

Sectoral Analysis of Mergers and Acquisitions Activity of Newly Public Firms: The Case of Borsa Istanbul

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Abstract

This paper studies the mergers and acquisitions (M&As) activity of newly public firms on Borsa Istanbul between 1990-2014 on a sectoral basis. Our analysis of the number of initial public offerings (IPOs) and the amount of their IPO proceeds shows that while a higher number of firms go public in the manufacturing sector, larger firms go public in the financial sector in terms of the proceeds raised in the IPO process. For manufacturing firms that have been involved in an M&A activity, the aggregate deal volume corresponds to 17% of their market size for acquiring IPO firms and 59% of their market size for targeted IPO firms. For financial firms that have been involved in an M&A activity, the aggregate deal volume corresponds to 10% of their market size for acquiring IPO firms and 12% of their market size for targeted IPO firms. Overall, we find that compared to financial firms, manufacturing firms are more active as targets in the post-IPO M&A process within the first five years after their IPOs and similarly active as acquirers.

Keywords: Initial Public Offerings, Mergers and Acquisitions, Borsa Istanbul, Manufacturing Sector, Financial Sector

JEL Classification: G30, G34

1. Introduction

The decision to go public is a milestone in a firm's life cycle. Even though a large body of corporate finance literature is dedicated to understanding the initial public offering (IPO) decision of firms, many of these studies do not distinguish between the different sectors these firms operate in. We argue that firms might have different motivations to go public depending on their needs specific to their sectors, and therefore we base our study on a sectoral analysis of newly public firms.

Existing IPO studies argue that firms might go public either to facilitate a subsequent sale to another firm, i.e. to become a target (such as in Zingales 1995, Mello and Parsons 1998), or to fund external growth through acquisitions, i.e. to become an acquirer (such as in Brau and Fawcett 2006, Celikyurt et al. 2010, Hsieh et al. 2011, Brau et al. 2012).

In our study, we analyze the mergers and acquisitions (M&As) activity of firms going public on Borsa Istanbul (BIST) on a sectoral basis by focusing on firms in the two biggest sectors on BIST, namely the manufacturing and the financial sectors. Since firms might be involved in M&As as acquirers or targets, we examine the role of IPO firms not only as bidders but also as

takeover targets in the post-IPO M&A process. Specifically, we study the M&A behavior of newly public firms on BIST within the next five years after going public to find out whether these firms are involved in post-IPO M&As and if so, whether they mostly become acquirers or targets, focusing on the manufacturing and the financial sectors.

Our analysis of the number of IPO firms and the amount of their IPO proceeds shows that while a higher number of firms go public in the manufacturing sector, larger firms go public in the financial sector in terms of the proceeds raised in the IPO process.

We find that, during 1990-2014, 14.5% of the manufacturing firms participate as acquirers and 18.7% of them as targets in post-IPO M&As whereas 27.2% of the financial firms participate as acquirers and 28.8% of them as targets in post-IPO M&As. This finding indicates that the majority of BIST-IPO firms in both sectors do not participate in M&As in the five-year period after going public suggesting that participating in post-IPO M&As does not seem to be an important motive behind firms' going public decision in these sectors.

The levels of M&A activity undertaken by IPO firms on BIST within five years after going public are different for the cases when they participate as acquirers or as takeover targets in the post-IPO M&A process. Specifically, for manufacturing firms that have been involved in an M&A activity, the aggregate deal volume corresponds to 17% of their market size for acquiring IPO firms and 59% of their market size for targeted IPO firms. For financial firms that have been involved in an M&A activity, the aggregate deal volume corresponds to 10% of their market size for acquiring IPO firms and 12% of their market size for targeted IPO firms. Moreover, our statistical analysis reveals that compared to financial firms, manufacturing firms are more active as targets in the post-IPO M&A process within the first five years after their IPOs and similarly active as acquirers conditional on being involved in an M&A deal.

The rest of the paper is organized as follows. Section 2 reviews the related literature. Section 3 describes our IPO sample and presents descriptive statistics. Section 4 analyzes the M&A activity of IPO firms after going public on a sectoral basis. Section 5 concludes.

2. Literature Review

IPOs on Borsa Istanbul (called BIST-IPOs hereafter) are studied in the literature mostly in the context of the IPO process itself, the IPO underpricing and the IPO long-run performance.

The specifics of the IPO process on BIST are studied by Karatepe et al. (2002), and the compliance costs associated with IPOs are discussed by Kılıç et al. (2009). Saraç and Bozkurt (2011) study the small and medium sized

enterprises' tendency to go public. Atici and Gursoy (2015), on the other hand, study the ownership structure of firms after they go public on BIST.

Existing studies on BIST-IPOs focus mostly on the determinants of IPO underpricing such as Dağlı and Kurtaran (2008), Kucukkocaoglu (2008), Cihangir and Kandil (2009), and Ercan and Çevikel (2011). Kıymaz (2000), and Bildik and Yılmaz (2008) analyze both the initial and the aftermarket performance of IPOs whereas Kaderli and Demir (2008) examine the relation between IPO underpricing and the firm growth subsequent to the IPO. Some other studies analyze the long-run stock performance of IPOs such as Kıymaz (1997), Ewing and Ozfidan (2003), and Erdogan (2010). Durukan (2002) studies the relation between initial returns and long-term returns for IPO firms.

The post-issue operating performance of IPOs is explored by Kurtaran and Er (2008). Moreover, Bulut (2008) and Bulut et al. (2009) study the relation between post-issue operating performance of IPO firms and their investment bank reputation and auditing firm reputation, respectively.

Most of these studies on IPO firms on Borsa Istanbul do not distinguish between the different sectors these firms operate in. However, since firms might have different motivations to go public depending on their needs specific to their sectors, we believe that such a distinction between sectors is necessary and base our study on a sectoral analysis of newly public firms.

There are sectoral studies exploring stock performance or various investment and financing activities of firms traded on BIST such as Gönenç and Arslan (2003), Öztürk and Demirgüneş (2008), Alp et al. (2010), Sayılğan and Sayman (2010), Karcıoğlu and Özer (2014), Uygur and Taş (2014). Even though these studies are based on a sectoral analysis, none of them have a focus on newly public firms.

So far, the extent of M&A activity by newly public firms on BIST and what role, acquirer or target role, these IPO firms perform have not been documented in existing literature on a sectoral basis. To the best of our knowledge, ours is the first systematic sectoral study of the M&A activity by newly public firms on BIST. Our paper therefore complements the literature studying IPO firms on BIST.

3. Data and Descriptive Statistics

We obtain the IPO data from BIST database which covers all Turkish IPOs between 1986 and 2014 and the M&A data from Securities Data Company's (SDC) Mergers and Acquisitions database. In our study, we cover the M&A transactions by BIST-IPO firms between 1990 and 2015 since BIST database starts to provide detailed IPO data from 1990 on. The types of M&A deals include not only mergers and acquisitions but also acquisitions of assets and partial stock interest. We get the financial data of sample firms from Rasyonet.

A total of 453 firms went public on BIST during 1986-2014. Graph 1 shows the frequency of IPOs over the years. The number of IPO firms varies over time ranging between 1 and 35. To analyze BIST-IPOs in more detail over the years, we categorize IPO firms into the sectors in which they operate. The sector information comes from KAP (Kamuyu Aydınlatma Platformu – Public Disclosure Platform). A total of 189 firms are from the manufacturing sector comprising about 42% of the IPO sample, 137 firms are from the financial sector comprising about 30% of the IPO sample, and the remaining IPO firms in the sample do not form a significant group when classified into sectors. Graph 1 also shows the distribution of the number of IPOs per year in the manufacturing sector and the financial sector between 1986 and 2014.

In the manufacturing sector, the highest number of IPOs per year is observed in years 1990 and 1994 with 17 IPOs in each year. On the other hand, there are no IPOs in 1999, 2001-2002, and 2007-2009. We observe a cyclical IPO pattern for the manufacturing sector similar to that for the whole IPO sample where there are periods of low IPO activity mostly coinciding with economic crises.

In the financial sector, the highest number of IPOs per year is observed in 1995 with 12 IPOs per year. On the other hand, there are no IPOs in years 2003 and 2009. When compared with the distribution of IPOs in the manufacturing sector, we observe that financial institutions' going public decision is less sensitive to the changes in the economy. That is, we do not observe drastic changes over the years in the number of IPOs in the financial sector as we do in the manufacturing sector.

Tables 1 and 2 show the mean and the median of the total IPO proceeds of firms going public on BIST for each year during 1990-2014 and in both Turkish Liras (TRY) and in US Dollars (USD) for the manufacturing sector and the financial sector, respectively. The tables also present inflation adjusted IPO proceeds, where the inflation adjusted values are reported in 2015 currencies and the inflation rates are obtained from TUIK (Türkiye İstatistik Kurumu – Turkish Statistical Institute). For the 55 IPOs in the 1986-1989 period we report only the number of IPOs since BIST database provides only firm names for this time period, therefore leaving us with a sample of 398 BIST-IPOs during 1990-2014 for which the details of the IPO process are available. For some years from 1990 to 2014, the proceeds are not available for the sectors since no firm in these related sectors went public in those years coinciding with the economic crisis periods.

Table 1 shows that for IPO firms in the manufacturing sector, the highest mean of nominal total proceeds is 210.28 million TRY in 2006 and the lowest mean is 0.04 million TRY in 1992; and Table 2 shows that for IPO firms in the financial sector, the highest mean of nominal total proceeds is 484.90 million TRY in 2007 and the lowest mean is 0.03 million TRY in 1992. For both the manufacturing and the financial sectors, we observe a

general upward trend in the mean of nominal total proceeds in Turkish Liras from 1990 to 2014. The mean of inflation adjusted total proceeds, on the other hand, is more stable over time showing no clear trend for both sectors. For the US Dollars case, we do not observe much fluctuation in neither the nominal nor inflation adjusted total proceeds indicating that the level of IPO activity on BIST does not change much over the years. Similar patterns are observed for the median of both the nominal and the inflation adjusted total proceeds.

Our comparison of the total IPO proceeds raised for the two sectors in Tables 1 and 2 shows that the proceeds from IPOs in the financial sector are higher than the proceeds from IPOs in the manufacturing sector. More specifically, the mean of inflation adjusted total IPO proceeds is 62.99 million TRY for the manufacturing firms whereas this number is 159.95 million TRY for financial firms. We find that the difference between the means of the volume of IPO proceeds is statistically significant at the 10% level for inflation adjusted values in both currencies. Therefore, considering the two types of sectors, our analysis of the number of IPOs and the amount of their proceeds implies that while a higher number of firms go public on BIST in the manufacturing sector, larger firms go public on BIST in the financial sector in terms of the proceeds raised in the IPO process.

4. The M&A Activity of Newly Public Firms on BIST

We analyze the frequency and the volume of M&A deals undertaken by BIST-IPO firms for the sample period from 1990 to 2015 by comparing the M&A deal activities in cases when IPO firms are acquirers and when IPO firms are targets. We repeat our analysis for both the manufacturing and the financial sectors, and also explore the differences in the post-IPO M&A activities between these two groups of firms. We include not only mergers and acquisitions but also acquisitions of assets and acquisitions of partial stock interest, i.e. partial acquisitions, in our analysis. Therefore, target firms do not have to be acquired in total and can be acquired in part in an M&A process, thus allowing multiple acquisitions of the same target firm during the sample period.

4.1 Frequency of post-IPO M&As

Table 3 presents the summary statistics for the number of M&A deals undertaken by BIST-IPO firms in the five-year period after going public for the manufacturing and the financial sectors. Panels A and B report the statistics for cases when IPO firms are acquirers and when IPO firms are targets, respectively.

Panel A of Table 3 shows that among the 166 manufacturing firms on BIST from 1990 to 2014, 24 of them, i.e. 14.5% of the manufacturing BIST-IPO firms, make at least one acquisition within five years after their IPO year. Moreover, conditional on having been involved in a post-IPO M&A as an

acquirer, these firms participate in a total of 42 M&A deals in five years, corresponding to an average of 1.75 deals per IPO firm. We find that compared to manufacturing firms, financial firms are more active in post-IPO M&A activity as acquirers. More specifically, Panel A of Table 3 also shows that among the 125 financial firms on BIST from 1990 to 2014, 34 of them, i.e. 27.2% of the financial BIST-IPO firms, make at least one acquisition within five years after their IPO year. Moreover, conditional on having been involved in a post-IPO M&A as an acquirer, these firms participate in a total of 82 M&A deals in five years, corresponding to an average of 2.41 deals per IPO firm.

In Panel B of Table 3, we analyze whether BIST firms get acquired by other firms in the five-year period after they go public. We find that among the 166 manufacturing firms on BIST from 1990 to 2014, 31 of them, i.e. 18.7% of the manufacturing BIST-IPO firms, were involved in at least one M&A activity as a target firm within five years after their IPO year. Moreover, conditional on having been involved in a post-IPO M&A as a target, these firms participate in a total of 63 M&A deals in five years, corresponding to an average of 2.03 deals per IPO firm. We find that compared to manufacturing firms, financial firms are less active in post-IPO M&A activity as targets. More specifically, Panel B of Table 3 also shows that among the 125 financial firms on BIST from 1990 to 2014, 36 of them, i.e. 28.8% of the financial BIST-IPO firms, participate in at least one M&A as a target firm within five years after their IPO year. Moreover, conditional on having been involved in a post-IPO M&A as a target, these firms participate in a total of 54 M&A deals in five years, corresponding to an average of 1.50 deals per IPO firm.

Overall, our findings so far indicate that, conditional on being involved in an M&A deal, financial firms are more active as acquirers but less active as targets compared to manufacturing firms in terms of the number of post-IPO M&A activities. Still, the majority of BIST-IPO firms in both sectors do not participate in M&As in the five-year period after going public suggesting that participating in post-IPO M&As does not seem to be an important motive behind firms' going public decision in these sectors.

4.2 Volume of post-IPO M&As

We study the deal volume of firms involved in post-IPO M&As to find out how large these M&A deals are in comparison to the IPO firm's size in the manufacturing and the financial sectors. We use the market value of assets (MVA) as the measure of firm size where MVA is defined as the book value of assets less the book value of equity plus the equity market capitalization. For each IPO firm, we calculate the annual percentage M&A deal volume by dividing the inflation adjusted deal volume by inflation adjusted MVA at the time of IPO. We use inflation adjusted dollars so that the deal volume and the firm size are given in the same year's dollars. We also calculate

cumulative percentage deal volumes for each firm by adding up the annual inflation adjusted deal volumes for a given time window and then dividing the total by the inflation adjusted firm size measured in the IPO year. The time window ranges from year 0 to year 5 where year 0 denotes the IPO year.

4.2.1 Deals of acquiring IPO firms

Graphs 2 and 3 show the average M&A volume over time as a percentage of market value of assets measured in the IPO year for BIST-IPO firms which make at least one acquisition within five years after going public for the manufacturing sector and the financial sector, respectively. We report averages of annual deal volumes and also averages of cumulative deal volumes where year 0 denotes the IPO year.

Graph 2 shows that, for the manufacturing sector, the M&A volume averages 0.88% of firm size in the IPO year. The average annual deal volume becomes 0.49% of firm size in year 1, and reaches its highest value of 11.40% in year 2, revealing an upward trend over years 0-2. Afterwards we observe a downward trend in average annual deal volume over years 3-5 reaching its lowest level in year 5. Consistently, we observe a sharp rise from 0.88% to 12.77% in the average cumulative deal volume over years 0-2 and then a modest increase over years 3-5 with a mean increase of 1.48% each year during this period. We find that the total acquisition volume of a typical manufacturing IPO firm over five years after going public amounts to 17.21% of its firm size measured as a percentage of market value of assets.

Graph 3 shows that, for the financial sector, the M&A volume averages 0.64% of firm size in the IPO year. The average annual deal volume becomes 2.88% of firm size in year 1, and 2.92% in year 2, revealing an upward trend over years 0-2. Afterwards we observe a downward trend in average annual deal volume over years 3-5 reaching its lowest level of 0.69% in year 5. Consistently, we observe a sharp rise from 0.64% to 6.44% in the average cumulative deal volume over years 0-2 and then a modest increase over years 3-5 with a mean increase of 1.20% each year during this period. We find that the total acquisition volume of a typical financial IPO firm over five years after going public amounts to 10.05% of its firm size measured as a percentage of market value of assets.

Our analysis of the M&A volumes in Graphs 2 and 3 for the manufacturing and financial sectors shows that IPO firms are most active as acquirers within their first two years after the IPO year. For both sectors we observe similar patterns of the M&A deal volume over time indicating that firms in the manufacturing and financial sectors behave similarly in terms of the deal amounts when they participate as acquirers in post-IPO M&As, with the manufacturing firms being involved in deals with slightly higher deal values.

4.2.2 Deals of target IPO firms

Graphs 4 and 5 show the average M&A volume over time as a percentage of market value of assets measured in the IPO year for BIST-IPO firms which get acquired by other firms in the five-year period after they go public for the manufacturing sector and the financial sector, respectively. We report averages of annual deal volumes and also averages of cumulative deal volumes where year 0 denotes the IPO year.

Graph 4 shows that, for the manufacturing sector, the M&A volume averages 7.76% of firm size in the IPO year. The average annual deal volume is 6.17% of firm size in year 1, and reaches its highest value of 28.19% in year 2, revealing an upward trend over years 0-2. Afterwards we observe a downward trend in average annual deal volume over years 3-5 reaching its lowest level in year 5. Consistently, we observe a sharp rise from 7.76% to 42.12% in the average cumulative deal volume over years 0-2 and then a modest increase over years 3-5 with a mean increase of 5.53% each year during this period. We find that the total deal volume of a typical targeted manufacturing IPO firm over five years after going public amounts to 58.71% of its firm size measured as a percentage of market value of assets.

Graph 5 shows that, for the financial sector, the M&A volume averages 4.94% of firm size in the IPO year. The average annual deal volume is 4.55% of firm size in year 1, and then reveals an downward trend over years 2-4 reaching its lowest level of 0.24% in year 4. Consistently, we observe a rise from 4.94% to 12.47% in the average cumulative deal volume over years 0-5 indicating that the total deal volume of a typical targeted financial IPO firm over five years after going public amounts to 12.47% of its firm size measured as a percentage of market value of assets.

Our analysis of the M&A volumes in Graphs 4 and 5 for the manufacturing and financial sectors shows that these sectors reveal different patterns of the M&A deal volume over time indicating that firms in the manufacturing and financial sectors behave differently in terms of the deal amounts when they participate as targets in post-IPO M&As, with the manufacturing firms being involved in deals with much higher deal values.

4.2.3 IPO firms in the manufacturing versus financial sectors

So far we find that there is an upward trend in annual M&A volume over years 0-2, where year 0 denotes the IPO year, and a downward trend afterwards, when the IPO firm is the acquirer in the M&A process regardless of whether it is in the manufacturing or financial sector. However, the patterns over time for the M&A deal volume are different for these two sectors when the IPO firm is the target in the M&A process, with the manufacturing firms showing a more aggressive increase in annual M&A deal volume over time.

Table 4 summarizes the mean cumulative M&A volume as a percentage of firm size for the subsample of manufacturing IPO firms and the subsample of financial IPO firms where we use market value of assets as the measure of firm size. In Panel A we report percentages for acquiring IPO firms and in Panel B we report percentages for target IPO firms. The mean cumulative deal volumes are increasing over time since these cumulative deal volumes are found for each firm by adding up the annual deal volumes for a given time window and then dividing the total by the firm size measured in the IPO year. Table 4 also reports the p-values for the t-test to determine whether the mean cumulative deal volumes are equal for the two IPO firm subsamples, namely the manufacturing and the financial sectors.

Panel A of Table 4 shows that the mean M&A volume of firms in their IPO year is 0.88% of firm size at the time of the IPO for manufacturing firms and is 0.64% for financial firms. The t-test shows that these deal volumes in the IPO year are not significantly different from each other. Even though we observe higher cumulative M&A deal volumes over time for firms in the manufacturing sector compared to firms in the financial sector, the differences do not turn out to be statistically significant. Overall, we observe similar percentage deal volumes for the two sectors when firms take the acquirer role in the M&A process. We find that, on average, the total M&A volume of IPO firms over the five-year period corresponds to 17.21% of firm size at the time of the IPO for manufacturing firms and to 10.05% for financial firms, with these means, however, not being significantly different from each other.

Panel B of Table 4 shows that the mean M&A volume of firms in their IPO year is 7.76% of firm size at the time of the IPO for manufacturing firms and is 4.94% for financial firms. The t-test shows that these deal volumes in the IPO year are not significantly different from each other. We observe higher cumulative M&A deal volumes over time for firms in the manufacturing sector compared to firms in the financial sector, with the difference becoming statistically significant at the 5% and 10% levels for time windows 0-4 and 0-5 after the IPO year, respectively. We find that, on average, the total M&A volume of IPO firms over the five-year period corresponds to 58.71% of firm size at the time of the IPO for manufacturing firms and to 12.47% for financial firms, with these means being significantly different from each other at the 10% level.

Overall, our findings indicate that BIST firms, which participate as acquirers in post-IPO M&As, have similar levels of total deal volume as a percentage of firm size when they operate in the manufacturing sector or in the financial sector. On the other hand, BIST firms, which participate as targets in post-IPO M&As, have a larger total deal volume as a percentage of their firm size when they operate in the manufacturing sector compared to when they operate in the financial sector. This finding suggests that manufacturing

firms might decide to go public on BIST with a subsequent sale in mind after their IPOs.

Conclusion

We study the mergers and acquisitions activity of newly public firms on Borsa Istanbul within five years after their initial public offering on a sectoral basis and analyze the role of these firms as bidders or takeover targets in the post-IPO M&A process.

Our analysis of the number of initial public offerings (IPOs) and the amount of their IPO proceeds implies that while a higher number of firms go public in the manufacturing sector, larger firms go public in the financial sector in terms of the proceeds raised in the IPO process.

We show that 14.5% of the manufacturing firms participate as acquirers and 18.7% of them as targets in post-IPO M&As whereas 27.2% of the financial firms participate as acquirers and 28.8% of them as targets in post-IPO M&As. For manufacturing firms that have been involved in an M&A activity, the aggregate deal volume corresponds to 17% of their market size for acquiring IPO firms and 59% of their market size for targeted IPO firms. For financial firms that have been involved in an M&A activity, the aggregate deal volume corresponds to 10% of their market size for acquiring IPO firms and 12% of their market size for targeted IPO firms.

Overall, we find that compared to financial firms, manufacturing firms are more active as targets in the post-IPO M&A process within the first five years after their IPOs and similarly active as acquirers. Still, the majority of BIST-IPO firms in both sectors do not participate in M&As in the five-year period after going public suggesting that participating in post-IPO M&As does not seem to be an important motive behind firms' going public decision in these sectors.

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Table 1: Summary statistics for IPO proceeds of firms in the manufacturing sector going public on BIST during 1986-2014

Year	# of IPOs	Turkish Lira (TRY)				US Dollars (USD)			
		Nominal		Inflation Adjusted (as of 2015)		Nominal		Inflation Adjusted (as of 2015)	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median
1986	7								
1987	12								
1988	2								
1989	2								
1990	17	59,834.69 "	32,490.00 "	101,254,555.07 "	54,980,822.59 "	\$ 22,867,965.43	\$ 11,872,743.48	\$ 41,469,346.34	\$ 21,530,333.04
1991	12	48,177.56 "	36,448.65 "	47,649,272.21 "	36,048,978.24 "	\$ 13,687,935.37	\$ 9,068,480.69	\$ 23,810,117.86	\$ 15,774,591.88
1992	6	44,223.75 "	36,686.25 "	26,348,687.74 "	21,857,814.98 "	\$ 6,884,452.31	\$ 6,482,691.98	\$ 11,623,295.92	\$ 10,944,987.92
1993	6	115,895.83 "	64,125.00 "	40,357,219.54 "	22,329,592.26 "	\$ 9,608,307.34	\$ 6,278,322.03	\$ 15,755,719.91	\$ 10,295,203.92
1994	17	281,945.00 "	192,000.00 "	43,538,279.88 "	29,648,866.68 "	\$ 8,725,669.92	\$ 6,766,547.28	\$ 13,944,420.09	\$ 10,813,562.60
1995	16	439,829.92 "	275,670.00 "	38,590,372.62 "	24,187,094.81 "	\$ 10,035,399.12	\$ 6,169,907.84	\$ 15,599,151.22	\$ 9,590,582.73
1996	13	559,496.59 "	317,483.67 "	27,302,471.18 "	15,492,657.03 "	\$ 6,511,680.67	\$ 4,053,983.59	\$ 9,833,711.00	\$ 6,122,183.36
1997	16	1,404,566.25 "	1,265,000.00 "	34,425,121.52 "	31,004,431.95 "	\$ 9,220,115.14	\$ 8,452,711.91	\$ 13,605,524.16	\$ 12,473,117.13
1998	11	1,590,863.64 "	1,150,000.00 "	22,976,526.05 "	16,609,220.52 "	\$ 6,285,546.84	\$ 4,628,139.09	\$ 9,133,601.78	\$ 6,725,203.15
1999									
2000	15	9,818,344.67 "	9,380,000.00 "	60,436,936.49 "	57,738,700.72 "	\$ 16,506,038.81	\$ 16,438,734.39	\$ 22,703,715.73	\$ 22,611,139.89
2001									
2002									
2003	1	4,185,000.00 "	4,185,000.00 "	9,953,368.59 "	9,953,368.59 "	\$ 2,717,532.47	\$ 2,717,532.47	\$ 3,498,724.68	\$ 3,498,724.68
2004	3	39,789,569.31 "	21,315,000.00 "	86,565,380.01 "	46,372,481.71 "	\$ 26,493,719.13	\$ 14,729,723.57	\$ 33,219,423.73	\$ 18,469,016.23
2005	1	3,750,000.00 "	3,750,000.00 "	7,573,731.85 "	7,573,731.85 "	\$ 2,765,486.73	\$ 2,765,486.73	\$ 3,353,838.99	\$ 3,353,838.99
2006	3	210,282,400.42 "	191,360,000.00 "	387,322,696.60 "	352,469,208.43 "	\$ 158,145,963.19	\$ 143,545,120.40	\$ 185,772,209.29	\$ 168,620,770.40
2007									
2008									
2009									
2010	7	45,408,861.81 "	22,005,079.44 "	61,855,505.07 "	29,975,102.85 "	\$ 29,608,542.00	\$ 13,971,479.01	\$ 32,147,212.52	\$ 15,169,409.73
2011	8	17,745,320.88 "	14,406,250.00 "	21,885,470.00 "	17,767,362.70 "	\$ 11,004,451.69	\$ 8,750,274.03	\$ 11,581,995.02	\$ 9,209,512.03
2012	8	27,958,687.50 "	12,300,000.00 "	32,480,887.78 "	14,289,473.34 "	\$ 15,626,490.71	\$ 6,940,455.82	\$ 16,113,070.57	\$ 7,156,568.70
2013	1	76,762,500.00 "	76,762,500.00 "	83,033,996.25 "	83,033,996.25 "	\$ 42,636,358.59	\$ 42,636,358.59	\$ 43,327,067.60	\$ 43,327,067.60
2014	5	63,205,000.00 "	28,000,000.00 "	63,205,000.00 "	28,000,000.00 "	\$ 28,611,196.77	\$ 13,388,161.04	\$ 34,318,591.81	\$ 34,318,591.81
Avg/Sum	189	26,497,395.67 "	20,359,670.16 "	62,987,130.44 "	47,333,310.82 "	\$ 22,523,308.01	\$ 17,350,360.73	\$ 28,463,723.06	\$ 22,631,810.83

Table 2: Summary statistics for IPO proceeds of firms in the financial sector going public on BIST during 1986-2014

Year	# of IPOs	Turkish Lira (TRY)				US Dollars (USD)			
		Nominal		Inflation Adjusted (as of 2015)		Nominal		Inflation Adjusted (as of 2015)	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median
1986	4								
1987	3								
1988	1								
1989	4								
1990	9	154,661.24 "	42,351.19 "	261,723,680.10 "	71,668,301.83 "	\$ 58,343,912.98	\$ 16,512,085.45	\$ 105,802,326.03	\$ 29,943,432.99
1991	4	170,933.25 "	41,400.00 "	169,058,909.16 "	40,946,035.01 "	\$ 42,640,879.27	\$ 11,726,682.09	\$ 74,173,667.07	\$ 20,398,524.33
1992	3	34,625.36 "	20,000.00 "	20,629,927.46 "	11,916,080.27 "	\$ 4,983,720.33	\$ 3,066,576.92	\$ 8,414,214.17	\$ 5,177,424.35
1993	5	108,905.00 "	101,400.00 "	37,922,873.22 "	35,309,483.90 "	\$ 9,021,851.21	\$ 9,616,962.27	\$ 14,794,048.08	\$ 15,769,912.29
1994	6	418,808.33 "	439,375.00 "	64,672,877.29 "	67,848,806.24 "	\$ 16,505,438.26	\$ 13,934,803.88	\$ 26,377,202.79	\$ 22,269,093.50
1995	12	303,846.11 "	128,231.25 "	26,659,247.00 "	11,250,921.03 "	\$ 7,094,374.22	\$ 2,823,378.10	\$ 11,027,584.95	\$ 4,388,694.60
1996	8	519,170.63 "	251,133.03 "	25,334,633.76 "	12,254,859.63 "	\$ 5,681,451.06	\$ 2,889,402.51	\$ 8,579,927.47	\$ 4,363,474.00
1997	7	4,265,226.79 "	542,025.00 "	104,538,287.46 "	13,284,725.08 "	\$ 28,774,866.77	\$ 3,534,330.99	\$ 42,461,199.14	\$ 5,215,382.33
1998	7	7,525,540.96 "	3,117,500.00 "	108,689,886.47 "	45,025,430.42 "	\$ 32,038,997.85	\$ 11,977,025.63	\$ 46,556,243.27	\$ 17,403,956.31
1999	8	5,345,741.60 "	1,367,500.00 "	45,739,028.00 "	11,700,550.72 "	\$ 10,479,803.66	\$ 2,995,074.74	\$ 14,901,972.33	\$ 4,258,908.11
2000	5	30,427,000.00 "	39,000,000.00 "	187,293,757.65 "	240,064,960.35 "	\$ 52,855,153.59	\$ 69,342,579.01	\$ 72,701,172.95	\$ 95,379,286.35
2001	1	385,875.00 "	385,875.00 "	1,409,397.80 "	1,409,397.80 "	\$ 242,654.49	\$ 242,654.49	\$ 324,580.62	\$ 324,580.62
2002	1	25,357,500.00 "	25,357,500.00 "	71,381,556.77 "	71,381,556.77 "	\$ 18,783,333.33	\$ 18,783,333.33	\$ 24,731,812.66	\$ 24,731,812.66
2003									
2004	3	81,371,256.67 "	32,228,750.00 "	177,029,655.72 "	70,116,214.87 "	\$ 54,597,475.74	\$ 21,640,156.50	\$ 68,457,609.62	\$ 27,133,734.04
2005	5	400,321,537.00 "	5,567,600.00 "	808,514,126.44 "	11,244,669.18 "	\$ 295,468,021.69	\$ 4,038,004.06	\$ 358,328,305.25	\$ 4,897,082.07
2006	7	36,927,295.96 "	3,172,188.00 "	68,017,008.66 "	5,842,906.53 "	\$ 27,762,813.83	\$ 2,060,398.03	\$ 32,612,651.99	\$ 2,420,325.41
2007	9	484,895,442.44 "	227,322,072.80 "	824,003,216.11 "	386,297,957.63 "	\$ 366,478,574.46	\$ 173,395,936.54	\$ 418,568,872.94	\$ 198,041,977.86
2008	1	5,063,193.33 "	5,063,193.33 "	7,817,642.51 "	7,817,642.51 "	\$ 3,838,951.65	\$ 3,838,951.65	\$ 4,222,060.78	\$ 4,222,060.78
2009									
2010	10	186,063,496.06 "	70,125,000.00 "	253,453,864.85 "	95,523,585.49 "	\$ 127,546,950.67	\$ 46,716,540.45	\$ 138,482,973.26	\$ 50,722,070.48
2011	5	68,719,350.20 "	16,500,000.00 "	84,752,216.53 "	20,349,604.13 "	\$ 44,830,109.70	\$ 10,219,882.32	\$ 47,182,914.88	\$ 10,756,249.33
2012	2	71,281,250.00 "	71,281,250.00 "	82,810,692.81 "	82,810,692.81 "	\$ 40,027,996.17	\$ 40,027,996.17	\$ 41,274,393.52	\$ 41,274,393.52
2013	4	116,810,000.00 "	90,662,500.00 "	126,353,377.00 "	98,069,626.25 "	\$ 63,910,719.16	\$ 47,157,536.00	\$ 64,946,072.82	\$ 47,921,488.09
2014	3	121,076,785.33 "	18,975,000.00 "	121,076,785.33 "	18,975,000.00 "	\$ 53,640,994.00	\$ 8,892,169.27	\$ 34,318,591.81	\$ 34,318,591.81
Avg/Sum	137	71,632,497.45 "	26,595,297.59 "	159,951,419.48 "	62,222,130.80 "	\$ 59,371,697.57	\$ 22,844,889.58	\$ 72,140,886.89	\$ 29,188,367.64

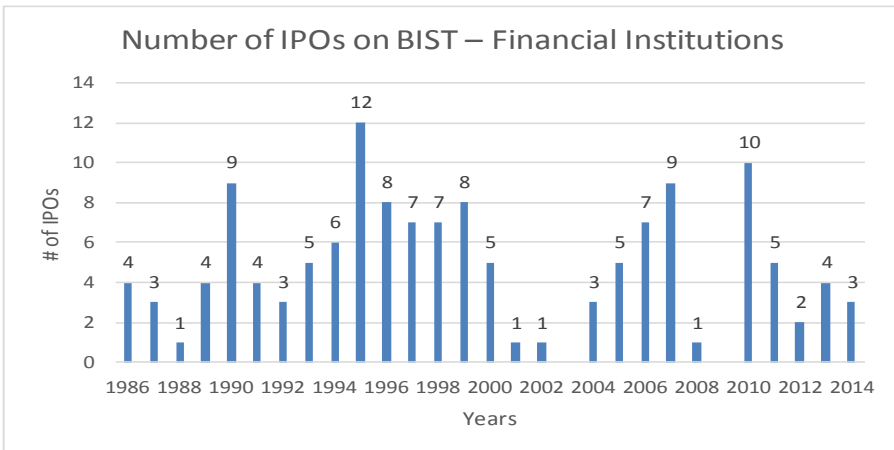
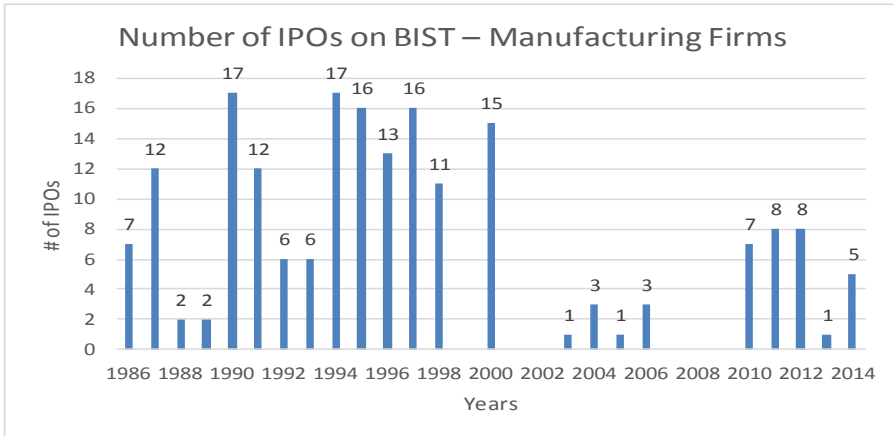
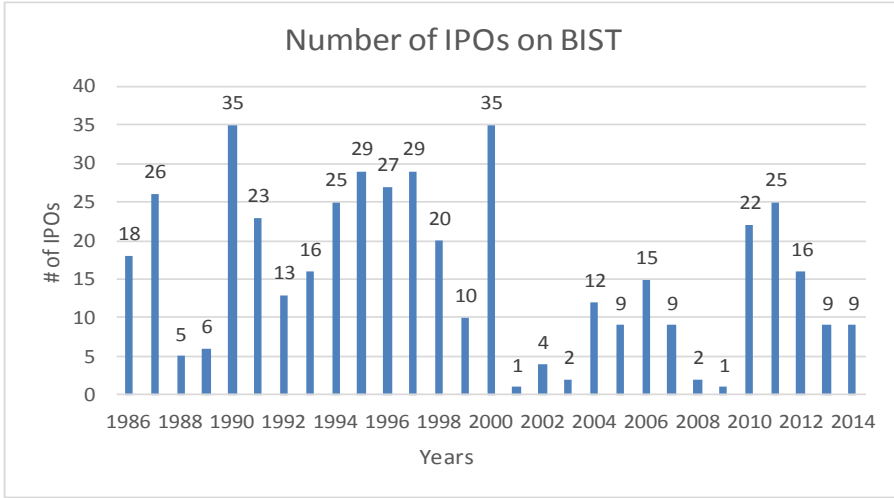
Table 3: This table presents the number of M&A deals undertaken by BIST-IPO firms in the five-year post-IPO period for the manufacturing and financial sectors.

	Manufacturing sector	Financial sector
Panel A: IPO firm is acquirer		
Number of IPO firms involved in M&As	24	34
Percentage of IPO firms involved in M&As	14.5	27.2
Total number of M&A deals	42	82
Number of M&A deals per IPO firm	1.75	2.41
Panel B: IPO firm is target		
Number of IPO firms involved in M&As	31	36
Percentage of IPO firms involved in M&As	18.7	28.8
Total number of M&A deals	63	54
Number of M&A deals per IPO firm	2.03	1.50

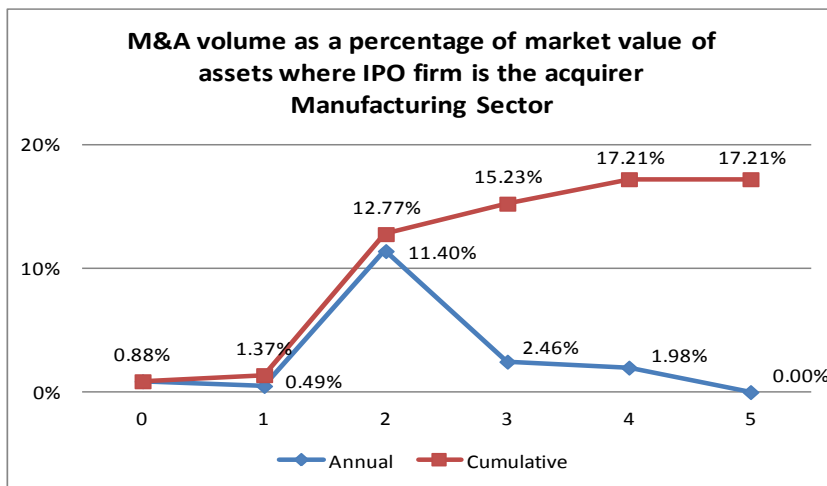
Table 4: This table presents the cumulative M&A volumes as a percentage of market value of assets in the IPO year for BIST-IPO firms in the manufacturing and financial sectors.

	Year 0	Years 0-1	Years 0-2	Years 0-3	Years 0-4	Years 0-5
Panel A: Cumulative M&A volume for acquiring IPO firms						
Manufacturing firms	0.88%	1.37%	12.77%	15.23%	17.21%	17.21%
Financial firms	0.64%	3.52%	6.44%	8.10%	9.36%	10.05%
p-value for t-test	0.75	0.17	0.48	0.43	0.38	0.42
Panel B: Cumulative M&A volume for target IPO firms						
Manufacturing firms	7.76%	13.93%	42.12%	44.21%	58.71%	58.71%
Financial firms	4.94%	9.49%	10.21%	10.53%	10.77%	12.47%
p-value for t-test	0.70	0.60	0.15	0.12	0.05	0.06

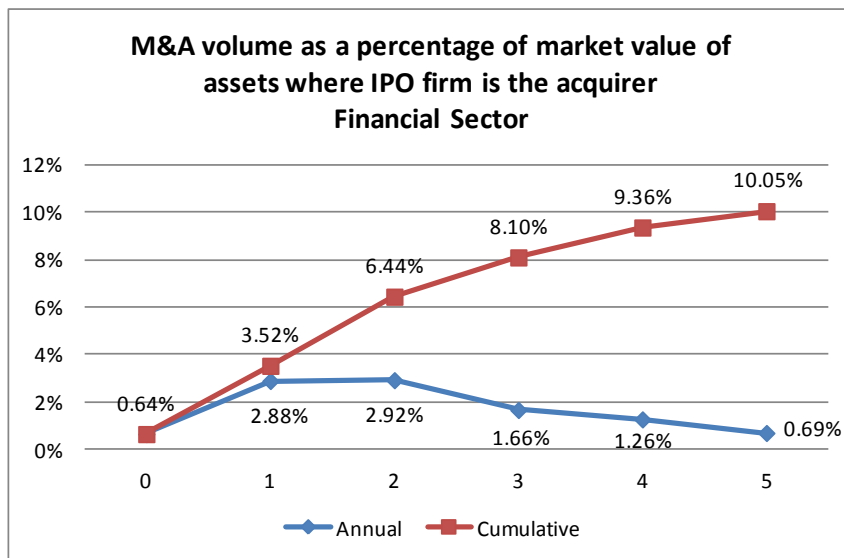
Graph 1



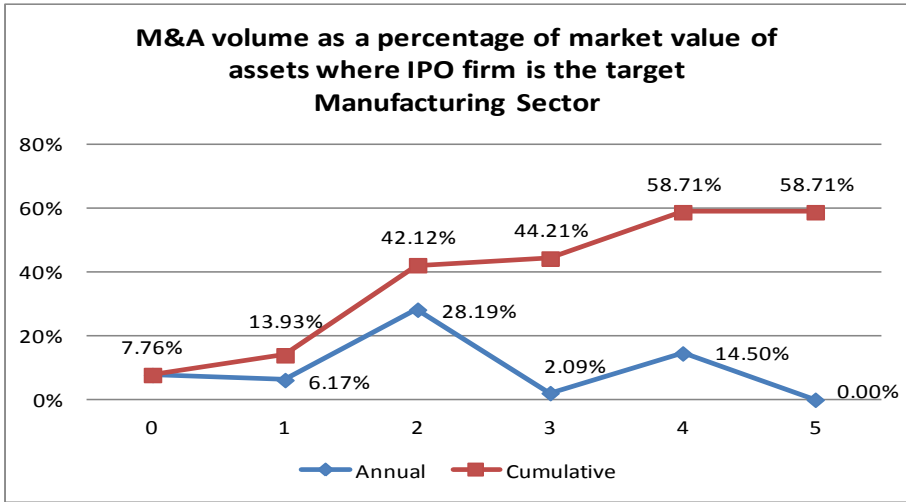
Graph 2



Graph 3



Graph 4



Graph 5

