Title: The Evolution of Private Pensions, the Effects of Aging, and the Variance in Assets **Author(s):** Joseph T. Marchand **Institution/Country:** Syracuse University, US

The variance in the collectively accumulated assets of a given cohort of individuals is predicted to grow as the cohort ages together over the life-cycle. This variance in assets is attributed to individual differences in risks associated with earnings and asset returns which accumulated over time. Institutions that share risk across individuals, such as Social Security, have been theorized to limit the rate at which this variance in assets grows. This study tests each of these theoretical predictions with empirical evidence by providing the conditions under which these theories can be accepted or rejected, and alternative explanations are offered where discrepancies between theory and evidence exist. The relationship of the variance in assets on age is shown to hold positive and significant for all asset classes except retirement assets. The variance in total assets grows at 1.3 percent per each year of age, while the variance in financial and non-financial assets grow at less than 1 percent per each year of age. The variance in retirement assets linearly decreases with age, declining at a rate of 4.2 percent per each year of age. There is a statistically significant negative relationship of variance in assets on the percentage of defined-benefit holders that holds across all asset classes, while a positive significant relationship holds for the variance in assets on the percentage of defined-contribution holders across all asset classes. A one percent increase in the percentage that hold defined-benefit plans in a given industry decrease the variance in assets by 0.7 percent. As the percentage of defined-contribution holders in a given industry increased by one percent, the variance in assets grows by 0.8 percent. The evidence highlight the importance of the age structure on the dynamics of the relative well-being of individuals, as seen through the variance in assets. The evidence also identifies one particular outcome of the changing retirement landscape in the United States and other developed countries and stresses the importance of the traditional role of Social Security and similar schemes that share risk across individuals.