

Diversification and its Discontents: Idiosyncratic and Entrepreneurial Risk in the Quest for Social Status

Executive Summary

Nikolai Roussanov

Wharton School, University of Pennsylvania

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Abstract

Incorporating preference for social status into a simple model of portfolio choice helps to explain a range of qualitative and quantitative stylized facts about the heterogeneity in asset holdings among U.S. households. I specify preferences for status parsimoniously as a function of a household's wealth relative to the per capita wealth level. In the model, investors hold undiversified portfolios in equilibrium because of the greater aversion to aggregate risk that stems from the relative wealth concerns. This prediction provides a possible explanation for the apparently small premium for undiversified entrepreneurial risk. Consistently with empirical evidence, the wealthier households own a disproportionate share of risky assets, particularly private equity, and experience more volatile consumption growth. The calibrated model can match the empirical level of risky asset holdings and the degree of wealth mobility among the rich without generating excessive volatility of aggregate consumption growth.

Diversification and risk-sharing are fundamental principles of modern finance and macroeconomics. Yet in practice these basic principles are frequently violated. Entrepreneurs are a case in point. Most commit a large fraction of their human and financial capital to their ventures, thus exposing themselves to large undiversified risks. This lack of diversification by itself is not surprising and can be explained by the limited ability of entrepreneurs to raise external financing or hedge their income risk. But economic theory predicts that higher risk should be compensated by higher average return. Analyzing the data on proprietary businesses Moskowitz and Vissing-Jørgensen (2002) do not find such a risk-return trade-off. In fact, they conclude that returns on undiversified entrepreneurial investment are no higher than the average return on publicly traded equity despite the greater risk, the phenomenon they refer to as the 'private equity premium puzzle'. Hamilton (2000) reaches similar conclusions by analyzing the earnings differentials between self-employment and paid employment. Hall and Woodward (2007) calculate that risk-adjusted returns to venture capital-backed entrepreneurs (but not their investors) are small. Thus the 'private equity premium puzzle' cannot be dismissed as a phenomenon affecting only small 'mom-and-pop' establishments in which the owners become entrepreneurs simply because they have no better options. The low required return on entrepreneurial activity appears to be at the heart of the economy based on individual initiative and innovation.

In my dissertation I interpret these facts by appealing to the human desire for social status as a key driver of risk-taking behavior. If the satisfaction brought by "getting ahead of the Joneses" outweighs the danger of falling behind, risky activities with highly idiosyncratic payoffs, such as entrepreneurship, can be particularly attractive. In their seminal analysis of rational attitudes towards risk Friedman and Savage (1948) suggest that as people move to a higher "social class" the importance of the extra dollar of wealth for their utility rises. This could be because higher status requires greater expenditures to maintain it, for example through "conspicuous consumption." Thus in a way greater wealth encourages further pursuit of even greater wealth. Consequently, people "take great risks to distinguish themselves" (p. 299), potentially exhibiting risk-loving behavior. Relative

wealth concerns create a wedge in people's attitudes towards aggregate risk and towards idiosyncratic risk. Therefore, some investors who care about social status *optimally* do not diversify: they hold portfolios concentrated in idiosyncratic assets that earn a positive average return, such as private equity.

I model social status as an increasing function of individuals' wealth relative to the average wealth level, in the spirit of Duesenberry (1949) as well as the growing literature documenting the importance of relative wealth or relative income concerns on self-reported well-being (e.g. Luttmer (2005)). The key feature of status preferences in my model is that wealthier households care more about their social position in relation to consumption than do poorer ones. Adam Smith suggested that at higher levels of income people value the "social esteem" brought on by their wealth more than the consumption of goods and services that this higher wealth can buy (see Smith (1759), p. 70). This property implies that investors' marginal utility of wealth rises when they "get ahead of the Joneses" (i.e. advance their relative wealth position), as suggested by Friedman and Savage (1948). Consequently, they value a marginal dollar of wealth more highly when the economy is experiencing bad times, even if their own wealth stays constant. This sensitivity increases aversion to aggregate risk and leads investors to reduce their portfolios' exposure to the public equity market. Conversely, status-conscious investors demand less compensation for bearing individual-specific (e.g. entrepreneurial) risk, compared to a non-status seeking investor.

The social status model has further important implications. In particular, it is able to account for much of the observed variation households' (and, in particular, entrepreneurs') asset holdings. Qualitatively, the richer households have a larger fraction of their wealth invested in individual-specific idiosyncratic assets, such as private equity, as well as risky assets generally. The standard deviations of individual portfolio returns as well as consumption growth rates are larger for the households in the the upper half of the distribution. The reason for this heterogeneity is that status has luxury good properties in my model. At higher wealth levels the sensitivity to the relative position, and therefore the aversion to aggregate risk, increases, while overall risk aversion declines. Quantitatively, the model

is calibrated to match both the overall levels of risk-taking and the shares of household wealth concentrated in a single risky asset that are observed in the U.S. data. In particular, I match both the low shares of risky assets held by the low wealth households, and the large, highly concentrated equity shares of the very wealthy.

The prediction that entrepreneurial behavior is especially pronounced at the top of the wealth distribution produces dramatic concentration of wealth. At the same time, entrepreneurial activity generates substantial mobility, especially among the richer households. This feature of the model suggests that at least some of the empirically observed cross-sectional dispersion in accumulated wealth can be understood using a simple portfolio-based approach that allows the amounts of both aggregate and idiosyncratic risk in the economy to be determined endogenously. Thus it supports the argument of Friedman (1953) who emphasizes the role of individual choice and, in particular, risk preferences in shaping the distribution of income and wealth.

The model also has potential implications for the study of investment and, consequently, economic growth. Standard macroeconomic theory is predicated on the assumption that the demand for diversification leads households to pool and share their idiosyncratic risks. Perfect risk sharing is prevented, however, by the incompleteness of insurance markets due to asymmetric information and limited enforcement of contracts. Such market imperfections impose costs on society in the form of foregone investment opportunities, due to the inability of agents to share idiosyncratic risk of individual projects. Preference for social status can mitigate this problem, since it can lead investors to take on more undiversified idiosyncratic risk than predicted by the standard theory, unleashing greater entrepreneurial investment and spurring economic growth. This intuition is similar to the argument of Robson (1996) that evolutionary forces favor agents who are less averse to idiosyncratic than to aggregate risks, since the former are “diversified” at the macro-level, while the latter are not. I provide an example of how status-generated “overinvestment” in individual-specific projects can be socially optimal in economies with limited risk-sharing in Roussanov (2006). This possibility appears consistent with the evidence of Anderson and Reeb (2003) that companies with concentrated founding-family

ownership are less, not more, diversified, than other firms, contrary to the predictions of standard theories, such as Shleifer and Vishny (1986). Corneo and Jeanne (1997) and Corneo and Jeanne (2001) make a related argument that “oversaving” generated by social status concerns can help overcome negative externalities arising from technological spillovers, and therefore lead to optimal economic growth.

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