does not account for the fact that more than 50% households only buy financial assets (Table I) in terms of flows, the outstanding participation numbers as in Table II can provide incorrect inferences.

### 4 Empirical analysis

The previous section documented the details of the flow and stock positions of household asset portfolio choice along the extensive margin. Here, we take a step further and empirically analyze the mechanism driving this portfolio choice. We use annual district-level rainfall shocks as a source of exogenous variation to household incomes and identify its impact on household portfolio choice.

We map the annual district-level rainfall shocks to the district in which the household is located, assuming that all households in the district are faced with the same rainfall shock. We obtain monthly gridded rainfall data in 0.75 \* 0.75 grids and map the grids to district boundaries. We take the average monthly precipitation across all grids overlapping with a district's boundaries to estimate the average monthly rainfall in the district. We take the average of the district-level monthly precipitation data within the year to obtain annual district-level rainfall.

On the household side, we use the Consumer Pyramids data to obtain a household-level panel between the years 2014 and 2018. We use the information on the household's income, asset and consumption choices. For this analysis, we annualize the data from the tri-annual surveys for each year and identify the impact of annual rainfall shocks on annual household investments and consumption using a linear probability model. The primary specification is:

$$Pr(Invest_{idt}^{j} = 1) = \alpha_i + \delta_t + \theta_d t + \sum_{k=2}^{4} \beta_k R F_{dt}^{k} + \gamma X_{idt} + \epsilon_{idt}$$
 (1)

In (1), our outcome of interest,  $Invest^j$ , is a dummy equaling 1 if household i, located in district d, invested in asset j during year t. Our outcomes of interest are investments in financial asset, risky asset, gold, real estate, household durables and long-term durables.  $\alpha_i$  and  $\delta_t$  denote household and year fixed effects while  $\theta_d$  is a district-specific time-trend. Our independent variable of interest,  $RF_{dt}^k$ , is a binary variable equaling 1 if the district rainfall falls in quartile k. District rainfall quartiles are based on the long-run distribution of the district's rainfall between 1980 and 2018. The first quartile is omitted and forms the base category.  $\beta_k$  therefore measures the change in likelihood of household i to invest in asset j if rainfall that year falls in the  $k^{th}$  quartile, relative to the lowest (first) quartile.

 $X_{idt}$  is a set of household co-variates such as household size, number of children in the household, number of females in the household, average years of education, whether the household has any members who have completed secondary education or higher, and controls for investments made by the household in the previous year. Our main specification also includes a one-year lag of district rainfall shocks to test whether the previous year's weather shocks affect present investment choices. Standard errors are clustered at the household level.

The results from estimating specification 1 are reported in Table 1. A positive rainfall shock, i.e. rainfall being in quartile 2 or 3, always leads to an increase in the probability of investment in all asset classes except risky assets. The increase in probability can be as high as 73% as seen in the case of real estate, where the probability of buying real estate jumps from a baseline of 0.11 to 0.19 (column (4)). This increase is also registered in the case of a positive rainfall shock in the previous year, except in the case of

financial assets (column (1)). However, the probability of buying consumer durables declines with a single positive rainfall shock.

But do these results depend on household incomes? To examine this, we test the impact of rainfall shocks on households' investment choices across household incomes. We interact annual rainfall shocks with total household income, as recorded in the first survey round in 2014. Based on annual household incomes in 2014, we define high income households as those whose total income in 2014 exceeded the median household income in 2014. We use 2014 incomes to prevent any confounding between our rainfall-induced financial asset choices and household incomes. The results of this specification are reported in Table 2. For most assets, the interaction term is insignificant, thus implying that richer (above median) households do not respond differently, relative to below median households with regard to investments along the extensive margin.

In addition to annual rainfall shocks, we also test whether multiple positive annual rainfall shocks affect household investment choices. Since gold and real estate are lumpy investments, it is possible that households need multiple positive income draws to invest in them. If this is the case, we would expect a significantly different response by households to investing in gold and real estate, vis-a-vis basic financial assets, when faced with multiple positive rainfall shocks investments. We empirically test this using the following specification:

$$Pr(Invest_{idt}^{j} = 1) = \alpha_i + \delta_t + \theta_d t + \beta ConsecPos_{dt} + \gamma X_{idt} + \epsilon_{idt}$$
 (2)

In (2), ConsecPos is a dummy equaling 1 if the district experiences a positive rainfall shock in both years t and t-1. A positive rainfall shock denotes rainfall incidence in either of the top two quartiles. If lumpy investments such as gold and real estate require multiple "good draws" from the income distribution, we would expect  $\beta > 0$  in (2).

The results from estimating (2) are reported in Table 3. In the case of consecutive positive rainfall shocks, we identify a divergence between basic financial assets and other asset classes. Unlike the case of a single positive rainfall shock, we now find that probability of investment in the basic financial asset class declines (column (1)) with consecutive positive rainfall shocks – Two consecutive positive rainfall shocks decrease the probability of investment in basic financial assets by around 25%.

But what do households do with this consecutive increase in incomes? The results in Table 3 suggest that they invest in gold and real estate, and also purchase durables. This can be seen from the positive coefficient on the consecutive positive shock dummy in columns (3), (4), (5) and (6) in Table 3. This suggests that households use basic financial assets as a transitory asset in order to save for buying other physical assets and durables in the future.

Table 4 suggests little difference in households' response to consecutive positive rainfall shocks along households' income profile. We interact the consecutive positive rainfall shock dummy with the above median income household dummy and find that the interaction term is insignificant for most asset classes. This implies that both above and below median income households use basic financial assets as a transitory asset class. The only exception is the probability of investment in long term durables such as automobiles and livestock. It is only in the case of above median income households that the probability of investment in long term durables rises.

### 5 Conclusion

This paper uses the household level Consumer Pyramids dataset to document the differences in stocks as opposed to flows in household asset choice along the extensive margin. Using three and half years of panel data (with around 40,000 households who were repeatedly surveyed in each round), we find that a majority of households invest only in financial assets. This gives a very different picture about the use of financial assets by Indian households than what one would get by using survey data on the stock of household investments. Using only stock level data hides the information about the active participation of Indian households in the financial assets market.

We further show that households use the basic financial assets as transitory assets to engage in future investments in physical assets or the purchase of durable goods. We establish this empirically by using rainfall shocks as a source of exogenous variation to household incomes. We find that a single year of high rainfall incidence (positive income shock) increases the probability of investment in all asset classes, but two consecutive years of high rainfall incidence only increases the probability of investment in gold, real estate and durable goods. This comes at the cost of investments in basic financial assets.

## Appendix

Table III: Coverage of CMIE Consumer Pyramid Data

Number of Rounds a HH is surveyed	Frequency	Percent	Cumulative
1	7,180	0.57	0.57
2	15,906	1.27	1.84
3	42,402	3.38	5.22
4	29,960	2.39	7.61
5	44,630	3.56	11.16
6	75,432	6.01	17.17
7	1,14,989	9.16	26.34
8	1,68,736	13.45	39.79
9	$3,\!18,\!597$	25.39	65.17
10	4,36,990	34.83	100
Total	12,54,816	100	

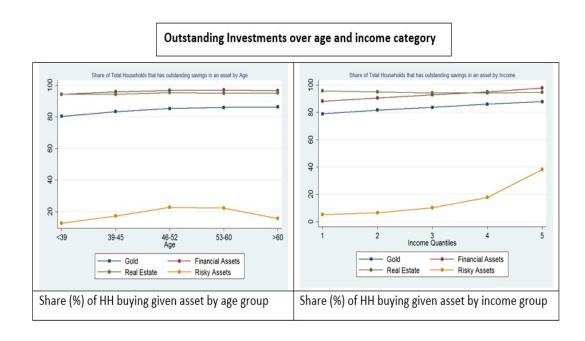


Figure 2: Outstanding investments in various assets (% of households)

**Table 1:** Rainfall Shocks and Household Investment Choices - Reduced Form

	(1)	(2)	(3)	(4)	(5)	(6)
	Basic Financial	Risky		Real	Household	Long-Term
	Asset	Asset	$\operatorname{Gold}$	Estate	Durables	Durables
Rainfall Q2	.060***	001	.060***	.080***	026***	005
	(.006)	(.006)	(.005)	(.005)	(.005)	(.005)
Rainfall Q3	.060***	005	.063***	.091***	016***	015***
	(.007)	(.007)	(.005)	(.005)	(.006)	(.005)
Rainfall Q4	046***	014*	.026***	.056***	.007	031***
	(.007)	(.007)	(.005)	(.005)	(.006)	(.006)
Rainfall Q2, L1	.002	039***	.009**	.011**	032***	016***
	(.006)	(.006)	(.004)	(.005)	(.005)	(.005)
Rainfall Q3, L1	032***	041***	.017***	.028***	.002	012**
	(.007)	(.007)	(.005)	(.005)	(.005)	(.005)
Rainfall Q4, L1	102***	061***	.026***	.042***	006	035***
	(.008)	(.008)	(.006)	(.006)	(.006)	(.006)
Observations	304769	304769	304769	304769	304769	304769
$\mathbb{R}^2$	.73	.71	.71	.71	.59	.56
Dep Var Mean	.22	.26	.11	.11	.09	.07

The above tables regresses household investment choices on rainfall shocks. The dependent variable is a binary, equaling 1 if the household has made investments in each of the mentioned categories in the past year. Basic financial asset includes fixed deposits, NSC and KVP. Advanced financial assets include provident funds, mutual funds, life insurance and stocks. Long-term durables include the purchase of cars, houses, two-wheelers tractors or livestock. Household durables include purchases of refrigerators, air-conditioners, coolers, televisions, washing machine and computers. The independent variable of interest is annual rainfall quartiles. Rainfall quartiles are based on the long-term average annual rainfall in the district between 1980 and 2018. All specifications controls for household size, total number of children, total number of elderly, total number of females, household average age, average years of education, dummies for whether there is an individual having completed secondary (higher) education in the household, and dummies for whether anyone is on regular medication (has been hospitalized) in the household. The specifications also include lagged asset choices, household, year and occupation fixed effects, and district-specific time-trends. Standard errors are clustered by household.

**Table 2:** Rainfall Shocks and Household Investment Choices - Differential Effects by Household Income

	(1)	(2)	(3)	(4)	(5)	(6)
	Basic Financial	Risky		Real	Household	Long-Term
	Asset	Asset	$\operatorname{Gold}$	Estate	Durables	Durables
RF Q2	.065***	003	.054***	.077***	030***	012*
	(.008)	(.008)	(.006)	(.006)	(.007)	(.007)
RF Q3	.065***	015**	.055***	.082***	018**	016**
	(.008)	(.008)	(.006)	(.006)	(.007)	(.007)
RF Q4	036***	030***	.022***	.055***	.011	027***
	(.008)	(.009)	(.006)	(.006)	(.007)	(.007)
High Income*RF Q2	006	.001	.009*	.005	.008	.011*
	(.007)	(.008)	(.005)	(.005)	(.007)	(.006)
High Income*RF Q3	006	.013*	.013***	.014***	.005	.002
	(.007)	(.007)	(.005)	(.005)	(.006)	(.006)
High Income*RF Q4	016**	.027***	.006	.001	008	007
	(.007)	(.007)	(.005)	(.005)	(.006)	(.006)
Observations	304769	304769	304769	304769	304769	304769
$\mathbb{R}^2$	.73	.71	.71	.71	.59	.56
Dep Var Mean	.22	.26	.11	.11	.09	.07

The above tables tests the differential impact of rainfall shocks on household investment choices across household income. The dependent variable is a binary, equaling 1 if the household has made investments in each of the mentioned categories in the past year. Basic financial asset includes fixed deposits, NSC and KVP. Advanced financial assets include provident funds, mutual funds, life insurance and stocks. Long-term durables include the purchase of cars, houses, two-wheelers tractors or livestock. Household durables include purchases of refrigerators, air-conditioners, coolers, televisions, washing machine and computers. The independent variables of interest is the interaction between annual rainfall quartiles and household income quartiles. Rainfall quartiles are based on the long-term average annual rainfall in the district between 1980 and 2018. Household income quartiles are based on total household income in 2014. All specifications controls for household size, total number of children, total number of elderly, total number of females, household average age, average years of education, dummies for whether there is an individual having completed secondary (higher) education in the household, and dummies for whether anyone is on regular medication (has been hospitalized) in the household. The specifications also include lagged asset choices, household, year and occupation fixed effects, and district-specific time-trends. Standard errors are clustered by household.

**Table 3:** Consecutive Positive Rainfall Shocks and Household Investment Choices

	(1)	(2)	(3)	(4)	(5)	(6)
	Basic Financial	Risky	. ,	Real	Household	Long-Term
	Asset	$\mathbf{Asset}$	$\operatorname{Gold}$	Estate	Durables	Durables
Cons. Pos. Shocks	045***	001	.024***	.033***	.026***	.007**
	(.005)	(.004)	(.003)	(.003)	(.003)	(.003)
Observations	304769	304769	304769	304769	304769	304769
$\mathbb{R}^2$	.73	.71	.71	.71	.59	.56
Dep Var Mean	.22	.26	.11	.11	.09	.03

The above tables tests the differential impact of rainfall shocks on household investment choices across household occupation. The dependent variable is a binary, equaling 1 if the household has made investments in each of the mentioned categories in the past year. Basic financial asset includes fixed deposits, NSC and KVP. Advanced financial assets include provident funds, mutual funds, life insurance and stocks. Longterm durables include the purchase of cars, houses, two-wheelers tractors or livestock. Household durables include purchases of refrigerators, air-conditioners, coolers, televisions, washing machine and computers. The independent variables of interest is a dummy equaling 1 if a household has faced 2 consecutive positive rainfall shocks. Rainfall shocks are deemed positive if the annual rainfall for the contemporary year exceeds the median long-term annual rainfall in the district between 1980 and 2018. household average age, average years of education, dummies for whether there is an individual having completed secondary (higher) education in the household, and dummies for whether anyone is on regular medication All specifications controls for household size, total number of children, total number of elderly, total number of females, household average age, average years of education, dummies for whether there is an individual having completed secondary (higher) education in the household, and dummies for whether anyone is on regular medication (has been hospitalized) in the household. The specifications also include lagged asset choices, household, year and occupation fixed effects, and district-specific time-trends. Standard errors are clustered by household.

**Table 4:** Consecutive Positive Rainfall Shocks and Household Investment Choices - Differential Effects by Household Income

	(1)	(2)	(3)	(4)	(5)	(6)
	Basic Financial	Risky		Real	Household	Long-Term
	Asset	Asset	$\operatorname{Gold}$	Estate	Durables	Durables
Cons. Pos. Shocks	050***	003	.027***	.034***	.024***	.002
	(.006)	(.006)	(.004)	(.004)	(.004)	(.004)
High Income*Cons. Pos. Shocks	.008	.004	006	002	.004	$.007^{*}$
	(.006)	(.006)	(.005)	(.005)	(.005)	(.004)
Observations	304769	304769	304769	304769	304769	304769
$\mathbb{R}^2$	.73	.71	.71	.71	.59	.56
Dep Var Mean	.22	.26	.11	.11	.09	.03

The above tables tests the differential impact of consecutive positive rainfall shocks on household investment choices across household incomes. The dependent variable is a binary, equaling 1 if the household has made investments in each of the mentioned categories in the past year. Basic financial asset includes fixed deposits, NSC and KVP. Advanced financial assets include provident funds, mutual funds, life insurance and stocks. Long-term durables include the purchase of cars, houses, two-wheelers tractors or livestock. Household durables include purchases of refrigerators, air-conditioners, coolers, televisions, washing machine and computers. The independent variables of interest is the interaction between consecutive positive rainfall shocks and 2014 household income. Consecutive positive rainfall shocks is a dummy equaling 1 if a household has faced 2 consecutive positive rainfall shocks. Rainfall shocks are deemed positive if the annual rainfall for the contemporary year exceeds the median long-term annual rainfall in the district between 1980 and 2018. household average age, average years of education, dummies for whether there is an individual having completed secondary (higher) education in the household, and dummies for whether anyone is on regular medication Household income is based on total household income in 2014. Households with high income are those whose income in 2014 exceeded median household income in 2014. All specifications controls for household size, total number of children, total number of elderly, total number of females, household average age, average years of education, dummies for whether there is an individual having completed secondary (higher) education in the household, and dummies for whether anyone is on regular medication (has been hospitalized) in the household. The specifications also include lagged asset choices, household, year and occupation fixed effects, and district-specific time-trends. Standard errors are clustered by household.