

# FINANCES OF EGYPTIAN LISTED FIRMS

Inessa Love<sup>1</sup>

## Abstract

This paper presents an analysis of the finances of Egyptian listed companies evaluating recent trends in growth and profitability during the 1995-2001 period. The data from financial statements reveal the effect of the economic slowing of the past few years, especially in the construction and real estate sectors and especially in smaller companies. We find that smaller firms appear to be less profitable and enjoy lower growth, likely because of being particularly adversely affected by many of the sources of the high costs of doing business in Egypt. While the Egyptian firms are not very highly leveraged on average, we find that smaller firms have significantly less access to bank finance than larger firms do. This confirms the widely held view that there is a need to improve the availability of credit for small enterprises.

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## 1. Introduction

One of the main roles of the financial sector is allocation of financial resources to their most productive uses. Financial intermediaries play a crucial role in providing funds to the enterprise sector and stimulating its growth. To date, Egypt's success in penetrating international markets for manufactures has been disappointing as has its low growth in total factor productivity.<sup>2</sup> Government policies distorting the allocation of resources (including the export-harming structure of tariffs and non-tariff barriers to trade as well as inefficiencies and misallocations through the public sector banks) are thought to be primarily responsible for this disappointing record; however, deficient financial infrastructure also points clearly to the need for examining the arrangements for financing the enterprise sector. Facilitating access to finance by the enterprise sector and especially small and medium enterprises should improve productivity and growth in Egypt.

This paper presents an analysis of the finances of Egyptian listed companies evaluating recent trends in growth and profitability and the effects of the economic slowdown of recent years. The data from financial statements (available up to year 2000) reveal the effect of the economic slowing of the past few years, especially in the construction and real estate sectors and especially in smaller companies. Smaller firms appear to be less profitable and enjoy lower growth, likely because of being particularly adversely affected by many of the sources of the high costs of doing business in Egypt. Egyptian firms are not very highly leveraged, on average. While this may reduce their vulnerability, it raises questions about the adequacy of access to credit. Importantly, smaller firms rely much less on bank finance than do larger ones, financing 40 percent less of their assets in this way. It is likely that these differences are even more pronounced for non-listed small and micro enterprises. This confirms the widely held view that there is a need to improve the availability of credit for small enterprises.

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<sup>2</sup> Non-resource based manufacturing exports account for barely 1 percent of GDP. A standard growth decomposition attributes two-thirds of Egypt's growth 1995–2000 to physical capital accumulation; one-third to human-capital adjusted labor, and essentially nothing to total factor productivity growth (cf. World Bank: *Egypt: Social and Structural Review*, 2001).

The rest of the paper is organized in the following sections: Section 2 describes the data, Section 3 reports on the international comparison of key financial ratios, Section 4 provides the analysis of financial ratios by year, Section 5 presents industry composition and trend in sales growth by industry, Section 6 presents analysis of financial ratios by firm size, Section 7 presents analysis of key ratios by leverage and size, Section 8 reports the results of regression analysis of the leverage ratios, Section 9 discusses capital market liquidity and concentration and Section 10 presents summary of results.

## **2. Data**

The data were obtained from the Capital Market Authority (CMA) and include market price and shares traded for about 1100 firms and financial information on approximately 900 firms. The data on market prices and volumes are available for 1997–2001 and the data on financial statements cover 1995–2001. Because year 2001 is very underrepresented and biased toward the large firms, it is excluded from most of the analysis.<sup>3</sup>

An important adjustment has been made to reported accounts in order to carry out the analysis. This is required because most firms continue to report fixed assets (PPE—property plant and equipment) at their gross values without deduction of any allowance for depreciation. (This is the case even though Egyptian accounting standards have been changed to comply with IAS, which requires reporting fixed assets at their net value, i.e., subtracting accumulated depreciation from gross assets). This creates a distorted picture of the true value of the assets: as fixed assets age their replacement value declines and therefore the “economic” value of the total assets should decline. By recording the PPE at gross value, the book value of the total assets might be constant (or even increasing) even if the true (economic) value were declining. To adjust for this the team estimated the net value of fixed assets by subtracting accumulated depreciation, which will also allow easy comparison with similar ratios for other countries. In calculating total assets the team used the net-of-depreciation values for fixed assets. The adjustment gives quite a different picture: for

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<sup>3</sup> There are total of 140 firms available for year 2001, while there are about 500 firms for year 2000 and about 600 for 1999. The firms that have the 2001 data available are mostly large firms—for example the size of the median firm in 2001 is over twice that of the median size in 2000.

example, the level of net total assets is quite stable over time (in contrast to the gross figure for total assets which grows at about 5 percent a year, on average).

### **3. International Comparison of Key Financial Ratios**

Table 1 reports the main corporate financial ratios for Egypt and for listed firms in a sample of developing and developed countries (obtained from the Worldscope database). Since year 1999 is the most represented in both datasets, it is chosen as a benchmark for comparison.

Profitability of Egyptian firms in 1999 was broadly in line with international experience. The profitability ratios (both operating income and net income) are the same or slightly lower than the average for other countries shown.

Leverage in Egypt is lower than in most other countries in the sample. The ratio of total liabilities to total assets has a median of 0.51 for Egypt while the world median is 0.57. The lower leverage ratio in Egypt suggests that Egyptian firms may face some difficulties in raising debt finance. Furthermore, the interest coverage ratio (the ratio of earnings before interest and taxes, EBIT, over the interest payments) is 2.79, which is much higher than the world median of 1.77. This suggests that the firms in Egypt could service more debt than they have.

The most striking difference is in the comparison of the ratio of current liabilities over total liabilities. The ratio of 0.99 suggests that the median firm in Egypt in 1999 has almost no long-term debt, while the median ratio over all other countries is 0.74, representing a much smaller portion of the total liabilities. This suggests that firms in Egypt are constrained in their access to long-term debt (i.e., with maturity of over one year). The limited availability of long-term financing is one of the frequently mentioned constraint in informal surveys of the private sector.

The ratio of retained earnings to total assets is much lower in Egypt than in other countries. This result is in contrast with comparison of profitability ratios, which are similar in Egypt and other countries. This phenomenon is somewhat puzzling. Available data does not allow verification of the presumption that it results from companies in Egypt paying out a

higher proportion of their earnings as dividends. If this is the case, it would appear surprising for an environment in which external financing seems hard to obtain (as appears to be the case in Egypt); firms would be expected in such an environment to want to reinvest their earnings. On the other hand, if the owners are uncertain about future economic and political stability, they might choose to take the earnings out of the firm (and reinvest elsewhere, likely outside of the country). Without more data (on dividends and reinvested earnings) it is difficult to investigate this question further, however it is an important question for further inquiry.

Finally comparison of the Q ratios (ratio of market value of assets to their book value) reveals that market valuations of firms in Egypt are a much lower multiple of book value than the median for the other countries. This is consistent with low price-earnings ratios that have been highlighted by recent CASE reports. The valuations are for 1999 and have come down even further since then. This may reflect market uncertainty about future earnings and overall economic stability.

#### **4. Analysis of Financial Ratios by Year**

Table 2 contains key ratios for Egyptian firms by year. Several clear patterns stand out in this analysis. First, the growth rate of sales is clearly declining over this period and the median real growth rate (i.e., inflation adjusted) turns negative in 1998 and declines even further in subsequent years. The declines in profitability (both net income and operating income are declining) parallel declines in sales growth. Low profitability also results in low additions to retained earnings—the percent of assets financed by retained earnings is also clearly declining. All these ratios are significantly lower in 2000 than in 1996 (significance is at 1 percent for sales growth and net income and at 15 percent for operating income and retained earnings).<sup>4</sup> The market valuations parallel these performance results with steadily declining Q-values (significant at 1 percent). These results suggest that the decline in the

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<sup>4</sup> Through this section, the Wilcoxon rank sum test is used for tests on the medians and standard t-test used for the equality of the means, whenever appropriate.

corporate sector is not a recent phenomenon and was persistent for at least last four years (starting in 1998).

Low profitability could in principle result in increased demand for borrowing from distressed firms. On the other hand it reduces the creditworthiness of firms and their capacity to service debt. In the case of Egypt, the declining profitability has been associated with a reduction in leverage. Analysis of the financing patterns reveals visible and statistically significant declining leverage ratios whether measured as debt to equity or total liabilities over total assets.<sup>5</sup> This suggests that in more recent years firms were less able to obtain debt financing (this could be either because such financing was not available or was only available at too high a cost). This is in line with reports of a liquidity squeeze often mentioned during interviews the team had with enterprises. As a result of the low overall level of indebtedness, the interest coverage ratios are relatively high and stable over time (the change is not significant). On one side this suggests that the debt levels are manageable (at least for the median firm), but on the other side it suggests that many firms might be able to afford more leverage than they currently have, potentially allowing more investment and faster growth.<sup>6</sup>

Another clearly visible problem is the maturity structure of the liabilities—the *mean* ratio of current liabilities over total liabilities is around 85 percent and the *median* firm has almost no long-term liabilities (defined as liabilities with more than one year maturity). This clearly reflects the underdevelopment of the long-term credit markets. The situation has not changed much in the last five years and the ratios are very stable over time. Over-reliance on short-term liabilities could become a source of potential instability in the corporate sector, as firms could be faced with a significant shortage of financing if creditors suddenly become unwilling to roll-over the debt.

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<sup>5</sup> Note that the decline is even more pronounced if total liabilities are scaled by the gross assets (i.e., including fixed assets as reported—i.e., with depreciation included).

<sup>6</sup> Since the leverage is declining, the total equity to total assets must be increasing. However, as we noted above, the retained earnings portion of the equity is also declining. A detailed look at different components of the equity capital reveals that the increasing category is paid-in capital. This is likely to be related to the tax exemption of paid-in capital for the listed firms.

Analysis of asset composition reveals that while gross fixed assets are growing, net assets are relatively stable, which suggests that the companies only undertook replacement investment, absorbing only the depreciation allowances and making no net addition to the stock of fixed assets. The cash stocks carried by firms were declining, which is likely to be another indication of the overall liquidity squeeze.

## **5. Industry Composition and Trend in Sales by Industry**

Table 3 shows the composition of our sample of listed firms by industry in 2000 (the latest year with sufficient coverage). The major industry is manufacturing, which has about 40 percent of all firms in our sample and 59 percent of total sales. Within manufacturing the biggest sub-sectors are Food and Kindred Products, Chemicals, and Stone, Clay and Glass industries. Outside of the manufacturing sector, the biggest sectors are Finance (with the main sub-sector of Real Estate companies, which represent 12 percent of the firms but only 6 percent of total sales in 2000), Construction (with about 12 percent of the firms and 8 percent of total sales) and Services (the biggest sub-sector is Hotels with about 6 percent of total firms and 3 percent of total sales).

Table 4 presents the trends in sales growth by industry. The two worst-performing sectors on this measure in recent years are Building & Construction and Real Estate companies, both saw a decline in their nominal sales of over 20 percent in 2000. This is a consequence of the real estate boom-bust cycle experienced by Egypt in recent years, which reflected negatively on overall economic performance, as was often emphasized during the teams interviews with enterprises.

The next worst performing sector was Trade, which has experienced declines of 10-15 percent in the 1999 and 2000. The general economic slowdown might have also have been the main driver here.

The best performing sectors in 1999 and 2000 in terms of sales growth were Services and Hotels, though this is unlikely to have been maintained given the political events of 2001.

## 6. Analysis of Financial Ratios by Firm Size

This section analyzes performance and financing patterns for firms of different sizes. The Firms in the database are split into three size groups based on their nominal sales. The groups are based on an equal three-way partition of the number of firms ordered by size (33<sup>rd</sup> and 66<sup>th</sup> percentiles). These groups designated as Smaller, Medium and Large, but this classification is relative—i.e., the firms classified as part of the Smaller group are not technically small enterprises—they are merely the smallest firms in the sample. The Smaller group has sales below LE 11.6 million and the Medium group has sales below LE 66.5 million.

Table 5 reports the medians for key ratios for 3 groups of firms and Table 6 reports the time trends by the firm size. Several patterns stand out of this analysis. First, median sales growth and profitability is significantly lower for the Medium and especially for the Smaller firms. This is true for averages across all periods (Table 5) and for the degree of decline (Table 6), which is much more pronounced for the Smaller group relative to both Medium and Large groups.

Median growth for the Smaller group was about 1 percent in 1996 and declined to *negative* 10 percent in 2000 (however, because of heterogeneity among firms the difference between the two years is only significant at the 15 percent level). Large firms were growing at a median rate of 10 percent in 1996, but had a median growth of *negative* 1 percent in 2000 (the difference between the two years is significant at 1 percent).

The profitability and retained earnings also declined significantly for the Smaller firms, while staying the same or even increasing for the Large firms. The big disparity in these trends highlights the weak condition of many small firms, which has further deteriorated in recent years. Note that the condition of—even smaller—firms that are not listed on the stock exchange could be even worse.

The leverage patterns are also clearly differ by size—the Smaller group has significantly lower debt to equity and total liabilities to total assets ratios, which suggests that they are having relatively more problems with accessing debt finance. However, the leverage



ratios of all three groups of firms have declined. Total liabilities have declined by about 10 percentage points (of total assets) in all three groups, but as a percent of the starting value this decline is larger for the Smaller group.<sup>7</sup> Because of falling profitability the coverage ratios have also declined for all three groups, but the only statistically significant decline was for the Smaller group. This suggests that the Smaller firms are limited in their access to credit partly because of their low and declining earnings, which makes them less likely to be able to meet interest payments. In other words, the lower levels of debt finance may be a result of low profitability, suggesting that—to this extent—the banks do make the right choices in the selection of credit-worthy clients. Further evidence is provided on this point in the regression analysis reported below. However, the low and declining earnings in Smaller firms is a source of concern that requires additional investigation. If the trend were to continue, many of the Smaller enterprises would not be viable. This is a worrying picture and may be mirrored in—or even worse in—the rest of (non-listed) corporate sector.

Reliance on long-term finance is significantly lower for the Smaller and Medium size firms and the median firms in both groups have almost zero long-term liabilities. It seems that only a few Large firms are able to obtain long-term debt. These ratios are very stable over time with no significant changes.

Paid-in capital as a share of total assets is much larger for Smaller firms and is increasing over time. This suggests that most of the financing for Smaller firms comes from the funds of their owners; another indication of their limited access to external finance. This may have been a tax-driven phenomenon. The increase is the largest for the Smaller firms (increased from 0.36 to 0.53), while it is the smallest for the Large firms (from 0.14 to 0.19).

Finally, the market-to-book values ratios are much lower for the Smaller and Medium firms. In addition, for these groups the Q ratios are very close to one, which implies that the market value of equity is equal to the book value of equity. This equivalence could well reflect a mechanical use of book value for setting the price at which the occasional

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<sup>7</sup> The total liabilities over total assets ratio declined from 0.42 to 0.32, a change of about 24 percent in the Small group and declined from 0.66 to 0.55, a change of 16 percent in the Large group.

transactions, required to qualify for maintenance of the listing; if so, there is no informational value in the market price of such firms.

## **7. Analysis of Key Ratios by Leverage and Size Groups**

Table 7 contains several key performance ratios for both size and leverage groups. These data confirm the previous results that Smaller firms are performing worse than the Medium and Large firms in terms of all performance ratios considered in this table—sales growth, operating income and interest coverage. However, Smaller firms that in addition are highly leveraged are significantly more worse off than the average Smaller firm. The Large firms are significantly better off than the other two groups (highest sales growth and operating income), however, within the Large group the worst performers (in terms of sales growth, operating income and interest coverage ratios) are firms with the highest leverage. The largest firms have higher market values in each of the leverage group. But it appears that the market gives the highest valuations to the moderately leveraged Large firms (i.e., medium leverage group). It could be that the market is cautious about highly leveraged firms inasmuch as they may be facing debt distress. If so, the market is, to some extent distinguishing the better-performing firms, which is definitely a positive sign.

## **8. Regression Analysis of the Leverage Ratios**

Bivariate relationships reported above could be misleading in that they could be entirely driven by correlations with omitted variables. For example, the lower leverage of small firms might truly be associated with their low profitability on average and not really with their size. Multiple regression analysis allows us to check for such potential complications. Table 8 presents results of selected regressions with the ratio of total liabilities over total assets as a dependent variable.

The regression confirms the patterns reported earlier and we find that each of the bivariate relationships reported is confirmed. In particular, the dummy variables for Smaller and Medium groups (using the same cutoff points as above) are significantly negative, indicating that these groups have less leverage than the Large group. The coefficients imply that controlling for time and industry effect the Smaller group has on average 18 percent less liabilities (as percent of the total assets) than the Large group, while the Medium group has about 8 percent less.<sup>8</sup>

The year dummies show the familiar negative trend, which becomes significant in years 1998 and 1999. The industries with the most leverage are the construction (always highly significant) and textiles and the lowest leverage is in the non-real estate finance group (note that there are no banks in this group and it mainly represents brokerages, insurance and holding companies). Sales growth is not significantly related to leverage (model 2) while operating performance is negatively related to leverage. This suggests that firms with lower operating performance have higher leverage. This link is mostly mechanical as firms making losses erode their equity and therefore increase their leverage. The effect of operating performance on the growth in level of total liabilities is not significant (not reported). In model 3 we interact the size dummies with a time trend and find that while the Large firms have experienced significant decline in their leverage (equal to about 1.1 percent per year), the Smaller firms have experienced significantly larger declines (equal to about 2.5 percent per year), while Medium group is not significantly different from the Large group.

## **9. Capital Market Liquidity and Concentration**

This section provides further discussion of the data on equity prices and volume traded. A brief look at the trading patterns reveals that for many of the listed securities, the

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<sup>8</sup> The trend variable replaces time dummies in this regression. It equals to one in the first year and increases by increment of one in each subsequent year. The trend-size interaction shows the differential effect of the trend on the firms in small and medium groups relative to the trend for the large group (which is given by trend variable without interaction).

trades are rather artificial. For example, there are many firms that trade the same number of shares (which usually is a round number such as 100 or 1,000) for several years in a row and the shares have the same price (again, very often a round number, 100 and 1,000 are very common). The reason for such artificial trading patterns is obvious—the CMA has a rule that requires delisting any firm that has not been traded for more than six months. However, this requirement could be satisfied by trades by firm insiders, which may be regarded as “cosmetic” trading.

To evaluate the extent of such trading behavior an indicator of “cosmetic trading” was created.<sup>9</sup> The percentage of all firms that are either not traded at all or traded only in a “cosmetic” way is reported in Figure 1 (Panel A).<sup>10</sup> About 40 percent of the firms are traded normally (i.e., their prices are determined by the supply and demand factors), while the remaining firms are either not traded or “cosmetically” traded. The percentage of non-traded firms is declining over this period (from about 40 percent to about 20 percent), however, the percentage of “cosmetically” traded firms is correspondingly increasing. It appears that about 60 percent of listed firms are actually not being traded by market participants.

Table 9 reports total market capitalization and total value traded, together with percentage of “cosmetic” and “traded” firms (note that these numbers are calculated for the whole universe of the listed firms). The total market capitalization was increasing until 1999 (likely as a result of adding new listings) after which is started to decline reflecting overall declines in the market valuations. The value traded also reached a peak in 1999 and declined sharply in 2000 and 2001 (declined by about 50 percent in each year).<sup>11</sup> The

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<sup>9</sup> The indicator takes value of one if one of the following rules are satisfied: (a) the price is the same for at least two years in a row, (b) the volume traded is the same for at least two years in a row, (c) the price or volume is a round number such as 100 or 1000, (d) the firm is not traded in the previous year and in the following year (this rule isolates a few companies with occasional trades that occur once every several years and are most likely done for “cosmetic” purposes). Of course, this indicator is not perfect and some measurement error is expected as these rules cannot pick all the “cosmetic” trades or, alternatively, could misclassify some “real” trades as “cosmetic” trades but this error is thought to be small.

<sup>10</sup> We only perform this exercise for the firms for which we have both financial and market data to make sure we are not misclassifying any firms that were not listed as “not-traded.”

<sup>11</sup> Note that these numbers do not match numbers reported by CMA—the order of magnitude is right but there is about a 40 percent difference for 2000 (the CMA numbers are lower) and about a 40 percent difference for

(continued)

problem with “cosmetic” trading is much less important when one looks at the market capitalization and the value traded. It is clear that the firms that are traded for “cosmetic” reasons represent Smaller firms (for example, for year 2000 the number of firms with “cosmetic” trades was about 70 percent of the number of total traded firms, however, these firms represent only about 30 percent of the total market capitalization). The value traded is even smaller for the “cosmetic” trades and moves around 5-10 percent of the total value traded. It is clear that the insiders do not need to trade much to have a “recorded” trade to avoid delisting, so they trade some tiny amounts and their trades do not significantly affect the total volume traded. The cosmetic trading is a reflection of the overall illiquidity in the market and not a problem by itself.

To further assess liquidity in the market, Table 10 reports the distribution of the number of firms and value traded for several categories based on the value traded during the year. Thus most firms (about 60 percent ) trade less than LE 1 million and this proportion is relatively stable over time. The proportion of firms with trading over 100 million is clearly decreasing over time (from about 11 percent in 1997 to about 3.5 percent in 2000), which likely reflects the fall in prices. However, on the total value traded the picture is reversed. Most value is traded by the few firms that trade above LE 100 million a year. For example, in 2000 the 3.5 percent of firms that trade over LE 100 million (2.6 percent + 0.7 percent ) accounted for close to 74 percent of total volume traded (26.7 percent + 47 percent ).<sup>12</sup> It is clear that most of the volume traded is concentrated in a few firms.

To further look at the market concentration, Figure 1 (Panel B) presents the percentages of market capitalization by the largest firms. It is clear that the market is very concentrated with the 10 largest firms representing over 50 percent of the total capitalization (this number decreased to about 35 percent in 2001). The 100 largest firms represent about

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2001 but the CMA numbers are higher. One potential reason could be that it is assumed here that the total number of shares is the same for all years—but the firms could issue additional shares or repurchase their shares or do a split. Unfortunately the CME does not keep the historical number of shares, and the team recommended collecting these data for the future research purposes.

<sup>12</sup> Note that part of this relationship is purely mechanical—the firms that trade the most value will represent a large share of the total trading.

90 percent of the total market capitalization, which decreased to 77 percent in 2001. It is clear that the market is becoming less concentrated but the concentration ratios are still very high.

The value traded is even more concentrated than market capitalization with 10 most traded firms representing over 70 percent of the market in 1999 and 2000, which decreases to 59 percent in 2001, Figure 1 (Panel C). However, this decline is due to increased trading by the firms that are in the 20-100 group (by the value traded) and the value traded by the firms that do not fall in the 100 most traded was only 2 percent in 2000 and rose to 4 percent in 2001. It is clear that only a very few firms are actively traded. The average turnover for the 100 largest firms was about 4 times in 2001, while for the remaining firms it is about 0.4, which is 10 times less.

To summarize this section, the stock market in Egypt is very concentrated with many firms either not traded or traded cosmetically. Most of the trading is done in a very few firms (most trading is in the largest 100 firms). The concentration and liquidity ratios are improving very slowly.

## **10. Summary of Results**

This paper examines financial statements of listed Egyptian enterprises. It provides evidence on how enterprises are financed, and analyses their profitability and growth. In considering the findings, it should be noted that, because of the tax and other advantages of listing, the population of listed companies likely represents a larger share of the enterprise sector in Egypt than in many other developing countries. The main findings are summarized below:

- Listed firms are not highly leveraged on average by international standards and indeed median leverage declined in the period 1995–2000. The number of firms with a debt/equity ratio in excess of 200 percent at end-2000 is 48 and they account for 14 percent of the total firms with non-missing data for debt and equity. The stock figures do not, therefore, point to any evident systemic vulnerability from excessive corporate leverage.

- Nevertheless, the recent decline in overall economic growth is clearly reflected in the deteriorating growth and performance of the listed firms. It appears that small firms have suffered the largest declines in their growth rates and profitability. In terms of industrial composition, the construction and the real-estate financing sectors were hit the hardest by the crisis with over 20 percent nominal declines in year 2000.
- The analysis also suggests that small firms have particular difficulty accessing debt finance, with low and declining leverage ratios in recent years. No doubt this is partly the result of low prospective profitability of the small firms, which in turn is likely to be related to the institutional factors and excessive costs of doing business in Egypt.
- In addition, access to long-maturity debt is severely limited among all firms but even more so for smaller firms.
- The stock market in Egypt is very concentrated with many firms either not traded or traded cosmetically. Most of the trading is done in a very few firms (most trading is in the largest 100 firms). The concentration and liquidity ratios are improving very slowly.

**Table 1. International Comparison of Listed Firms**

	No. Firms in 1999	Operating Income/ TA	Net Income/ TA	Total Liabilities/ TA	Interest Coverage	Current Liabilities/ TA	Retained Earnings/ TA	Tobin's Q
Egypt	535	0.05	0.04	0.51	2.79	0.99	0.03	0.99
Turkey	33	0.09	0.04	0.58	3.42	0.86	N/A	1.45
Pakistan	77	0.08	0.03	0.67	1.66	0.75	N/A	0.9
Malaysia	285	0.03	0.02	0.49	1.00	0.81	0.07	1.05
India	286	0.06	0.04	0.59	1.68	0.62	N/A	0.89
Indonesia	112	0.08	0.06	0.67	1.91	0.80	0.03	1.23
South Africa	406	0.09	0.06	0.47	1.45	0.83	0.14	1.14
Hong Kong	250	0.02	0.02	0.41	1.10	0.86	0.14	0.83
South Korea	453	0.05	0.02	0.59	1.82	0.64	0.03	0.91
Greece	157	0.05	0.05	0.47	1.80	0.92	0.01	4.45
France	726	0.06	0.04	0.62	1.76	0.76	0.04	1.36
Germany	706	0.02	0.02	0.64	1.81	0.53	0.06	1.35
Japan	3138	0.03	0.01	0.6	2.14	0.75	0.17	0.99
United Kingdom	1428	0.08	0.05	0.53	1.48	0.79	0.11	1.47
United States	462	0.11	0.06	0.6	1.81	0.46	0.28	1.95
Average (excl. Egypt)		0.06	0.04	0.57	1.77		0.10	1.43

Source: Egypt—CMA data (own calculations), other countries—Worldscope. Reported are medians. TA stands for total Assets. Tobin's Q is defined as market value of equity + book value of liabilities over total assets. Interest coverage is defined as earnings before interest and taxes over interest payments.



**Table 2. Summary Statistics for Key Financial Ratios, 1995-2000**

	1995	1996	1997	1998	1999	2000	t-test
Number of Firms:	562	549	522	611	605	496	
<b>Growth and Performance</b>							
Nominal Sales growth (Median)		6.900	7.550	4.263	1.771	-2.72	(***)
Real Sales growth (Median)		-0.279	2.820	0.061	-1.194	-5.27	(***)
Net Income/TA (Median)	0.041	0.045	0.043	0.037	0.039	0.029	(***)
Operating Income/ TA (Median)	0.051	0.048	0.048	0.050	0.048	0.037	( <sup>a</sup> )
Retained Earnings /TA (Mean)	0.024	0.019	0.017	0.009	0.024	0.013	
(Median)	0.040	0.039	0.034	0.030	0.029	0.037	( <sup>a</sup> )
Tobin's Q (Mean)			3.35	4.01	2.12	1.45	(***)
(Median)			1.064	1.028	0.993	0.97	(***)
<b>Leverage</b>							
Total Debt /Total Equity (Median)	0.605	0.646	0.550	0.478	0.475	0.471	(**)
Total Liabilities / TA (Median)	0.563	0.563	0.553	0.523	0.505	0.485	(***)
Current Liabilities / Total Liabilities (Mean)	0.856	0.833	0.832	0.838	0.852	0.837	( )
(Median)	1.00	1.00	0.99	1.00	1.00	0.99	( )
Interest Coverage (Median)	2.470	2.601	2.570	2.903	2.793	2.288	( )
Paid-in-Capital/TA	0.215	0.213	0.217	0.262	0.256	0.303	(***)
<b>Asset Composition</b>							
Gross PPE / TA (Median)	0.331	0.318	0.337	0.356	0.395	0.421	(***)
Net PPE / TA (Median)	0.220	0.215	0.201	0.203	0.207	0.215	( )
Cash / TA (Mean)	0.142	0.129	0.128	0.125	0.128	0.107	(**)
(Median)	0.060	0.056	0.053	0.049	0.057	0.039	( <sup>a</sup> )

Source: CMA data (own calculations). TA stands for total assets. Tobin's Q is defined as market value of equity + book value of liabilities over total assets. Real Sales Growth is sales growth adjusted for inflation (obtained from WDI). Interest coverage is defined as earnings before interest and taxes over interest payments. Gross PPE is property plant and equipment (i.e., fixed assets) at purchase cost, net PPE excludes accumulated depreciation. The t-test indicates significance for equality of the medians (or means) between years 1996 and 2000. \*\*\*, \*\*, \*, and <sup>a</sup> indicate significance at 1 percent, 5 percent, 10 percent, and 15 percent, respectively.

**Table 3. Industry Composition**

Industry	Number of Firms	Percent of Total Number	Total Sales (million LE)	Percent of Total Sales
Agriculture	15	4.0	480	1.3
Construction	43	11.6	3,082	8.1
Building Construction	20	5.4	1,240	3.3
Manufacturing	152	41.0	22,463	59.3
Food and kindred products	28	7.6	6,749	17.8
Chemicals and Allied Products	28	7.6	4,523	11.9
Stone, Clay, Glass and Concrete	16	4.3	2,166	5.7
Utilities	24	6.5	3,268	8.6
Whole trade and retail trade	36	9.7	3,068	8.1
Finance, Insurance and Real estate	58	15.6	3,517	9.3
Real Estate	47	12.7	2,315	6.1
Services	43	11.6	2,005	5.3
Hotels	21	5.7	1,215	3.2
Total	371		37,883	

Notes: Source CMA (own calculations). Data are for year 2000. Only the main subsectors are reported separately. Number of firms and total sales for main sectors include the numbers reported in subcategories.

**Table 4. Egypt: Sales Growth Trends by Industry**

	1996	1997	1998	1999	2000
Agriculture	13.38	1.45	12.52	8.26	4.34
Construction	21.76	13.89	13.00	4.60	-9.85
Building Construction	34.37	-4.17	7.98	1.84	-22.50
Manufacturing	6.17	6.56	3.89	0.13	-3.11
Food and kindered products	6.25	12.31	2.84	3.31	-1.96
Chemicals and Allied Products	11.94	7.62	4.80	3.20	1.53
Stone, Clay, Glass and Concrete	11.06	7.88	1.82	-1.51	-8.28
Utilities	3.76	6.80	-3.71	3.88	-3.17
Whole trade and retail trade	3.76	7.65	0.53	-10.47	-14.95
Finance, Insurance and Real estate	5.26	9.32	0.01	-1.70	-10.88
Real Estate	1.59	6.72	2.90	-7.96	-24.53
Services	6.21	16.94	3.78	13.54	6.34
Hotels	9.38	0.46	-0.54	8.74	7.94

Notes: Source CMA (own calculations). Only the main subsectors are reported separately. Number of firms and total sales for main sectors include the numbers reported in subcategories.

**Table 5. Summary Statistics of Financial Ratios by Firm Size**

	Small	Medium	Large	t-test
	1,017	1,019	1,048	
<b>Growth and Performance</b>				
Nominal Sales Growth	-4.18	2.55	5.91	(***)
Real Sales Growth	-7.75	-1.35	1.59	(***)
Operating Income /TA	0.022	0.058	0.082	(***)
Net Income / TA	0.027	0.040	0.071	(***)
Retained Earnings / TA	0.032	0.043	0.028	( )
Tobin's Q	0.955	0.982	1.078	(***)
Mean:	1.355	1.811	3.687	(***)
<b>Leverage</b>				
Debt to Equity	0.271	0.543	0.699	(***)
Total Liabilities / TA	0.396	0.541	0.614	(***)
Current Liabilities / Total Liab.	1.000	0.999	0.923	(***)
Mean:	0.872	0.837	0.828	(***)
Interest Coverage	2.048	2.130	3.537	(***)
Paid-in- Capital	0.424	0.233	0.152	(***)
Cash / TA	0.045	0.047	0.064	(***)

Notes: Source CMA (own calculations). Firms are split in three groups based on their nominal sales with equal number of firms in each group. TA stands for total Assets. Unless specified otherwise, the numbers reported are medians for the respective group. The definitions of the variable are given in the notes to Table 1. The t-test indicates significance for equality of the medians (or means) between years 1996 and 2000. \*\*\*, \*\*, \*, and <sup>a</sup> indicate significance at 1 percent, 5 percent, 10 percent, and 15 percent, respectively.

**Table 6. Time Trends by Firm Size**

		1995	1996	1997	1998	1999	2000	t-test
Nominal Sales Growth	Small		0.776	-5.024	-4.250	-1.635	-10.529	( <sup>a</sup> )
	Medium		5.371	9.043	3.606	-1.820	-1.050	(**)
	Large		10.928	9.522	6.362	4.313	-0.587	(***)
Real Sales Growth	Small		-5.993	-9.201	-8.109	-4.500	-12.881	( )
	Medium		-1.706	4.247	-0.570	-4.680	-3.651	( )
	Large		3.477	4.705	2.075	1.275	-3.200	(***)
Retained Earnings	Small	0.041	0.047	0.036	0.024	0.028	0.018	(***)
	Medium	0.048	0.049	0.049	0.038	0.033	0.041	( )
	Large	0.032	0.022	0.025	0.033	0.025	0.038	(*)
Operating Income / Total Assets	Small	0.033	0.032	0.020	0.017	0.018	0.012	(***)
	Medium	0.064	0.067	0.063	0.071	0.053	0.044	(**)
	Large	0.086	0.077	0.071	0.092	0.091	0.080	( )
Total Liabilities / Total Assets	Small	0.470	0.427	0.430	0.357	0.376	0.323	(***)
	Medium	0.606	0.592	0.542	0.538	0.485	0.489	(***)
	Large	0.627	0.666	0.647	0.604	0.602	0.553	(***)
Interest Coverage	Small	1.978	2.721	2.993	1.764	2.625	1.359	(**)
	Medium	2.214	2.404	2.934	2.097	2.057	1.733	( )
	Large	4.009	3.117	2.562	4.569	3.768	2.923	( )
Paid-in-Capital	Small	0.368	0.365	0.367	0.442	0.443	0.532	(***)
	Medium	0.185	0.193	0.248	0.271	0.250	0.291	(***)
	Large	0.140	0.137	0.129	0.153	0.178	0.197	(***)

Notes: Source CMA (own calculations). Firms are split in three groups based on their nominal sales with equal number of firms in each group. The t-test indicates significance for equality of the medians (or means) between years 1996 and 2000. \*\*\*, \*\*, \*, and <sup>a</sup> indicate significance at 1 percent, 5 percent, 10 percent, and 15 percent, respectively.

**Table 7. Key Financial Ratios by Size and Leverage Groups**

	Leverage Groups		
	Low	Medium	High
Nominal Sales Growth			
Small	-0.22	-4.24	-10.67
Medium	2.59	3.76	-0.33
Large	9.26	4.65	5.78
Operating Income over Total Assets			
Small	0.03	0.03	0.01
Medium	0.09	0.07	0.04
Large	0.09	0.12	0.06
Interest Coverage Ratios			
Small	5.51	2.08	1.11
Medium	10.55	2.45	1.38
Large	16.78	5.03	1.83
Tobin's Q			
Small	0.91	0.97	0.97
Medium	0.90	0.99	1.00
Large	0.94	1.20	1.07

Note: Reported are medians. Firms are split into nine groups—intersection of three size groups and three leverage groups.

**Table 8. Regression Analysis of Leverage**

	(1)	(2)	(3)	(4)
Small	-0.187 -12.4 ***	-0.188 -9.86 ***	-0.217 -11.49 ***	-0.154 -5.62 ***
Medium	-0.076 -6.27 ***	-0.082 -5.6 ***	-0.080 -6.67 ***	-0.075 -3.73 ***
Sales growth		0.000 -0.17		
Operating income/ TA			-0.694 -2.84 ***	
Dummy 1996	0.004 0.19		-0.002 -0.09	
Dummy 1997	0.006 0.29	-0.001 -0.03	0.000 0.01	
Dummy 1998	-0.026 -1.2	-0.012 -0.47	-0.033 -1.66 *	
Dummy 1999	-0.057 -3.08 ***	-0.047 -2.18 **	-0.071 -3.96 ***	
Dummy 2000	-0.067 -3.56 ***	-0.062 -2.88 ***	-0.085 -4.47 ***	
Trend				-0.011 -2.8 ***
Small * Trend				-0.014 -1.65 *
Medium * Trend				-0.001 -0.09
Mining	0.000 0	-0.028 -0.42	0.006 0.1	0.005 0.08
Construction	0.174 7.1 ***	0.177 6.28 ***	0.148 5.92 ***	0.174 7.16 ***
Manufacturing:				
Food	0.026 0.98	0.026 0.82	0.022 0.89	0.025 0.96
Textile	0.198 2.66 ***	0.195 2.1 **	0.122 2.18 **	0.201 2.69 ***
Apparel	0.085 2.3	0.077 1.69 *	0.071 1.86 *	0.087 2.37 **
Chemicals	-0.050 -1.92	-0.054 -1.78 *	-0.026 -1	-0.049 -1.91 **
Rubber and Plastic	0.032 1.07	0.029 0.81	0.030 1.06	0.032 1.08
Stone, Clay, Glass	-0.001 -0.02	0.000 0	-0.009 -0.35	0.001 0.03
Electrical	0.010 0.35	-0.014 -0.44	0.041 1.52	0.009 0.34
Other Manufacturing	-0.019 -0.74	-0.035 -1.14	-0.020 -0.87	-0.019 -0.76
Utilities	-0.027 -0.74	-0.054 -1.31	-0.034 -0.96	-0.029 -0.78
Trade	0.091 2.81 ***	0.103 2.5 ***	0.053 1.54	0.092 2.86 ***
Finance	-0.200 -5.62 ***	-0.172 -3.74 ***	-0.219 -6.04 ***	-0.198 -5.61 ***
Real Estate	0.111 4.24 ***	0.105 3.23 ***	0.093 3.54 ***	0.112 4.32 ***
Services	-0.021 -0.82	-0.026 -0.87	-0.037 -1.49	-0.022 -0.9
Constant	0.601 23.33 ***	0.600 19.2 ***	0.682 18.3 ***	0.605 25.17 ***
No. Obs/RSQ	2438 0.140	1705 0.133	2438 0.200	2438 0.140

Notes: Source CMA (own calculations). Dependent variable is total liabilities over total assets. Small and medium are dummies variable for firms in the smallest and medium thirds. Trend is a time trend equal to zero and 1995 and increasing by one for each subsequent year. The asterisks report t-tests for coefficient significance: \*\*\*, \*\* and \* indicate significance at 1 percent, 5 percent, and 10 percent, respectively.

**Table 9. Percent Market Capitalization and Volume Traded by Trading Patterns**

Year	Market Capitalization		Value Traded		Turnover
	Total (LE bn.)	Cosmetic (percent)	Total (LE bn.)	Cosmetic (percent)	
1997	244	9.8	17	1.6	0.07
1998	207	13.4	14	12.2	0.07
1999	259	45.3	442	9.0	0.16
2000	166	51.0	25	9.5	0.15
2001	81	29.1	13	5.0	0.16

Notes: Source CMA (own calculations). This table includes all firms that have been traded (i.e., have non-zero price in the CMA database). Turnover is the ratio of the value traded by market capitalization.



**Table 10. Liquidity Distribution**

(In millions of LE)					
Value Traded	< 1	1 – 10	10 – 100	100 – 1,000	> 1,000
percent of total number of firms					
1997	57.9	13.8	16.4	11.9	0.0
1998	64.7	10.9	16.3	7.9	0.2
1999	66.0	13.4	14.8	5.0	0.8
2000	67.2	16.3	12.8	3.0	0.7
2001	69.2	15.3	12.2	2.6	0.7
percent of total value traded					
1997	0.2	1.0	14.8	84.3	0.0
1998	0.3	1.7	25.8	64.8	7.5
1999	0.1	0.8	8.7	18.9	71.5
2000	0.3	1.6	12.3	25.4	60.7
2001	0.5	3.0	23.0	26.7	47.0

Note: Source CMA (own calculations). This table includes all firms that have been traded in each year (i.e., have non-zero price in the CMA database).

**Figure 1. Liquidity and Concentration**

