TURKISH ECONOMIC ASSOCIATION

DISCUSSION PAPER 2011/2
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NO APPEALING FUTURE FOR HIGH GROWTH – LOW PROFITABILITY FIRMS: EVIDENCE FROM TURKEY'S TOP 1000

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Feb, 2011

No Appealing Future For High Growth – Low Profitability Firms: Evidence from Turkey's Top 1000

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Abstract

The view that profitability, not growth, is the driving force behind the firm performance, and unprofitable high growth can not lead to financial success has often been discussed in the literature. In this study, I tested this hypothesis on Turkey's top 1000 data using an extended version of the method of Davidson et al. (2009). My sample strongly supports the hypothesis that controlling for leverage, low growth-high profitability (p*rofit*) firms outperform high growth-low profitability (*growth*) firms regarding both directions of their transition to an upper state and a lower state in subsequent periods. The hypothesis that controlling for type of firm (growth or profit firm), leverage matters with respect to firm's future performance is weakly supported by 3-year transition data.

Keywords: Firm performance; growth; profitability; Turkey

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1. Introduction

Sales and sales growth are, no doubt, among the top objectives of firms. Surveying senior managers, Hubbard and Bromiley (1995) find sales as the most common objective of management. However, the literature on the relationship between firm growth and profitability (or financial performance) is far from being harmonious with respect to both theoretical views and empirical findings. The argument that growth rate may be negatively related to firm performance proxied by profitability or efficiency goes back to Penrose (1958) who assumes a negative relationship between firm growth and productivity growth (Penrose effects). On the other hand, many arguments affirm the positive influence of sales growth on profitability. For instance, views based on scale economies, first mover advantages (Lee et al., 2000, Lieberman and Montgomery, 1988), higher survival rates of larger firms (Aldrich and Auster, 1986), network externalities (Katz and Shapiro, 1985), learning curve benefits, etc., assert that rapid growth could, eventually, lead to high profitability.

Evolutionary firm theory predicts a positive association between firm performance (i.e., profitability and efficiency) and firm market share (i.e., growth) in accordance with the "growth of the fitter" principle. Using GMM panel data techniques on a sample of French manufacturing firms, Coad (2007) tested this hypothesis and found that profit rates have a small positive influence on subsequent growth, and the reciprocal influence of growth on profit rates is positive and significant indicating that there are no "Penrose effects". Coad (2007) concludes the evolutionary proposition that profitability is the main driver of firm growth is rejected by his data.

Managerial theory of firm (Marris, 1964) accepts that managers pursuing their own interest can maximize growth instead of shareholders' wealth even when this is harmful for shareholders' interest (Jensen, 1993). High growth, at the initial stages, through the exploitation of profitable opportunities, creates more profits and then, beyond some points, less favorable opportunities will be used, and eventually profits will decrease (Cubbin-Leech, 1986). Hence, managerial theory suggests an inverted U-shape relationship between firm growth and profitability, and the existence of a growth-profit trade-off in the second phase of the process. Testing the agency hypothesis, Brush et al. (2000) found that cash flow increases sales growth, and sales growth increases performance (i.e., profitability, ROA) for three types of firms:

Firms without free cash flow , firms with low free cash flow and owner-managed firms with low free cash flow.

In contrast to the above views, high growth strategies, besides big opportunities, represent at the same time substantial risk and challenges (Aaker and Day, 1986, Hambrick and Crozier, 1985, Markman and Gartner, 2002). Fast growth necessitates extraordinary resources, mainly, heavy cash flows, external capital, new plant and equipment investments, many new employees, a new firm structure, marketing and organizational scheme, etc. Moreover, a high growth market will attract new aggressive competitors who may have a low cost advantage or better products. Besides, key success factors can change and the firm can not adapt. Finally, the firm can not hold its market position gained during the high growth period unless there is a sustainable competitive advantage (Aaker and Day, 1986).

Empirical evidence on the relationship between growth and profitability is contradictory. Some empirical studies report results in support of a positive relationship between growth and profitability. For example, Capon et al.(1990) argue that pursuing a high sales growth strategy will yield a positive impact on profitability. Geroski et al. (1997), using a panel of large UK firms, find no trace of any trade-off between growth and profitability in the data, furthermore, they assert that high (low) current period growth rates are reasonable predictors of increases (decreases) in long run profitability. Coad et al. (2010), using census data on Italian firms, find that sales growth is very strongly associated with subsequent growth of profits and mildly associated with subsequent productivity growth.

Contrary to the above findings, some studies (e.g., Jacopson and Aaker, 1985, Shuman and Seeger, 1986, Chandler and Jansen, 1992, Markman and Gartner, 2002), reported no significant relationship between firm growth and financial performance, while other studies found a negative relationship (e.g., Manu, 1993, Weisbord, 1994, Reid, 1995).

In a recent paper, Davidsson et al. (2009), applying a resource-based approach, argued that high profitability permits the firm to build a resource-based competitive advantage and building such a valuable and hard-to-copy advantage may at first constrain growth. On the other hand, firm growth without profit is often not a sign of sound development. Growth is not direct evidence of effective value creation and appropriation which are the central tasks of entrepreneurial firms (p.390). Profitability (and the competitive advantage it reflects) is the horse that pulls

the growth cart, rather than the other way around (p.389). They empirically tested the hypothesis that the firms with high profitability and low growth (*profit firms* as they named them) are more likely to reach to a state of high growth and high profitability (*star firms*) in subsequent periods than are the firms with high growth and low profitability (*growth firms*). They also tested a second hypothesis stating that the *growth* firms are more likely to reach a state of low growth and low profitability (*poor firms*) than are the *profit* firms. Using panels of Australian and Swedish firms, they showed that the 1-year and 3-year transition probabilities of *profit* and *growth* firms to the *star* and *poor* firms groups are indeed statistically different, and *profit* firms are in a better position than the *growth* firms. Following the same methodology of Davidsson et al. (2009), Jang (2010) also reached similar results for US restaurant firms.

In this study, I extended the method of Davidsson et al. (2009) to three dimensions by taking the debt ratio (leverage) as a third measure to categorize firms besides growth and profitability, and applied it to the Turkey's top 1000 sample for 1997-2009 period to test hypotheses similar to those tested in Davidsson et al. (2009).

The rest of this paper is organized as follows. Section 2 describes the methodology, hypotheses to be tested and the data. Section 3 reports the empirical results. Section 4 concludes.

2. Methodology, hypotheses and the data

Davidsson et al. (2009) divide firms into 4 categories using quartiles of sales growth rates and return on assets (ROA): *Growth* (High growth - low profitability), *profit* (low growth – high profitability), *star* (high on both) and *poor* (low on both) firms. Then, they test two hypotheses: *Profit* firms are more likely to become *star* firms (i.e., to reach an upper state) in subsequent periods than are *growth* firms. Secondly, *growth* firms are more likely to become poor firms (i.e., to descend a lower state) in subsequent periods than are *profit* firms. For Australian data, they found that the percentages of growth firms which passed to star and poor categories in the next period are 11.6% and 30.3%, respectively, while the these ratios for profit category firms are 29.6% and 11.0%. Profit firms outperform growth firms. Their likelihood to ascend to an upper (*star*) category is three times higher and their likelihood to

descend to a lower category (*poor*) is three times smaller than growth firms. Davidsson et al. (2009) control industry affiliates of firms by using growth rates and profitability ratios relative to the other firms in the industry (they divided firms data by the industry median). But they do not control firms' debt ratios (leverages). A natural objection to their approach is that growth firms may be more leveraged compared to profit firms and this feature could be the main reason behind their poor performance in the subsequent years. To address this question I adapted the method of Davidsson et al. (2009) by adding a third dimension, the leverage ratio, to the analysis.

In this study, I sorted Turkey's top 1000 industrial firms by 8 categories using the median values of three variables, sales growth rates, ROA and leverage ratio (debt / liabilities) as category borders. Figure 1 depicts these 8 categories which

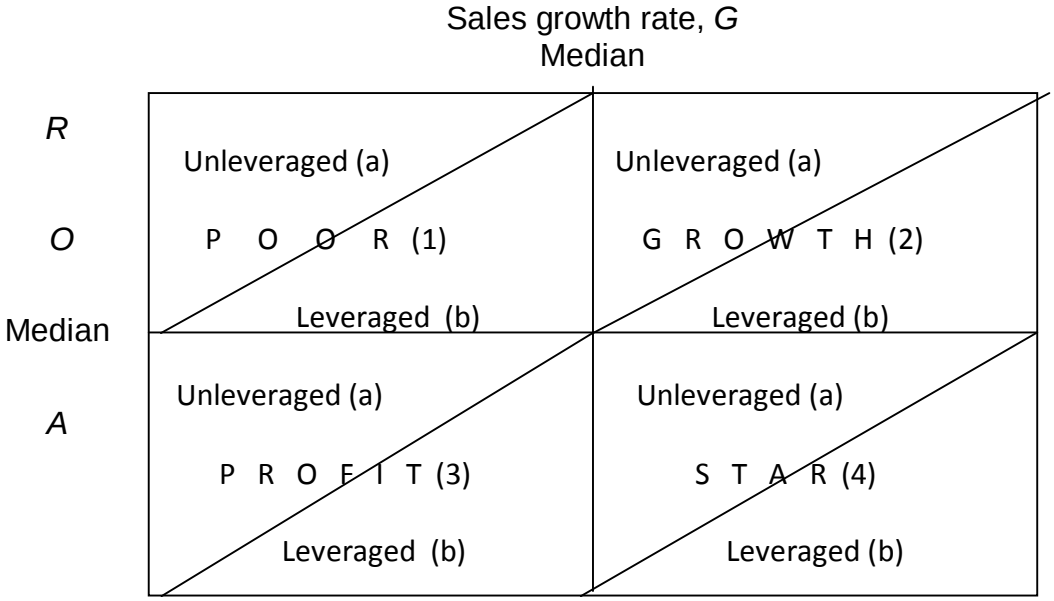

Figure 1
Categorization of firms by the median values of sales growth rate, *G,* return on assets (*ROA*) and leverage (debt) ratio

are numbered as 1a, 1b, 2a, 2b, etc.. For instance, unleveraged poor category, 1a (unleveraged-low growth-low profitability firms) includes those firms whose sales growth, ROA and debt ratios are below the median values of these variable in the year under consideration. Industry affiliates of firms are controlled by subtracting industry median values from individual firm data. Hence, all three variables used,

here, are in deviation form. 1-year transition probabilities of firms from the original (initial) state *k* to the destination state m will be shown as p_{km} where *k*, *m* = 1*a*, 1*b*, …, 4*a* and 4*b*. The 1-year transition probabilities matrix, P_{8x8}, will be:

$$P_{8x8} = \begin{bmatrix} p_{1a1a}\ p_{1a1b}\ p_{1a2a}\ p_{1a2b} \cdots\cdots p_{1a4a}\ p_{1a4b} \\ p_{1b1a}\ p_{1b1b}\ p_{1b2a}\ p_{1b2b} \cdots\cdots p_{1b4a}\ p_{1b4b} \\ \cdots\cdots\cdots\cdots\cdots\cdots\cdots\cdots \\ p_{4a1a}\ p_{4a1b}\ p_{4a2a}\ p_{4a2b} \cdots\cdots p_{4a4a}\ p_{4a4b} \\ p_{4b1a}\ p_{4b1b}\ p_{4b2a}\ p_{4b2b} \cdots\cdots p_{4b4a}\ p_{4b4b} \end{bmatrix} \qquad (1)$$

The rows of the transition matrix, P, sum to 1. First row denotes percentages of firms passing from the *unleveraged poor* (1a) category (initial state) to various categories (destination states) from the period t to t+1. The first column shows the percentage of firms arriving to the *unleveraged poor* (1a) category from various categories at time t+1.

The following hypotheses will be tested:

H1: Controlling for leverage (indebtedness), *profit* firms (*Category* 3) have a greater chance to ascend to an upper state (i.e. *star*, *Category 4*) than *growth* firms (*Category 2*) in subsequent periods. That is,

$$p_{3a4} > p_{2a4} \quad \text{and} \quad p_{3b4} > p_{2b4} \qquad (2)$$

H2: Controlling for leverage (indebtedness), *growth* firms are more likely than are *profit* firms to transition to a lower state (i.e., *poor*, *Category 1*) in subsequent periods. That is,

$$p_{2a1} > p_{3a1} \quad \text{and} \quad p_{2b1} > p_{3b1} \qquad (3)$$

H3: Leverage matters with respect to firm's future performance. Compared to leveraged firms, unleveraged firms which finance their growth mostly through internally generated funds, will be in a better position concerning future performance. That is, the likelihood of ascending to an upper (i.e., *star*) category is lower for *leveraged* firms than for *unleveraged* ones within the *growth* and *profit* categories. The same is valid concerning the likelihood of descent to a lower (*poor*) state:

Unleveraged firms are in a better position than are *leveraged* ones regarding transition to the *poor* category in the next period. That is,

H3a: $p_{2a4} > p_{2b4}$ and $p_{3a4} > p_{3b4}$ (4)

H3b: $p_{2a1} < p_{2b1}$ and $p_{3a1} < p_{3b1}$ (5)

H4: If our first two hypotheses, H1 and H2, are true, that is, the main driving force behind the firm's future performance is profitability, not growth, then, we can expect no significant difference between *profit* (low growth-high profitability) and *star* (high on both) firms and between *growth* (high growth-low profitability) and *poor* (low on both) firms regarding the likelihood of their future transitions to a lower or higher states. So, we predict:

H4a: $p_{3a1} = p_{4a1}$ and $p_{3b1} = p_{4b1}$ (6)

H4b: $p_{3a4} = p_{4a4}$ and $p_{3b4} = p_{4b4}$ (7)

H4c: $p_{2a1} = p_{1a1}$ and $p_{2b1} = p_{1b1}$ (8)

H4d: $p_{2a4} = p_{1a4}$ and $p_{2b4} = p_{1b4}$ (9)

Hypothesis H4a says that *unleveraged profit* (3a) and *unleveraged star* (4a) firms have equal likelihood to descend to the lower category 1 (*poor* firms) in the subsequent periods, and the same is valid for their *leveraged* counterparts (i.e., 3b and 4b).

Hypothesis H4b indicates that controlling for leverage, the chance of *profit* firms to ascend to an upper state (i.e., *star*) is equal to the chance of *star* firms to be at the same state in the subsequent periods (for *star* firms there is no more an upper state to ascend).

Hypotheses H4c and H4d argue that controlling for leverage, the likelihood of moving to a lower (an upper) state in subsequent periods for growth and poor firms are equal. Since there is no more a lower state for poor firms, the likelihood of their staying in the poor state in the subsequent periods is taken as their probability of transition to a lower state.

Data

I used data on the top 1000 Turkish industrial firms collected by the Istanbul Chamber of Industry (ISO). Our sample covers the period 1997-2009, but the year 1997 is lost due to the calculation of sales growth rate. Only private companies are included in the sample. Because of new entries to and exits from the top 1000 list each year, the panel is naturally unbalanced. There are 6310 firm-year observations in the panel. In order to control the industry effects, industry median values of the variables are subtracted from the firm data, that is,

$$x_{it} = X_{itj} - \bar{x}_{tj} \quad , \quad i \in J$$

Where X_{itj} denotes sales growth rate, ROA and debt ratio of firm *i* which is a member of industry *j*, $\bar{x}_{tj}$ the median value of the variable under consideration in industry *j* at time *t*. Sales growth rate, G, and return on assets (ROA, profits before tax divided by liabilities) are used as proxies for firm growth and profitability. External funds (debt) / Total assets ratio is used as the leverage ratio.

3. Results and Discussion

1-year transition percentages of firms listed in Turkey's top 1000 across the 8 firm categories (states) are presented in Table 1. Most important probabilities of Table 1 for our hypotheses are visualized in Figure 2 to make the issue clearer. Besides 1-year transition probabilities 3-year transition probabilities are also given in Figure 2 in order to follow firms' transitions in the long run. Results of z-test for the equality of related percentages are given in Table 2. We can summarize our findings as follows:

i. As seen from the z-test results given in Table 2, the data strongly support our two hypotheses, H1 and H2. Controlling for leverage, p*rofit* (low growth - high profitability) firms outperform *growth* (high growth - low profitability) firms on both directions of transition to an upper state (*star*) and a lower state (*poor*). While 37.6% of the *unleveraged profit* (*Category 3a*) and 32.7% of the *leveraged profit* firms (*Category 3b*) ascends to an upper state (i.e., *star* category) in the next period, only 20.9% of the *unleveraged growth* (*Category 2a*) and 15.9% of the *leveraged growth* (*Category 2b*) firms are able to move the *star* category (See, *Figures 2*). Hence,

controlling firm leverage does not change the result found by Davidsson et al. (2009) that low growth – high profitability (*profit*) firms have higher chance to move to an upper state than high growth – low profitability (*growth*) firms.

Since the 3-year transition probabilities can be taken as long run path of firms, the non-rejection of our hypotheses H1 and H2 indicates that the superiority of profit firms over growth firms concerning future performance is not only a short run phenomenon, but it is also valid in the long run.

Table 1
1-year transition percentages for Turkish top 1000 data

	Destination state (t+1)								
Initial State (t) ↓	1a	1b	2a	2b	3a	3b	4a	4b	Total
1a	**0.330**	0.100	0.189	0.069	0.110	0.009	0.178	0.014	1.000
1b	0.036	**0.389**	0.030	0.305	0.022	0.062	0.037	0.118	1.000
2a	0.319	0.086	**0.231**	0.067	0.084	0.004	0.151	0.058	1.000
2b	0.037	0.367	0.045	**0.293**	0.024	0.074	0.038	0.121	1.000
3a	0.133	0.037	0.059	0.019	**0.352**	0.024	0.350	0.026	1.000
3b	0.032	0.219	0.011	0.146	0.095	**0.170**	0.108	0.219	1.000
4a	0.090	0.030	0.057	0.036	0.352	0.017	**0.361**	0.057	1.000
4b	0.022	0.200	0.016	0.134	0.075	0.189	0.082	**0.282**	1.000
Total	0.110	0.181	0.070	0.139	0.159	0.060	0.178	0.102	1.000

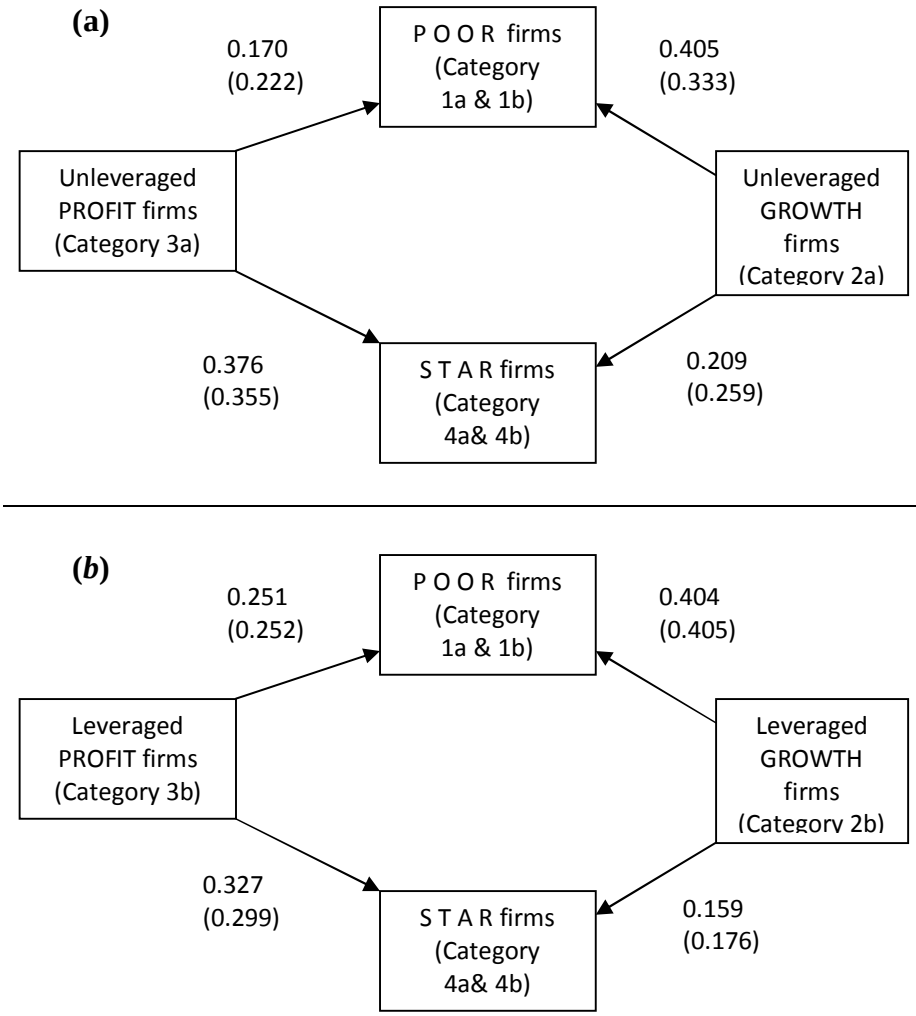

Figure 2
1-year and 3-year (in parenthesis) transition probabilities of unleveraged (a) and leveraged (b) *growth* and *profit* firms to the *poor* and *star* firm categories

Table 2
One-tailed z tests for null hypothesis of equality of proportions for 1 and 3-year transition probabilities obtained from the Turkey's top 1000 data

Hypothesis	Alternative hypothesis	1-year transition probabilities		3-year transition probabilities	
		z	p-value	z	p-value
H1	$p_{3a4} > p_{2a4}$	3.08	0.001	1.61	0.054
	$p_{3b4} > p_{2b4}$	3.25	0.001	1.94	0.026
H2	$p_{2a1} > p_{3a1}$	4.84	0.000	1.99	0.023
	$p_{2b1} > p_{3b1}$	2.73	0.003	2.25	0.012
H3a	$p_{2a4} > p_{2b4}$	1.00	0.159	1.39	0.082
	$p_{3a4} > p_{3b4}$	0.97	0.166	0.88	0.190
H3b	$p_{2a1} < p_{2b1}$	0.02	0.492	-1.28	0.100
	$p_{3a1} < p_{3b1}$	-1.57	0.058	-0.48	0.316
	Null hypothesis				
H4a	$p_{3a1} = p_{4a1}$	1.24	0.107	0.22	0.413
	$p_{3b1} = p_{4b1}$	0.52	0.520	-0.07	0.472
H4b	$p_{3a4} = p_{4a4}$	-1.24	0.107	-0.12	0.452
	$p_{3b4} = p_{4b4}$	-0.70	0.242	-0.26	0.397
H4c	$p_{2a1} = p_{1a1}$	-0.54	0.295	-0.41	0.341
	$p_{2b1} = p_{1b1}$	-0.61	0.271	0.24	0.405
H4d	$p_{2a4} = p_{1a4}$	0.31	0.378	0.60	0.264
	$p_{2b4} = p_{1b4}$	0.10	0.461	0.04	0.484

ii. Our third hypothesis, H3, saying that leverage matters with respect to firm's future performance, is mostly rejected by the 1-year (short run) transition probabilities with one exception: The hypothesis $p_{3a1} < p_{3b1}$ is not rejected by the data. That is, compared to *leveraged profit* firms (3b) u*nleveraged profit* firms (*3a*) have a smaller likelihood to move a lower state (*poor*) in the short run. As for long run (3-year) transition probabilities, leverage seems to have a weak effect (p-values of 0.08 and 0.10) on the long-run transition probabilities of *growth* firms, but has no effect on the transition probabilities of *profit* firms.

iii. All variants of our fourth hypothesis, H4a to H4d, are strongly supported by the data of both 1-year and 3-year transition matrices. The non-rejections of null hypotheses H4a and H4b implies that there is no substantial difference between *profit* and *star* firms with regards to the probabilities of their upward and downward transitions both in the short and the long run. Similarly, the non-rejections of H4c-H4d means that *growth* (high growth-low profitability) firms are not different from *poor* (low on both) firms regarding short and long run probabilities of their upward and downward transitions across states.

These results affirm once more the assertion that profitability is the driving force behind the future performance of firms and without profitability growth by itself could not lead to financial success. The ineffectiveness of growth by itself (i.e., without profitability) in the determination of firm performance in subsequent periods, principally, comes from its nonpersistent nature. Firm growth rates which have very low, mostly insignificant, serial correlation coefficients, are nearly random. For instance, the first three autocorrelation coefficients of sales growth rate,G, in our sample are -0.0024 (p-value, 0.420), 0.0450 (0.000) and -0.0171 (0.130), respectively.

The difference in future performance between *growth* and *profit* firms increases sharply during the financial crisis years. For instance, in 2001, 68 out of 113 growth firms (53.5%) descended to the *poo*r category, whereas this percentage is only 18.2 % (24 out of 107 firms) for *profit* firms. Moreover, the percentages of firms ascending to the *star* category is 8.7% for *growth*, but, 39.4% for *profit* firms during the 2001 financial crisis.

Our results have some implications for firm managers, investors and policy-makers as well as for researchers. Growth by itself (independent of profitability) should not be taken as an objective for a firm. High growth-low profitability strategies are rarely sustainable. Value of growth for the prosperity of firms should not be exaggerated. Since unprofitable rapid growth brings about many adverse factors for value-profit- generation process of firms, it is, mostly, a signal of illness and risk. In our sample, more than 40% of these growth-focused firms descends to a state of low growth-low profitability in the next period. Profitability eventually leads to growth, not the other way around. Economic policies towards business firms should accentuate the importance of profitability and support value-creation efforts of firms. Assessing firms only by their growth performance, neglecting profitability, will lead

industry managers and investors to very erroneously forecasts about the future evolution of these firms.

A limitation of this study is related with sizes of firms sampled. Since we include only private industrial companies listed in Turkey's top 1000, our sample is truncated from below and includes only big firms. Future studies may fill this gap and expand the scope of research to the small firms.

4. Conclusion

In this study, I extended the method of Davidsson et al. (2009) by adding the leverage ratio as a third dimension besides growth and profitability to categorize firms. This extension enabled me to control for leverage in comparing the performance of *growth* and *profit* firms in the subsequent periods. I classified Turkey's top 1000 industrial firms into 8 categories using the median values of three variables, sales growth rates, ROA and leverage ratio (debt / liabilities) as category borders. Using the terminology of Davidsson et al. (2009), these categories are called *growth* (high growth-low profitability), *profit* (low growth-high profitability), *poor* (low on both) and *star* (high on both) categories, each of which are separated into *unleveraged* and *leveraged* sub-categories in turn using the median leverage ratio as a yardstick.

Results for both 1-year (short-run) and 3-year (long-run) transition matrices strongly support our two hypotheses, H1 and H2. Controlling for leverage, p*rofit* firms outperform *growth* firms on both directions of transition, to an upper state (*star*) or to a lower state (*poor*). Thus the superiority of profit firms over growth firms concerning their future performance is not only a short run phenomenon, but it is a persistent one.

Our third hypothesis, H3, arguing that leverage matters with respect to firm's future performance, is mostly rejected by 1-year (short run) transition probabilities, but weakly supported by 3-year transition data. Being unleveraged or leveraged seems to have a weak effect on the long-run transition probabilities of *growth* firms, but has no effect on the transition probabilities of *profit* firms.

All variants of our fourth hypothesis, H4a to H4d, are strongly supported by the data of both 1-year and 3-year transition matrices, indicating that there is no

substantial difference (i) between *profit* and *star* firms and (ii) between *growth* and *poor* firms concerning their future upward and downward transitions across categories (states). This result is resolute evidence supporting the claim that profitability, not growth, is the driving force behind firm performance. The view that high growth could, eventually, lead to high profitability is strongly rejected by the data on Turkey's top 1000 industrial firms.

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Table A1
1-year transition matrix

Initial State (t) ↓	Destination state (t+1) 1a	1b	2a	2b	3a	3b	4a	4b	Total
1a	**211**	64	121	44	70	6	114	9	639
1b	38	**405**	31	318	23	65	39	123	1042
2a	148	40	**107**	31	39	2	70	27	464
2b	35	345	42	**276**	23	70	36	114	941
3a	130	36	58	19	**344**	23	342	25	977
3b	12	81	4	54	35	**63**	40	81	370
4a	107	35	67	43	416	20	**427**	68	1183
4b	15	139	11	93	52	131	57	**196**	694
Total	696	1145	441	878	1002	380	1125	643	6310

Table A2
3-year transition matrix

Initial State (t) ↓	Destination state (t+3) 1a	1b	2a	2b	3a	3b	4a	4b	Total
1a	84	54	56	38	64	5	64	21	386
1b	40	196	27	151	40	41	39	65	599
2a	74	36	53	35	42	5	65	21	331
2b	48	189	34	133	23	55	38	65	585
3a	106	43	50	24	193	16	211	27	670
3b	16	48	10	36	42	26	28	48	254
4a	111	61	39	50	238	20	252	39	810
4b	21	96	12	88	40	55	48	96	456
Total	500	723	281	555	682	223	745	382	4091

Table A3
3-year transition probabilities matrix

Initial State (t) ↓	Destination state (t+3) 1a	1b	2a	2b	3a	3b	4a	4b	Total
1a	**0.218**	0.14	0.145	0.098	0.166	0.013	0.166	0.054	1.000
1b	0.067	**0.327**	0.045	0.252	0.067	0.068	0.065	0.109	1.000
2a	0.224	0.109	**0.16**	0.106	0.127	0.015	0.196	0.063	1.000
2b	0.082	0.323	0.058	**0.227**	0.039	0.094	0.065	0.111	1.000
3a	0.158	0.064	0.075	0.036	**0.288**	0.024	0.315	0.04	1.000
3b	0.063	0.189	0.039	0.142	0.165	**0.102**	0.11	0.189	1.000
4a	0.137	0.075	0.048	0.062	0.294	0.025	**0.311**	0.048	1.000
4b	0.046	0.211	0.026	0.193	0.088	0.121	0.105	**0.211**	1.000
Total	0.122	0.177	0.069	0.136	0.167	0.055	0.182	0.093	1.000