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The Illinois Institute for Rural Affairs (IIRA) works to improve the quality of life for rural residents by partnering with public and private agencies on local development and enhancement efforts.



**Western Illinois
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Demographics of High-income Households in Rural Illinois, 2021

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Abstract

This paper presents the profile of high-income households in rural Illinois. Salient findings include:

1. Households in the top quintile accounted for 52% of total household income in rural Illinois, approximately \$35 billion in 2021, and
2. A typical top-5% household is a single family, two-member household with a female head of household.

To attain a more equitable personal distribution of income, it is recommended that governments focus on motivating individuals to attain positions that are scarce and valued by the society.

Introduction

An often-quoted phrase in marketing is the 20-80 rule, that is, 20% of customers account for 80% of product purchases². Since personal consumption expenditure constitutes a major portion of rural Illinois' GDP³, and income is a predictor of

¹ Professor, Illinois Institute for Rural Affairs, Western Illinois University.

² Pareto rule; for its applications, see for example, Surgeons and the 20-80 rule, *British Medical Journal*, p.2, January 1, 1977.

³ Athiyaman, A. et. al (2014). Economic impacts of the 2008 Mississippi River Flooding. *Policy Brief*, January. Macomb, IL: IIRA.

consumption⁴, I explore the personal distribution of income in rural Illinois and profile the households that are on the top of the income distribution; Table 1

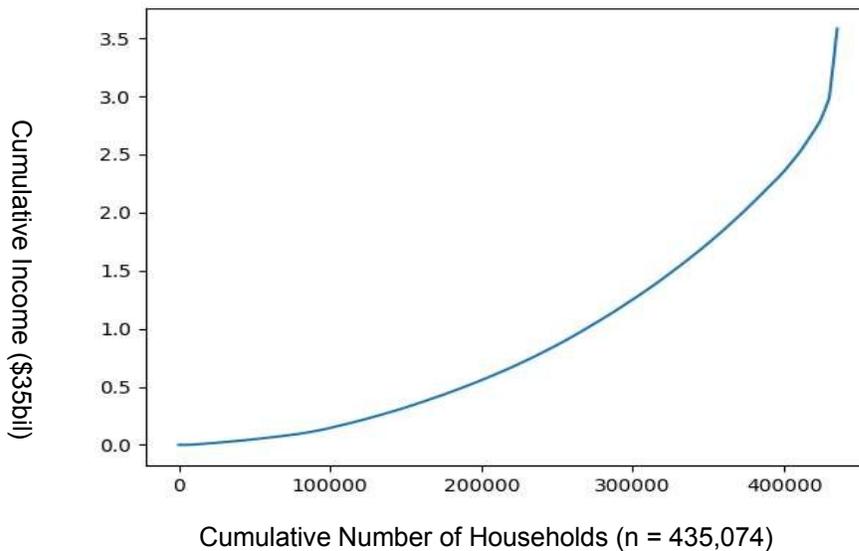
presents income quintiles for rural Illinois and Figure 1 shows the Lorenz curve⁵.

Table 1: Income Distribution: Rural Illinois Households, 2021 (n = 435,074)

Household Ranked by Income	Income Range	% of total income
Lowest 20%	0 – \$23,327	3%
2 nd 20%	\$23,328 – \$44,292	9%
3 rd 20%	\$44,293 – \$73,001	14%
4 th 20%	\$73,002 – \$106,213	22%
Highest 20%	\$106,214 - \$1,213,305	52%

Note: Data are from the Current Population Survey, 2021 Annual Social and Economic (ASEC) Supplement.

Figure 1: Lorenz Curve for Rural Illinois Households, 2021



⁴ On average, more than 10% of variance in household consumption is accounted for by household income; see, for example, Hisrich, R., and Peters, M. (1974). Selecting the superior segmentation correlate. *Journal of Marketing*, 38(July), 60-63; Herstein, R., & Vilnai-Yavetz, I. (2007). Household income and the perceived

importance of discount store image components. *International Review of Retail, Distribution and Consumer Research*, 17(2), 177-202.

⁵ Lorenz curve is a bivariate plot of cumulative percentages of income and cumulative percentages of families.

Why Income Stratification, Theory

No society is unstratified⁶. From a functional viewpoint, stratification is necessary to motivate individuals to take up positions or jobs that are required for the functioning of the society and for the individuals to perform their duties effectively. In competitive societies, importance is placed on motivating individuals to attain positions; monetary rewards are used as inducements to attract individuals to positions. Since rewards vary for different positions, best rewards are attached to positions which require the greatest training or talent (for example, medical doctor), the society becomes stratified.

In summary, society uses unequal economic returns as a principal means of influencing the entrance of persons

into positions and stimulating the performance of their duties. The variability in economic return (income) becomes one of the main segment or stratification cluster of the society.

Methodology: Data and Statistical Procedures

Data are from the Current Population Survey, 2021 Annual Social and Economic Supplement⁷. Microdata files relating to households in Illinois were sourced from the data section of the CPS website. The top 5% of the households given in Table 1, 21,754 households, were merged with household persons datafile to construct a household by person database; see the algorithm given in Table 2.

Table 2: Data Extraction Algorithm

BuildDataFile: Compute D

Input:

Household sequence number (H-SEQ) and person identifier (PH-SEQ).

Output:

Merged data file, details about households and persons in the households.

```
while H-SEQ ≠ 0 do
  D ← create Database
  for each person PH-SEQ ∈ H-SEQ do
    W
    D ← D ∪ W
  end for
end do
```

⁶ The argument is based on sociological functionalism; see Davis, K., and Moore, W. E. (1945). Some principles of stratification in *Ideological Theory: A Book of Readings*, edited

by L. A. Coser and B. Rosenberg, 413-445, New York: Macmillan.

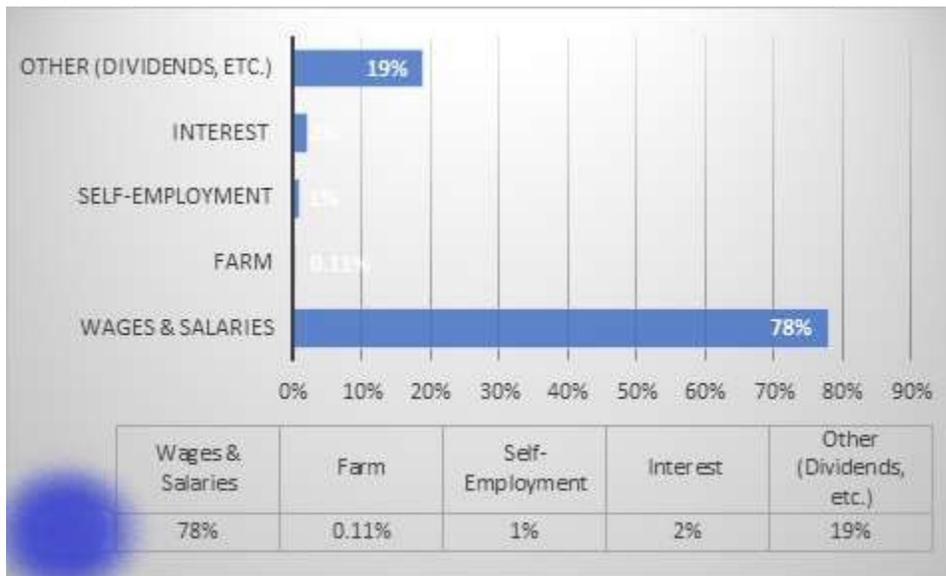
⁷ <https://www.census.gov/data/datasets/time-series/demo/cps/cps-asec.html>.

Findings

The top 5% of the households reported a total income of \$10.08bil in 2021, majority are from wages and salaries

(Figure 2). To put it in the context of Table 1, 29% of all household income in rural Illinois belonged to 5% of households.

Figure 2: Composition of Income: Top 5% of the Households



A typical, top-5% household is a single family, two-member household with a female as the head of household. This typical white-only household has

no family member under 18-years of age, The median age of the family members is 59 (Table 3).

Table 3: Typical Top 5% Households: Demographics

Demographic Attribute	Typical Value	Frequency of all Values
Family type	Primary Family	Primary family: 84% Nonfamily householder: 8% Secondary individual: 8%
Householder	Female	Male: 25% Female: 75%
Race	White	White: 100%
Age	59	Age group: LT 50 = 12% GTE 50 = 78%
Number of persons in the household	Two	Two = 65% Three = 27% GT 3 = 8%

Our theory on income stratification is predicated on the premise that higher income is associated with higher level of training. Table 4 lists the educational

qualifications of the top-income households. Two-in-three householders (67%) have received at least some college education.

Table 4: Educational Attainment of Top 5% Households

Training	%
High school diploma	33%
Some college, no degree	31%
Bachelor's degree	24%
Master's or professional degrees	11%
N (Households)	21,754

Summary and Conclusion

This paper presents the profile of high-income households in rural Illinois. Data are from the Current Population Survey, 2021 Annual Social and Economic Supplement. Results of data analysis suggest that:

1. Households in the top quintile accounted for 52% of total household income in rural Illinois;
2. The Gini coefficient for income inequality in nonmetro Illinois is 0.63; zero suggests perfect equality and a coefficient of 1 indicates perfect inequality; for Illinois, the Gini coefficient of income inequality is 0.48, 2019 data;
3. A typical, top-5% household is a single family, two-member household with female as the householder;
4. Two-in-three householders (67%) have received at least some college education; and
5. The median age of the householder is 59.

The results suggest both business and public policy implications. Businesses should note that these households, technically, middle-aged, empty nest households, demand more of home improvement products, travel, sports equipment, men's / women's apparel, and electronics⁸.

For public policy, the salient thing to note is that income distribution cannot be reduced by analyzing functional distribution or sources of income. In other words, it is of little or no use in manipulating wage rates, for example, to attain a more equitable personal distribution of income; the focus should be on motivating individuals to attain positions that are scarce and valued by the society.

⁸ Author's observation, based on empirical generalizations in marketing; specifically, covariations between household life cycle and expenditure data.