Wealth Accumulation Differences Between Entrepreneurial and Wage-earning Families: The Role of Active Saving Behavior

This study used Panel Study of Income Dynamics family data from 1984 to 2003 to examine the active savings behavior of entrepreneurial and wage-earning families. Findings indicate that entrepreneurial families hold significantly more wealth than wage earning families, and have a different portfolio allocation. In addition, before entry to entrepreneurship and during entrepreneurship business-planning and business-owning families save more and at a faster rate than wage earning families.

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Introduction

One of the oldest quests in economics is trying to explain how people accumulate wealth and why some people are richer than others. This study extends this effort by examining differences in wealth accumulation between wage earning and entrepreneurial families.

Recent research indicates that entrepreneurial families accumulate higher levels of wealth than wage-earning families (Quadrini, 1999, 2000; Gentry & Hubbard, 2004; Hurst & Lussardi, 2004; De Nardi, Doctor & Krane, 2007). Although a significant number of studies support Knight's view (1921) that wealth is a precondition for entrepreneurship entry, Quadrini (1999, 2000), Gentry and Hubbard (2004) suggest that the alternate hypothesis that entrepreneurship leads to a different wealth accumulation behavior should be examined. This pursuit is also supported by Schumpeter's view (1934) that having an entrepreneurial idea is the main prerequisite for entrepreneurial entry; wealth is secondary. Hurst and Lusardi (2004) found that only the top five percent of the wealth distribution are financially constrained as entrepreneurs, suggesting that for the majority of people, wealth is not the major driver for entering entrepreneurship. This prior research raises the questions: Does entrepreneurship influence family's wealth accumulation? If yes, how?

De Nardi, Doctor, and Krane (2007) have suggested that a country's prosperity depends directly on its innovation ability. If so, study of the relationship between entrepreneurship and wealth is important. After comparing entrepreneurs with wage earners coming from disadvantaged families, Farlie (2005a, 2005b) suggested that entrepreneurship might even be a solution to poverty. As Campbell (2006) has noted, it is inspiring to think that understanding family finance might lead to welfare improvement cures (Keynes 1932). Although such ideas might be considered extreme, they motivate further research on the relation between entrepreneurship and wealth accumulation.

Existing research indicates that the main factors generating wealth accumulation differences between entrepreneurial and wage earning families are:

1. Some families may enter a study period with a greater endowment (possibly inherited),
2. Families may receive different rates of return on their personal or family portfolio of assets,
3. Families may differ in their savings behavior.

A rich and extended literature has focused on inheritance and rates of return on family portfolio. This study is concerned with the relationship between entrepreneurship and saving behavior.

Current literature has identified several reasons for the particularly more accelerated wealth accumulation behavior of enterprising families (Quadrini, 1999, 2000; Gentry & Hubbard, 2004; DeNardi, Doctor & Krane, 2007). First, entrepreneurial families that face borrowing constraints should save more than wage earning families to fund a future business start-up or major project. Entrepreneurial families often sustain the development and implementation costs of an entrepreneurial idea far in advance of the initial business start. Second, in anticipation of higher costs for external versus internal financing, entrepreneurial families should exhibit more accelerated saving behavior than a typical wage earning family. Third, entrepreneurial families face entrepreneurial uncertainty;

consequently they should protect themselves by accumulating more wealth in anticipation of adverse business events. Fourth, the entrepreneurial family would realize that its current saving abilities and accumulated wealth determine access to external financing, creating an additional incentive to save more than a wage earning family (Shane, 2003). Fifth, the financial discipline and organization imposed by business ownership may force entrepreneurial families to have clearer and better-established financial goals than the typical wage earning family (House, 1971). Sixth, entrepreneurial families may engage in "mental accounting" and be less tempted to consume financial resources assigned to entrepreneurship. Seventh, Hurst, Lusardi, Kennickell, and Toralba (2006) suggest that entrepreneurial families lack the level of pension and health insurance coverage available to typical wage earning families, and thus they have another motivation to save more than wage earning families save. Finally, the typical entrepreneurial family may also driven by a stronger bequest motive than the typical wage earning family as a way to insure that the business remains in the hands of family members.

These various motivations for the more accelerated saving behavior of the entrepreneurial families form the basis for asking: How large is the difference in saving behavior between entrepreneurial and wage earning families? Why does this difference in saving behavior between entrepreneurial and wage earning families exist? When is the difference in saving behavior between entrepreneurial and wage earning families prevalent?

Theoretical Foundation

At least three theories support predictions regarding wealth accumulation differences between entrepreneurial and wage earning families: the cost of external financing, the uncertainty of income within entrepreneurial families, and mental accounting. To illustrate the mechanism that leads entrepreneurial families to more intense saving behavior we advance a two-period consumption model. A family begins period 1 with zero resources and earns y_1 income. The total resources in period 1 are divided between consumption C_1, and savings S_1. In period 2 the family engages in entrepreneurial activity and thus it earns income y_2 from wages w_2 and entrepreneurial rent θK^{α}. Thus the income in period 2 is

$$y_2 = \theta K^{\alpha}\delta^{\gamma} + (1-\delta)w_2. \quad (1)$$

The coefficient δ indicates the proportions of entrepreneurial and wage income from total income in period 2. Entrepreneurial wealth depends on entrepreneurial ability of the family θ, the amount of capital invested in the entrepreneurial project K, the scale production coefficient α, and the involvement coefficient γ (as the returns to scale increases, the participation to entrepreneurship increases also, $\alpha + \gamma \le 1$ (Petrova, 2005)). In a two period model, the family will consume (C_2) all the resources in period 2 and thus the proposed model becomes

$$\underbrace{\max}_{S_1,K,\delta}\left[U(C_1) + \beta U(C_2)\right] = \underbrace{\max}_{S_1,K,\delta}\left\{U(w_1 - S_1) + \beta U\left[(S_1 - K)(1+r) + \theta K^{\alpha}\delta^{\gamma} + (1-\delta)w_2\right]\right\}, \quad (2)$$

where β is the subjective time preference discounting factor applied by the family to future consumption and expressed as $\beta = \frac{1}{1+\rho}$, where ρ is the subjective discount rate. The first order conditions (FOCs) resulting from model (2) allow us to make predictions regarding the optimal amounts of savings, capital, and entrepreneurial activity proportion (S_1^*, K^*, δ^*) that maximize the utility of the family.

If the savings from period 1 are less than the needed investment capital, $S_1 < K$, then the family has to borrow additional capital; $r(S_1 - K)$ is the amount of money that the family has to repay at the end of the period 2. In the model, the family can borrow only up to an amount proportional to its savings from period 1, more precisely $(\lambda - 1)S_1$. This condition indicates that $\lambda - 1$ is the factor of proportionality, and $\lambda \ge 1$. Thus, the largest amount of capital that can be invested in the entrepreneurial activity by a family is $S_1 + (\lambda - 1)S_1 = \lambda S_1$ (Evans & Jovanovic, 1989; Petrova, 2005). The capital constraint faced by the family in period 2 is

$$0 \le K \le \lambda S_1. \quad (3)$$

As suggested previously, when the family becomes financially constrained, the cost of money becomes an issue. The cost of a loan is given by the difference between the rate of borrowing r_B and the rate of interest r, therefore $(\lambda - 1)S_1(r_B - r)$. The rate of borrowing money depends on the credibility of the entrepreneur, the amount of collateral committed to the loan, the degree of enforceability of the lending contract, etc. (Magri, 2006). This cost creates an incentive for the entrepreneurial family to save money for their future projects, as well as to search for cheaper sources of finance such as family, friends, or angel investors.

A resulting solution from the FOCs of the proposed model is the well-known Euler equation, which can be further improved to capture the increased uncertainty of the income due to entrepreneurial activity. Therefore, in our case the Euler equation becomes

$$U_1 = \frac{(1+r)}{(1+\rho)} E_1(U_2) + \frac{\sigma^2}{2}\psi, \quad (4)$$

where, σ^2 measures the variation of income in the second period ($\sigma^2 > 0$), and ψ is a function of the third derivative of the utility function, which is negative ($\psi < 0$) if the utility function is modeled as a decreasing absolute risk aversion (DARA, a common theoretical assumption regarding the functional form of the utility function). The Euler equation suggests that the marginal utility of consumption in period 1 equals the discounted expected (E_1) marginal utility of consumption in period 2 plus the income uncertainty term, $\frac{\sigma^2}{2}\psi$ (Knutz-Duriseti, 2004). Because the increased uncertainty of the income in period 2, $\frac{\sigma^2}{2}\psi < 0$, one can predict a decrease in marginal utility of consumption in the first period as compared with the situation when the uncertainty of the entrepreneurial activity is missing. Therefore, we expect a decrease in consumption in period 1 in order to compensate for the decrease of $\frac{(1+r)}{(1+\rho)} E_1(U_2)$ by $\frac{\sigma^2}{2}\psi$.

Another approach to explaining the wealth accumulation and saving effects is mental accounting and the fungibility of wealth components (Shefrin & Thaler, 1988; Thaler, 1999), which is difficult to capture and include in the same model. Shefrin and Thaler (1988) show that individuals and families develop a hierarchy of money locations based on how tempting is to spend the money from each location for household purposes. One can speculate that entrepreneurial families are less likely to spend money from mental accounts associated with entrepreneurship, and thus create saving behavior differences as compared with wage earning families.

The theoretical approaches survey here to explain saving behavior differences between entrepreneurial and wage-earning families lead to the following research proposition:

> *Entry and incumbent entrepreneurial families are likely to actively save more than wage earning families. Thus all else equal, they will accumulate more wealth.*

This study uses longitudinal data to examine the saving behavior differences between entrepreneurial and wage earning families. It is proposed that, if the entrepreneurial business cycle is considered as a temporal measure, it's more likely for entrepreneurial families to exhibit a more accelerated saving behavior before entrepreneurship entry and during entrepreneurship as compared with wage earning families.

Methods

This study used Panel Study of Income Dynamics (PSID) family data from 1984 to 2003. PSID is a unique national longitudinal data set that collects information on family wealth and wealth components once every five years. The descriptive statistics presented in Tables 1 to 4 are based on the entire PSID sample whereas for regression testing (results presented in Table 5) we used a rotational sample of married-couples only, with the head between 21 and 65 years old, having the same spouse for the duration of time in sample. To control for attrition effects, when ever a new wife or head was reported for a particular family, its record stopped the year the event was reported. But a new family record was created in that year.

The FOCs resulting from the advanced model (2) amended by the inclusion of the income uncertainty introduced by entrepreneurial activity, as suggested in equation (4), permits deductions of the optimal saving amounts S_1^* that maximize total utility of the entrepreneurial family. The reduced functional form of the saving function used to support the research proposition is:

Active Savings = F(family demographics, entrepreneurial choice, permanent income, consumption shock variability, random error). (5)

Family demographic variables include marital status, number of children, age of the youngest child, age of the head of the household, education of the head of the household, race of the head of the household, homeownership. Entrepreneurial choice is reflected in business ownership. Permanent income is a measure of the expected income of the family. Consumption shock variability is captured by income shocks (income variability) accompanied by the current level of family assets (lagged wealth and inheritances received). See Browning and Lusardi (1996, p.1806) for a detailed discussion regarding this approach to consumption shock variability.

The full specification of the econometric model used to support the advanced research proposition is

$$ACTSAV_{family} = \alpha_0 + \alpha_1 WLTH_{lagged-family} + \alpha_2 PINCOME_{family} + \alpha_3 TINCOME_{family} + \alpha_4 AGE1_{head} + \alpha_5 AGE2_{head} + \alpha_6 AGE4_{head} + \alpha_7 NOCHILDREN_{family} + \alpha_8 AGEOFYOUNGESTCH_{family} + \alpha_9 EDUCATION_{head} + \alpha_{10} BUSINCUMBENT_{family} + \alpha_{11} BUSSWITCHER_{family} + \alpha_{12} WAGETOBUS_{family} + \alpha_{13} WAGESWITCHER_{family} + \alpha_{14} BUSTOWAGE_{family} + \alpha_{15} HOwnerINCUMB_{family} + \alpha_{16} HOwnerSWITCHER_{family} + \alpha_{17} \mathrm{Re}ntTOHOwn_{family} + \alpha_{18} \mathrm{Re}ntSWITCHER_{family} + \alpha_{19} HOwnTO\mathrm{Re}nt_{family} + \alpha_{20} RACEBlack_{head} + \alpha_{21} RACEOther_{head} + \alpha_{22} FirstINHERITANCE_{lagged10y} + \alpha_{23} FirstINHERITANCE_{lagged5y} + \varepsilon, \quad (6)$$

where $ACTSAV_{family}$ represents the active savings of the family; $WLTH_{lagged-family}$ is the wealth (net worth) lagged to the prior available period; $PINCOME_{family}$ is the permanent income of the family; $TINCOME_{family}$ represents the transitory income of the family; $AGE1_{head}$, $AGE2_{head}$, $AGE4_{head}$ are age categories for the head of the household, 21-30 years old, 31-40 years old, and 51-65 years old respectively; $NOCHILDREN_{family}$ represents family's number of children between 1 and 17 years old; $AGEOFTHEYOUNGESTCH_{family}$ is the age of the youngest child in the family; $EDUCATION_{head}$ represents the dummy variable that distinguishes between college and non-college educated families; $BUSINCUMBENT_{family}$, $BUSSWITCHER_{family}$, $WAGETOBUS_{family}$, $WAGESWITCHER_{family}$, $BUSTOWAGE_{family}$ represent categorical variables accounting for longitudinal change of occupational choice of the family; $HOwnerINCUMB_{family}$, $HOwnerSWITCHER_{family}$, $\mathrm{Re}ntTOHOwn_{family}$, $\mathrm{Re}ntSWITCHER_{family}$, $HOwnTO\mathrm{Re}nt_{family}$ are categorical variables accounting for longitudinal change of family choice between homeownership and renting; $RACEBlack_{head}$ and $RACEOther_{head}$ are dummy variables identifying the race of the head of the household; $FirstINHERITANCE_{lagged5y}$ and $FirstINHERITANCE_{lagged10y}$ are first inheritances received by the family five and ten years ago respectively.

The active savings measure used in this study is based on Luoh and Stafford's (1998) definition:

Active savings = net inflow into stock market + net change in transaction account balances + net inflow into business + net inflow into annuities + home improvements + net inflow into non main home real estate + net inflow into mortgage premium + net inflow into transportation means + net inflow into bonds and insurance cash accounts + net into assets brought in – increases in non-collateralized debt – net into debts brought in. (7)

We define *entrepreneurial family* as a family reporting ownership of one or more businesses or financial interest in one or more businesses. The *wage earning families* are all other families. This classification is based on the PSID question: *"Did you (Head) or any one else in the family own a business at any time during the previous year or have a financial interest in any business enterprise?"* Quadrini (1999; 2000), Bradford (2003) and Gentry and Hubbard (2004) have used a similar measure to identify entrepreneurs.

The coding of family occupational choice is based on a five year time interval using the PSID data collection intervals for wealth and wealth components. The occupational choice coding captures the longitudinal (five year interval) preservation or change in family choice between entrepreneurship and wage earning. For example, for the time interval 1984-1989, the following measures were constructed to capture family occupation alternatives:

- If owning a family business in 1984 and in 1989, and no switch in occupational category during this period then *business incumbent* = 1; Else *business incumbent* = 0.
- If a wage earning family in 1984 and in 1989, and no switch in occupational category during this period then *wage earning incumbent* = 1; Else *wage earning incumbent* = 0.
- If a wage earning family in 1984 and in 1989 and switched the occupational category during this period then *wage switcher* = 1; Else *wage switcher* = 0.
- If a business owning family in 1984 and in 1989 and switched the occupational category during this period then *business switcher* = 1; Else *business switcher* =0.
- If a wage-earning family in 1984 and a business owning family in 1989 then *wage to business* = 1; Else *wage to business* = 0.
- If a business owning family in 1984 and a wage earning family in 1989 then *business to wage* = 1; Else *business to wage* = 0.

The same coding scheme has been applied to other time intervals, 1989-1994, 1994-1999, and 1999-2003. An identical coding constructing procedure has been applied to reflect the dynamics of change in home ownership versus renting. The same five years time intervals were considered, 1984-1989, 1989-1994, 1994-1999, 1999-2003. The coding scheme is based on the PSID question: *Do you (or anyone else in your family living there) own the home/apartment, pay rent, or what?*"Depending on the starting and ending classification, the following categories were created: *home owner incumbent, renter incumbent, home owner switcher, renter switcher, home ownership to rent, and renting to home ownership*.

Dummy variables were created for education and race. For each five years interval, education was recoded and collapsed in two categories as follows:

- If education is less or equal to high school then *high school* = 1; Else *high school* = 0.
- If education is some college and college degree then *some and college* = 1; Else *some and college* = 0;
- Race variables were recoded and collapsed in three categories only:
- If race equals 1 then *white* = 1; Else *white* = 0;
- If race equals 2 then *black* = 1; Else *black* = 0;
- If race greater than 2 then *other (non white or black, including Hispanic)* = 1; Else *other (non white or black, including Hispanic)* = 0.

Lagged wealth (no main home equity included), the current (received in the past five years) and lagged (received sometime between 10 and five years ago) first inheritance, the number of children, and the age of the youngest child are continuous variables and they were used as provided by PSID.

All money value variables were converted to 2003 dollars using the Consumer Price Index values for the corresponding years. The *permanent income* for every five years interval was computed as the average value of the total family income reported to PSID each year during the five years time interval. The *transitory income* for every five year time interval was defined as the variability of income over the time interval considered and computed as the variance of the total family incomes collected by PSID for each five year time interval (Guariglia, 2001; Robst, Dietz, and McGoldrick, 1999). The *number of children* in the family is computed as MAXIMUM of the number of children reported each year in the past five years. The *age of the youngest child* in the family is computed as MAXIMUM of the reported ages of the youngest child during the past five years.

Findings

Table 1 provides a cross-tabulation comparison between entrepreneurial and wage earning families in terms of wealth and wealth structure. In addition, Table 2 gives the result of t-tests of the observed differences. During 1984-2003, the difference in average accumulated wealth between entrepreneurial and wage earning families is

around four to five fold the wealth of wage earning families. These differences become larger as we progress from 1984 towards 2003: $512, 835 ($198,345)[1] for entrepreneurial families in 1984 versus $111,592 ($39,314) for wage earning families in the same year (*t = -14, p < .001*), and $717,122 ($236,600) for entrepreneurial families in 2003 versus $181,491 ($48,056) for wage earning families in the same year respectively (*t = -14, p < .001*). The descriptive statistics from Table 1 indicate an increasing trend in wealth accumulation differences between entrepreneurial and wage earning families as we progress from 1984 towards 2003. This simple comparison shows that on average entrepreneurial families accumulate more wealth than wage earning families. Furthermore, the comparison provided in Table 1 allows one to identify structural differences in asset allocation between entrepreneurial and wage earning families, and to observe changes in level and components of wealth for both groups between 1984 to 2003. Briefly, one could observe larger allocations of assets toward their own business for entrepreneurial families, combined with larger amounts of money allocated to cash accounts and consumer credit accounts. Further, the entrepreneurial families hold larger amounts of their assets in real estate other than main home. Finally, entrepreneurial families hold larger investments in stocks/mutual funds as well as in bonds; cash value life insurance, collections, etc. The latest observation goes against some prior reports in the literature that business-owning families have less retirement coverage than wage earning families. If we separate out the married-couple families and look at the wealth differences between entrepreneurial and wage-earning married-couple families the same conclusions holds with results higher in magnitude, see Tables 3 and 4.

Table 5 indicates the regression results of the econometric model (6) applied to years 1989, 1994, 1999 and 2003 with a five years back longitudinal retrospective. The regressions results support the advanced research proposition by illustrating that *business owning incumbent* families actively save somewhere between $10,877 (in 1999) to $25,849 (in 1989) more than wage earning incumbent families, the comparison group. Also, *wage to business* families (entrepreneurial entry) actively save somewhere between $9,971 (in 1994) to $17,141 (in 1989) more than wage earning incumbent families. Permanent income, number of children, age, race, home ownership, and inheritance show statistically significant effects in certain years.

Conclusions

Study results indicate that entrepreneurial families on average hold significantly more wealth than wage earning families. In addition, entrepreneurial family asset portfolio allocation differs from that of wage earning families. Separating the active saving from other wealth effects we've been able to support marginally the claim that before entry to entrepreneurship and during entrepreneurship business-planning and business-owning families are saving more and at a faster rate than wage earning families.

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[1] The figures outside the parentheses represent the average value while the figures inside the parentheses report the median value.

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Table 1. Longitudinal comparison of wealth/ wealth components between entrepreneurial and wage-earning families, all PSID sample [in $2003, Average (Median)]

Asset Category \ Year	**1984**		**1989**		**1994**		**1999**		**2003**	
Occupational category	Bus. owner	Wage earn.	Bus. owner	Wage earn.	Bus. owner	Wage earn.	Bus. owner	Wage earn.	Bus. owner	Wage earn.
N	563	5955	718	5976	893	7271	764	5838	822	6600
Business value	177,166	0	190,307	0	145,269	0	317,897	0	265,276	0
(Median)	(17,709)	(0)	(14,839)	(0)	(6,208)	(0)	(5,522)	(0)	(3,500)	(0)
Checking/saving accounts	37,868	18,409	48,690	22,003	34,874	21,049	36,714	14,397	41,960	17,540
(Median)	(8,855)	(2,656)	(11,871)	(2,968)	(9,312)	(2,483)	(6,627)	(2,209)	(8,000)	(2,000)
Real estate	94,755	12,737	159,208	12,614	129,772	9,325	90,551	11,423	133,484	15,028
(Median)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Stock/MF/IT/(IRA)	29,669	10,030	31,225	17,597	86,439	26,103	85,958	32,185	53,666	45,406
(Median)	(0)	(0)	(0)	(0)	(248)	(0)	(0)	(0)	(0)	(0)
Vehicles/motor home/trailer	18,486	8,140	20,433	9,581	20,403	11,435	21,720	11,551	21,816	11,457
(Median)	(11,511)	(5,313)	(13,355)	(5,936)	(12,416)	(7,449)	(14,358)	(6,074)	(15,000)	(6,000)
Bonds/Cash insur./Collections	66,756	21,493	23,548	5,905	21,220	9,715	16,653	7,046	17,564	6,603
(Median)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
IRA							54,234	18,073	51,891	26,093
(Median)							(442)	(0)	(2,000)	(0)
Credit card/Consumer debt	8,097	2,608	7,943	3,811	19,116	5,132	11,952	5,152	11,391	6,487
(Median)	(531)	(0)	(1,336)	(0)	(1,862)	(0)	(884)	(0)	(1,000)	(0)
Wealth (No main home equity)	416,554	68,201	465,468	63,889	421,861	72,495	611,775	89,523	574,265	111,629
(Median)	(125,205)	(12,397)	(115,742)	(14,097)	(105,533)	(16,016)	(145,786)	(13,855)	(134,001)	(16,000)
Wealth	**513,835**	**111,592**	**589,561**	**115.072**	**518,470**	**119,546**	**716,225**	**138,805**	**717,122**	**181,491**
(Median)	**(198,345)**	**(39,314)**	**(215,161)**	**(40,065)**	**(184,993)**	**(43,207)**	**(219,784)**	**(39,760)**	**(236,600)**	**(48,056)**
Total family income	**85,361**	**42,673**	**97,035**	**46,887**	**100,444**	**51,346**	**98,988**	**51,932**	**106,055**	**53,504**
(Median)	**(67,634)**	**(35,065)**	**(69,371)**	**(37,097)**	**(69,525)**	**(39,729)**	**(65,714)**	**(39,509)**	**(70,000)**	**(40,200)**

Source: Author's computation of PSID data. The results are weighted by normalized PSID weights.

Table 2. *t* test results of wealth (wealth components) by group comparison, entrepreneurial and wage-earning families, all PSID sample. Mean values by group are presented in Table 1.

Asset Category \ Year	**1984**		**1989**		**1994**		**1999**		**2003**	
	t Value	Pr > |t|	t Value	Pr > |t|	t Value	Pr > |t|	t Value	Pr > |t|	t Value	Pr > |t|
Business value	***-22.60****	***<.0001***	***-18.90****	***<.0001***	***-22.30****	***<.0001***	***-12.06****	***<.0001***	***-17.74****	***<.0001***
Checking/saving accounts	***-8.01****	***<.0001***	***-9.73****	***<.0001***	***-5.30****	***<.0001***	***-7.24****	***<.0001***	***-7.05****	***<.0001***
Real estate	***-16.62****	***<.0001***	***-12.73****	***<.0001***	***-14.75****	***<.0001***	***-11.73****	***<.0001***	***-8.25****	***<.0001***
Stock/MF/IT/(IRA)	***-6.17****	***<.0001***	*-2.11***	*0.0345*	***-7.07****	***<.0001***	***-3.06****	***0.0022***	-0.33	0.7379
Vehicles/motor home/trailer	***-18.00****	***<.0001***	***-16.81****	***<.0001***	***-12.96****	***<.0001***	***-9.63****	***<.0001***	***-14.34****	***<.0001***
Bonds/Cash insur./Collections	-1.82*	0.0691	***-8.83****	***<.0001***	***-5.31****	***<.0001***	***-3.93****	***<.0001***	***-5.87****	***<.0001***
IRA							***-9.65****	***<.0001***	***-4.01****	***<.0001***
Credit card/Consumer debt	***-6.13****	***<.0001***	***-4.97****	***<.0001***	***-7.51****	***<.0001***	***-4.54****	***<.0001***	***-6.12****	***<.0001***
Wealth (No main home equity)	***-12.56****	***<.0001***	***-18.84****	***<.0001***	***-21.36****	***<.0001***	***-14.76****	***<.0001***	***-12.64****	***<.0001***
Wealth	***-14.10****	***<.0001***	***-20.64****	***<.0001***	***-21.55****	***<.0001***	***-15.6****	***<.0001***	***-14.00****	***<.0001***
Total family income	***-23.84****	***<.0001***	***-19.40****	***<.0001***	***-17.91****	***<.0001***	***-16.53****	***<.0001***	***-15.68****	***<.0001***

Source: Author's computation of PSID data. ****** Statistically significant at p < .01***, *** Statistically significant at p < .05*, * Statistically significant at p < .10.

Table 3. Longitudinal comparison of wealth/wealth components between entrepreneurial and wage-earning, married couples only. [$2003, Average (Median)]

Asset Category \ Year	**1984**		**1989**		**1994**		**1999**		**2003**	
Occupational category	Bus. owner	Wage earn.	Bus. owner	Wage earn.	Bus. owner	Wage earn.	Bus. owner	Wage earn.	Bus. owner	Wage earn.
N	498	3,090	567	2,969	657	3,411	576	2,841	594	3,076
Business value	217,928	0	229,344	0	170,349	0	365,637	0	243,508	0
(Median)	(26,564)	(0)	(22,258)	(0)	(6,208)	(0)	(8,836)	(0)	(5,000)	(0)
Checking/saving accounts	44,800	22,484	54,902	29,807	37,503	26,910	40,734	18,301	49,926	23,856
(Median)	(12,042)	(5,313)	(14,839)	(6,381)	(9,933)	(4,966)	(8,836)	(3,313)	(10,000)	(5,000)
Real estate	111,347	16,646	193,734	20,049	138,624	13,317	88,950	16,475	156,711	22,790
(Median)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Stock/MF/IT/(IRA)	37,535	13,977	37,725	27,814	106,326	39,779	102,519	44,327	61,570	77,869
(Median)	(0)	(0)	(0)	(0)	(1,242)	(0)	(0)	(0)	(0)	(0)
Vehicles/motor home/trailer	19,952	11,829	22,370	14,766	21,907	15,574	23,677	16,723	23,960	17,028
(Median)	(14,168)	(8,855)	(14,839)	(10,981)	(14,899)	(12,416)	(16,567)	(11,044)	(17,000)	(12,000)
Bonds/Cash insur./Collections	86,433	40,491	28,294	8,874	21,904	13,578	19,670	9,957	20,338	9,357
(Median)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
IRA							60,213	28,254	63,398	40,825
(Median)							(5,522)	(0)	(4,179)	(0)
Credit card/Consumer debt	9,518	3,133	8,264	4,992	22,194	6,514	13,221	6,105	10,761	7,021
(Median)	(354)	(35)	(1,039)	(445)	(2,483)	(621)	(663)	(221)	(500)	(500)
Wealth (No main home equity)	508,477	102,293	558,105	96,318	474,414	102,642	690,179	127,931	608,740	185,678
(Median)	(145,217)	(23,022)	(148,387)	(29,677)	(134,089)	(31,039)	(170,636)	(27,390)	(168,136)	(35,000)
Wealth	**626,019**	**165,225**	**704,687**	**174,649**	**584,123**	**165,959**	**805,628**	**197,337**	**769,740**	**286,576**
(Median)	**(253,243)**	**(77,036)**	**(277,484)**	**(87,548)**	**(230,931)**	**(81,943)**	**(257,335)**	**(77,863)**	**(287,500)**	**(108,000)**
Total family income	**95,158**	**57,857**	**109,513**	**66,311**	**109,634**	**70,027**	**114,606**	**71,687**	**122,077**	**76,273**
(Median)	**(78,452)**	**(52,258)**	**(78,645)**	**(57,174)**	**(77,959)**	**(59,594)**	**(79,599)**	**(59,695)**	**(78,015)**	**(63,500)**

Source: Author's computation of PSID data. The results are weighted by normalized PSID weights.

Table 4. *t* test results of wealth (wealth components) by group comparison, entrepreneurial and wage-earning families, all PSID sample, married couples only. [Mean values by group are presented in Table 3.]

Asset Category \ Year	**1984**		**1989**		**1994**		**1999**		**2003**	
	t Value	Pr > |t|	t Value	Pr > |t|	t Value	Pr > |t|	t Value	Pr > |t|	t Value	Pr > |t|
Business value	***-17.61****	***<.0001***	***-14.20****	***<.0001***	***-16.21****	***<.0001***	***-8.75****	***<.0001***	***-13.57****	***<.0001***
Checking/saving accounts	***-7.02****	***<.0001***	***-6.45****	***<.0001***	***-3.07****	***0.0022***	***-4.82****	***<.0001***	***-4.85****	***<.0001***
Real estate	***-13.27****	***<.0001***	***-9.39****	***<.0001***	***-10.63****	***<.0001***	***-7.51****	***<.0001***	***-5.61****	***<.0001***
Stock/MF/IT/(IRA)	***-6.20****	***<.0001***	-0.95	0.3429	***-4.63****	***<.0001***	*-2.17***	*0.0304*	0.42	0.6729
Vehicles/motor home/trailer	***-10.71****	***<.0001***	***-8.52****	***<.0001***	***-6.70****	***<.0001***	***-4.41****	***<.0001***	***-7.13****	***<.0001***
Bonds/Cash insur./Collections	-1.16	0.2470	***-6.27****	***<.0001***	***-2.68****	***0.0074***	***-3.10****	***0.0020***	***-3.85****	***<.0001***
IRA							***-5.97****	***<.0001***	*-2.46***	*0.0138*
Credit card/Consumer debt	***-4.65****	***<.0001***	*-2.5***	*0.0111*	***-5.22****	***<.0001***	***-3.02****	***0.0026***	***-4.0****	***<.0001***
Wealth (No main home equity)	***-9.32****	***<.0001***	***-13.60****	***<.0001***	***-14.90****	***<.0001***	***-10.34****	***<.0001***	***-7.42****	***<.0001***
Wealth	***-10.33****	***<.0001***	***-14.67****	***<.0001***	***-15.50****	***<.0001***	***-10.83****	***<.0001***	***-8.07****	***<.0001***
Total family income	***-15.63****	***<.0001***	***-11.19****	***<.0001***	***-10.57****	***<.0001***	***-10.46****	***<.0001***	***-8.77****	***<.0001***

Source: Author's computation of PSID data. ****** Statistically significant at p < .01***, *** Statistically significant at p < .05*, * Statistically significant at p < .10.

Table 5. Regressions results: dependent variable is active savings

Year	**1989**			**1994**			**1999**			**2003**	
Independent variables	**Parameter estimate**	**Pr > | t |**	**VIF**	**Parameter estimate**	**Pr > | t |**	**VIF**	**Parameter estimate**	**Pr > | t |**	**VIF**	**Parameter estimate**	**Pr > | t |**
Intercept	-754.733	0.880	0.000	***-21979****	***0.000***	***0.000***	-4409.581	0.508	0.000	***-4141.086****	***0.370***
Lagged Wealth - 5 yrs. (no main home equity)	***0.037****	***0.001***	***1.504***	***-0.028****	***0.004***	***1.488***	***-0.016****	***0.005***	***1.287***	4.557E-4	0.886
Permanent Income (avg. of inc. - past 5 yrs.)	***0.443****	***<.0001***	***1.510***	***0.570****	***<.0001***	***1.643***	***0.318****	***<.0001***	***1.549***	***0.307****	***<.0001***
Transitory Income (var. of inc. - past 5 yrs.)	*-2.600E-6***	*0.012*	*1.129*	-1.920E-6	0.185	1.315	-7.952E-6	0.629	1.108	***-9.422E-7****	***0.001***
Age of head - 21 to 30	-875.933	0.868	1.426	-443.210	0.947	1.228	*-14916***	*0.049*	*1.232*	-5724.620	0.321
Age of head - 31 to 40	4605.193	0.132	1.742	3747.251	0.253	1.577	7404.074*	0.062	1.508	-3030.386	0.309
Age of head - 51 to 65	***9428.994****	***0.003***	***2.005***	*-6815.676***	*0.057*	*1.698*	-6021.712*	0.100	1.755	*-6148.900***	*0.028*
Number of Children	-233.549	0.842	1.787	***-611.470****	***0.009***	***1.459***	-435.307*	0.097	1.540	*-408.092***	*0.041*
Age of the Youngest child	***-658.985****	***0.001***	***1.415***	-374.711	0.765	1.636	-251.428	0.868	1.819	-671.231	0.541
Head - some and full College Ed.	4315.047*	0.077	1.264	600.835	0.827	1.251	3531.968	0.253	1.249	-189.828	0.935
Business own - incumbent	***25849****	***<.0001***	***1.242***	***24741****	***<.0001***	***1.243***	*10877***	*0.029*	*1.111*	4056.528	0.242
Business own - switcher	-2933.069	0.705	1.035	***18584****	***0.009***	***1.080***	7856.681	0.324	1.078	-5018.670	0.584
Wage to Business own	***17141****	***<.0001***	***1.069***	*9971.278***	*0.042*	*1.074*	*13083***	*0.007*	*1.065*	*9793.273***	*0.021*
Wage earn. - switcher	-4033.378	0.283	1.066	-1246.308	0.767	1.069	-4963.142	0.407	1.043	-10512*	0.101
Business own to Wage	-6637.874	0.187	1.044	9762.689*	0.056	1.084	*-12342***	*0.042*	*1.057*	5984.980	0.154
H. own – incumbent	2275.134	0.493	1.846	***13412****	***0.003***	***2.670***	7116.544	0.192	2.754	7445.688*	0.052
H. own - switcher	***26835****	***0.004***	***1.100***	***34135****	***<.0001***	***1.406***	15777	0.128	1.297	***50568****	***<.0001***
Renter to H. owner	10603	0.542	1.032	2811.769	0.856	1.069	15550	0.477	1.096	9243.448	0.673
Renter - switcher	***13336****	***0.006***	***1.485***	***25060****	***<.0001***	***1.946***	*16189***	*0.017*	*2.103*	***24685****	***<.0001***
H. owner to rent	-7677.679	0.321	1.148	*19632***	*0.013*	*1.314*	-1799.307	0.854	1.348	4813.386	0.488
Head's Race - Black	***-11613****	***0.005***	***1.051***	-7712.999	0.127	1.057	***-16060****	***0.004***	***1.053***	-6904.375	0.123
Head's Race - Other	-15808	0.206	1.012	-3515.734	0.876	1.021	7719.622	0.610	1.011	-899.627	0.918
First inheritance - 10 and 5 yrs. in the past	***-0.105****	***0.003***	***1.136***	***0.150****	***0.006***	***1.147***	***-0.254****	***0.000***	***1.084***	0.004	0.916
First inheritance - 5 yrs. in the past	0.042	0.219	1.065	***0.083****	***0.002***	***1.007***	0.007	0.883	1.086	***0.220****	***<.0001***
R-squared	0.162			0.1505			0.0927				
Number of cases	2150			2185			1674				

Source: Author's computation of PSID data. ***** ***Statistically significant at p < .01***, ** *Statistically significant at p < .05*, * Statistically significant at p < .10. The results are weighted by normalized F

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