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An empirical investigation of downsizing: A study of banking sector of Pakistan

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Downsizing is the burning issue of today's dynamic organizations. Organizations are shortening their staff to improve their financial performance. This bustle is not only affected its employees at their workplace but also in their private lives. This study has been conducted in order to measure whether the organizations are successful in achieving their objectives of downsizing or not. This study has been conducted on banking sector of Pakistan. The banks, those that downsized during the last decade, are selected as a sample of the study. Pre-downsizing and post-downsizing financial data have been analyzed at two time spans. Six different ratios are calculated as the indicators of financial performance which are as under: loan per employee, deposit per employee, return on assets, return on equity, loan to assets and non-performing loans to loan ratio. To test the hypothesis statistically, paired sample t-test is used. It is observed that banks could not achieve their desired results.

Key words: Downsizing, financial performance, banking sector, Pakistan.

INTRODUCTION

Most of the previous research regarding downsizing is from the point of view of HR, e.g. impact of downsizing on layoff survivors; and this impact is measured from different angles, such as impact on trust and employee practices (Tzafrir and Eitam-Meilik, 2005), impact on remaining workers' sickness absence (Østhus and Mastekaasa, 2010), effects on job satisfaction and life satisfaction of layoff survivors (Malik et al., 2010).

Very little work has been done from financial perspective, which is the original purpose of the organizations downsizing. Thus, this study has been conducted from financial aspect of the downsizing. Before moving ahead, here is a brief explanation of downsizing, financial performance and their relationship.

Downsizing can be referred to by different names like resizing, rightsizing, restructuring and even re-engineering (Cameron, 1994). Employee downsizing is the planned reduction in jobs and personnel (Cascio, 1995). Actually, the right size of human resource, that is, suitable number of employees is vital and indispensable for the successful survival of any organization. So generally firms reduce personnel size to improve their performance and efficiency. Various people, like Baumol et al. (2003) Espahbodi et al. (2000), and Wayhan and Werner, (2000), have proved through their studies that downsizing can improve efficiency and effectiveness. This phenomenon started in Europe and the USA in the early 1980's, when many firms found themselves in the throes of a significant economic downturn, but now the organizations in the Asia are also adopting such kinds of strategies to increase efficiency and to maximize profits because often in the context of declining revenues, downsizing could preserve profitability by enhancing organizational efficiency and reducing costs (Edward et al., 2004; Harrigan, 1983). Downsizing in companies not only reduce cost by reduction in employee numbers but also increase profitability by increasing efficiency of layoffs as stated by (Sadri, 1996); that those who remain will be as productive and efficient after the lay-off as they were before, if not more so. It can be said in a clearer

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way that downsizing is supposed to eliminate the unutilized personnel so that overall organization becomes more economically efficient (Sadri, 1996). Precisely, the objectives of downsizing are to increase efficiency and productivity, control over costs, fewer underutilized human resource, lessen management layers which will overcome communication gap and speed up communication, improvement in decision making process by reduction in time consumption.

Financial performance is that how efficiently an organization is utilizing its resources to generate cash profits or how much an organization is successful in achieving its financial objectives. Various studies proved that financial performance and downsizing have relationship because firms choose to downsize in order to improve financial performance (Espahbodi et al., 2000). Financial performance can be measured through various methods some of which are objective nature and others are of subjective. One of them, which is most commonly used, is ratio analysis. Therefore, this tool is used in this study to measure financial performance through different dimensions. Furthermore, as this study is relevant to the number of personnel, so some ratios are involved in this study directly related to staff numbers like loans number of employee and deposit per of employee.

As companies do downsizing in their organizations to improve their financial performance, this study has been conducted to measure whether the organizations are successful in achieving their objectives by reducing their staff or not. This study would be beneficial to the corporate management as well as individual employees. Corporate management takes several steps to carry out downsizing and it bears gigantic costs in execution of downsizing; on the other hand individual employees who put in hard efforts to reach such attractive positions are fired with a single notice followed by the corporate management decisions. So, conclusion of this study also includes suggestions for corporate management regarding downsizing. It would be helpful for management to save enormous cost and for individual employees to secure their careers.

LITERATURE REVIEW

Downsizing is an international management action which involves a diminution in workforce, which is purely designed to improve the competitive position of a company (Amabile and Conti, 1999). Most of the studies conducted regarding downsizing are focused on micro issues like impact of downsizing on departing employees and survivors (Chakravarthy and Mishra, 1994; Karake, 1998). But now it is the need of the hour to measure the impact of such HR practices on macro issues as financial performance of the organization (Wright and McMahan, 1992; Rogers and Wright, 1998).

Some studies regarding downsizing state that some firms could improve their operating performance (Espahbodi et al., 2000). Some studies prove that downsizing has an overall positive impact on financial performance of the organizations. According to Burkeand Nelson (1998), 85% of the firms indulged in downsizing achieved reduction in cost, 63% increased their profits and 58% improved their output. According to Wayhan and Werner (2000), downsizing extensively improves financial performance particularly in the short term. Moreover, they found that there is improvement in revenues of companies involved in downsizing relative to their competitors that had not implemented downsizing. In addition to that, there is a higher return to shareholders of the downsizing companies as compared to those which abstained from doing so (Sheaffer et al., 2009). There is also a noteworthy increase in the return on equity and net profit per employee (Collett, 1999). By and large, a cutback in employees improves overall performance in short run as reduction in workforce dwindle the cost and as a result there is a rise in profitability and liquidity of the company (Wayhan and Werner, 2000). Furthermore, organizations get advantage from an increase in output at initial stages of downsizing because remaining employees work with more dedication and enthusiastically to save their jobs (Sheaffer et al., 2009). Some researchers also proved that performance of the organization decreases after downsizing (Godkin et al., 2002; Raj and Forsyth, 2002; Vanderheiden et al., 1999). According to American management association, productivity and morale is not enhanced by downsizing. Level of productivity is not necessarily increased by downsizing rather it leads to lessen the productivity (Cascio, 1995).

A study has been conducted by Ozkanli and Bumin (2006) in order to measure the improvement in financial performance due to downsizing regarding firms registered in the Istanbul Stock Exchange, and he concluded that most of the remaining firms failed to achieve their desired goals regarding downsizing. In addition to the announcement, downsizing have overall negative impact on stock market prices (Sheaffer et al., 2009).

On the other hand, downsizing has very negative effects on laid off and survivors. Laid off people consider downsizing as unjust, inequitable, iniquitous, unscrupulous, dishonorable, unkind and cruel (Cameron, 1996). Downsizing not only affects physical health of remaining employees but also psychological (Naumann et al., 1995; Armstrong and Stassen, 2006; Begley, 1998; Havlovic et al., 1998; Kinicki et al., 2002; Kinicki et al., 2000; Terry et al., 1996; Terry and Callan, 1997; Eby and Buch, 1998; Henkoff, 1994). After downsizing, remaining employees feels job insecurity, have feelings of despair, melancholy, dread, trepidation, annoyance and anxiety.

Table 1. Employee Efficiency (H1: Loan per employee).

Sr. no.	Loan/no. of employees (t)	Loan/no. of employees (t+1)	Loan/no. of employees (t+1)-t
Bank 1	13911	19424	5513
Bank 2	19424	23980	4556
Bank 3	13556	18767	5211
Bank 4	24811	25402	591
Bank 5	3795	5453	1658
Bank 6	11233	11525	292
Bank 7	20228	25330	5102
Bank 8	3947	4905	958

Furthermore they lose their loyalty and trust to the organizations, and have low self-esteem and spirit, low and low job contentment. In that scenario many problems occur, like health tribulations, absenteeism and troubles in family relations (Ozkanli and Bumin, 2006). According to Ferris et al. (1995) approximately 68% downsizing is futile. According to Meinzen and Pradhan (2001), downsizing is liable to blight the overall human resource when there would be shortage of skilled and competent manpower after downsizing actions.

RESEARCH METHODOLOGY

The basic purpose of the study is to assess and measure the relationship between downsizing and financial performance of banking sector of Pakistan. So, this study would be conducted on the banking sector of Pakistan and the banks that did downsizing would be the sample of the study. It is supported from literature that an organization must cut down its staff strength at least by 10% for consideration of downsizing. Therefore, the banks that downsized its staff by 10% or more is the sample of the study. If a certain bank did downsizing on two different time span it would be analyzed independently. Financial data (that is, secondary data) of banks involved in downsizing that would comprise of pre-downsizing and post-downsizing data would be considered for this study. Then, this data would be used to analyze the changes in financial performance by using some tools like ratio analysis.

Hypothesis

Certain hypotheses are defined to test the relationship between downsizing and indicators of financial performance through different dimensions. These hypotheses will measure the relationship between downsizing and employee efficiency, downsizing and profitability, downsizing and asset quality. Therefore, this study revealed the following hypothesis (Ozkanli and Bumin, 2006):

Employee efficiency

Hypothesis 1: Loans per number of employee increases due to downsizing.
Hypothesis 2: Deposits per number of employee increases due to downsizing.

Profitability

Hypothesis 3: Return on assets increases due to downsizing.
Hypothesis 4: Return on equity increases due to downsizing.

Asset quality

Hypothesis 5: Loan to asset ratio increases due to downsizing.
Hypothesis 6: Non-performing loans to loan ratio decreases due to downsizing.

Thus, the following variables are determined on the basis of the data:

1. Loan/no. of employees
2. Deposits/no. of employees
3. Net income/assets
4. Net income/equity
5. Loans/assets
6. Non-performing loans/loans

To test the hypothesis, data of banks in the year of downsizing (t) and after downsizing (t+1) are evaluated by using paired sample t-test. This test compares the means of two variables for each case and test to see if the average difference is significantly different from zero. To check, if there is any significant change in the preceding discussed ratios at two different time span, that is, pre-downsizing and post-downsizing periods.

FINDINGS

Employee efficiency

Employee efficiency means how effectively an organization is using its workforce to generate profits. In case of banking sector employee efficiency is measured through two different ratios that involve the number of employees. First is loan/number of employee ratio and second is deposit/number of employee ratio. Detail of these is shown in Table 1.

It is concluded from Table 1 that loan to number of employees ratio of all eight banks has been improved due to downsizing. However, to verify that whether there is any significant difference between pre-downsizing and post-downsizing ratio of loan per employee, statistical

Table 2. Paired samples test.

Pair 1	Paired differences					t	Df	Sig. (2-tailed)
	Mean	Std. deviation	Std. error mean	95% confidence interval of the difference				
				Lower	Upper			
Loan per employee (t+1) - loan per employee (t)	2.98512E3	2303.68441	814.47543	1059.19664	4911.05336	3.665	7	0.008

Table 3. Employee Efficiency (H2: deposit per employee).

Sr. no.	Deposit/no. of employees(t)	Deposit/no. of employees (t+1)	Deposit/no. of employees [(t+1)-t]
Bank 1	21725	26514	4789
Bank 2	26514	31508	4995
Bank 3	19127	25336	6209
Bank 4	32316	35347	3031
Bank 5	23969	31543	7574
Bank 6	23	30	7
Bank 7	27366	40484	13119
Bank 8	6248	7939	1691

tool has been applied, that is, paired sample t-test. The results of paired sample t-test are given in Table 2. As per the paired sample t-test, it is proved that there is a significance difference between Loans per Employee ratio before and after downsizing in the banking sector of Pakistan.

H1: The hypothesis is accepted as support found through statistical tool.

The next variable to test employee efficiency is Deposit per Employee ratio. Table 3 shows the details of deposit per employee ratio of all banks with improvement/decline in it. It is found from Table 3, that the ratio of deposit per employee of all banks indulged in downsizing is improved. Furthermore, to test the validity that whether there is any significance improvement prevails before and after downsizing, statistical tool, paired sample t-test, is applied. These are the results of paired sample t-test (Table 4).

As per findings of paired sample t-test, it is observed that there is a significant improvement in deposit to per employee ratio after downsizing in banking sector of Pakistan.

H2: Findings are supporting this hypothesis so it is accepted.

Profitability

Profitability is another tool to measure the financial performance of any organization. So, profitability of banking sector (downsized banks) is measured here through two different ratios which are Return on Assets, and Return on Equity.

According to apparent results of Table 5, it is found that there is improvement in Return on Assets ratio of five banks while there is decline in the said ratio of three banks. To test it statistically, a paired sample t-test has been applied. Table 6 is the output of the test.

As per the findings of the paired sample t-test, it is proved that there is not any significant improvement/decline in return on assets (net income/assets) ratio on Pakistani banks before and after downsizing (Table 7).

H3: There is no support found for this hypothesis so it is rejected on the basis of statistical tool.

Here again the return on equity of five banks is improved in Pakistan due to downsizing and declined of three banks. To test statistically, paired sample t-test is applied. Results are shown in Table 8. According to the results of the test, it is found that there is no significant change in return on equity of banks after doing downsizing.

H4: This hypothesis is rejected as no support is found for it.

Assets quality

Asset quality is also an important factor to measure the asset quality, two ratios used are loans to asset ratio and

Table 4. Paired samples test.

Pair 1	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. deviation	Std. error mean	95% confidence interval of the difference				
				Lower	Upper			
Deposit/no. of employees (t+1) - deposit/no. of employees (t)	5.17662E3	4027.41601	1423.90658	1809.62096	8543.62904	3.636	7	0.008

Table 5. Profitability of banking sector of Pakistan (H3: ROA = net income/assets).

Sr. no.	Net income/assets (t)	Net income/assets (t+1)	Net income/assets (t+1)-t
Bank 1	0.01978	0.01090	-0.00888
Bank 2	0.01824	0.02152	0.00328
Bank 3	0.01723	0.02218	0.00495
Bank 4	0.01361	0.01481	0.00121
Bank 5	-0.01429	-0.00086	0.01343
Bank 6	0.00277	0.00521	0.00244
Bank 7	0.00252	0.00251	-0.00002
Bank 8	0.00106	0.00018	-0.00088

Table 6. Paired samples test.

Pair 1	Paired differences					t	df	Sig. (2-tailed)
	Mean	Std. deviation	Std. error mean	95% confidence interval of the difference				
				Lower	Upper			
Net income/assets (t+1) - net income/assets (t)	0.00194125	0.00623928	0.00220592	-0.00327492	0.00715742	0.880	7	0.408

Table 7. Profitability of banking sector of Pakistan (H4: ROE = net income/equity).

Sr. no.	Net income/equity (t)	Net income/equity (t+1)	Net income/equity (t+1)-t
Bank 1	0.30122	0.14235	-0.15887
Bank 2	0.23427	0.23764	0.00338
Bank 3	0.25411	0.29137	0.03725
Bank 4	0.17097	0.14094	-0.03003
Bank 5	-0.19562	-0.01048	0.18514
Bank 6	0.09608	0.15778	0.06171
Bank 7	0.01548	0.01635	0.00087
Bank 8	0.05040	0.00924	-0.04116

financial performance of banking sector. To measure the non-performing loans to loans ratio.

Apparently, it is shown (Table 9) that there is decline in loans to assets ratio of six banks while there is an improvement noted in two banks. However, to measure it statistically, paired sample t-test is applied; thus, findings are as shown in Table 10.As per findings of the paired sample t-test, it is observed that there is no significant difference between pre-downsizing and post-downsizing loans to assets ratios of downsized banks of Pakistan.

Table 8. Paired samples test.

Pair 1	Paired differences					t	df	Sig. (2-tailed)
	Mean	Std. deviation	Std. error mean	95% confidence interval of the difference				
				Lower	Upper			
Net income/equity (t+1) - net income/equity (t)	0.00728500	0.09775712	0.03456236	-0.07444200	0.08901200	0.211	7	0.839

Table 9. Asset quality of banks doing downsizing (H5: loans/assets).

Sr. no.	Loan/assets (t)	Loan/assets (t+1)	Loan/assets (t+1)-t
Bank 1	0.53118	0.59914	0.06796
Bank 2	0.59914	0.59197	-0.00717
Bank 3	0.58693	0.58425	-0.00267
Bank 4	0.60889	0.56535	-0.04354
Bank 5	0.06324	0.07781	0.01457
Bank 6	0.41032	0.32474	-0.08558
Bank 7	0.48208	0.40761	-0.07447
Bank 8	0.53822	0.52497	-0.01325

Table 10. Paired samples test.

Pair 1	Paired differences					t	df	Sig. (2-tailed)
	Mean	Std. deviation	Std. error mean	95% confidence interval of the difference				
				Lower	Upper			
Loan/Assets (t+1) - Loan/Assets (t)	-0.01802000	0.04961665	0.01754214	-0.05950056	0.02346056	-1.027	7	0.338

Table 11. Asset quality of banks doing downsizing (H6: non-performing loans/loans).

Sr. no.	Non-performing loans/loans (t)	Non-performing loans/loans (t+1)	Non-performing loans/loans (t+1)-t
Bank 1	0.00729	0.00939	0.00210
Bank 2	0.00939	0.00819	-0.00119
Bank 3	0.01835	0.01703	-0.00132
Bank 4	0.02642	0.03415	0.00773
Bank 5	0.02546	0.05495	0.02949
Bank 6	0.00589	0.00350	-0.00239
Bank 7	0.08171	0.05830	-0.02340
Bank 8	0.13568	0.16144	0.02576

H5: No support is found for this hypothesis so it is rejected on the basis of evidences.

From simple overview of differences in ratios it is found that four banks improved their Non-Performing Loans/Loans Ratio after doing downsizing (Table 11), whereas the other four felt decline in it. Apart from the preceding discussion, it is further tested through statistical tool which is paired sample t-test. The results of the test are shown in Table 12.

According to results of test, it is found that there is no

Table 12. Paired samples test.

Pair 1	Paired differences					t	df	Sig. (2-tailed)
	Mean	Std. deviation	Std. error mean	95% confidence interval of the difference				
				Lower	Upper			
Non-performing loans/loans (t+1) - non-performing loans/loans (t)	0.00459500	0.01684132	0.00595431	-0.00948470	0.01867470	0.772	7	0.466

significant change in non-performing loan/loan ratio before and after downsizing in banking sectors of Pakistan.

H6: No support is found for this hypothesis, so it is rejected on the basis of evidences.

Conclusion

This study has been conducted to check whether banks of Pakistan who did downsizing are successful in achieving their objectives relevant to finance or not. For this purpose, six hypotheses are assumed and six different ratios which are considered as a tool of financial performance, supported from literature, are used and calculated; and there results have been analyzed by comparison before and after downsizing. For further clarification, a statistical tool was applied, which is paired sample t-test, which supported in taking decision whether there is any significant difference before and after downsizing or not. According to results of the paired sample t-tests, it is found that there is significant difference between pre-downsizing and post-downsizing ratios of loan per employee (H1), and deposit per employee (H2); so these two hypotheses are accepted. Furthermore, there is not any significant difference found in all other four ratios which are: return on asset (H3), return on equity (H4), loans to assets (H5), and non-performing loans/loans (H6); all these four hypotheses are rejected on statistical grounds.

In overall conclusion, it can be said that banks in Pakistan could not achieve their financial purpose of doing downsizing in their sector. Return on Assets and Return on Equity are the most important tools to measure financial performance of any organization. So, in this analysis, it is observed that there is no significant difference between pre and post downsizing activities as aforementioned. On the other hand, asset quality test is an important tool to measure the financial performance of banking sector particularly. To check the assets quality, two ratios are calculated which are loans/assets and non-performing loans/loans. So, in this case also it is found in statistical tool that there is no significant difference in pre-downsizing and post-downsizing ratios of asset quality. As far as the first two ratios (deposit per employee and loan per employee) are concerned, there are some significant differences at two different points in time. The major reason for this significance change is that the number of employees is the divisor in both ratios and due to that decline in it by at least 10% will definitely affect greatly. Therefore, by observing all hypotheses and financial tools, it is concluded that there is no significant change in banking sector of Pakistan by doing downsizing because banks that indulged in downsizing remained failed in achieving their objectives.

It is suggested to banking management to avoid such awful practices which involve career problems for a large number of employees of banks. This is not only trouncing to fired employees but also to banks as they lose trained and expert personnel in such kind of activities. Furthermore, it is also observed that most of the downsizing done is at lower level where there is not much high pay rates. Management can adopt various strategies to improve financial performance by reduction of expenses and by improving methods of production. If they intended to do downsizing essentially, they may adopt different strategies in this regard, for example, instead of removing hundred workers at the bottom line, they may fire a single guy who is getting benefits more than that of those hundred employees and is not performing any special duties. Moreover, there should be proper planning before and after downsizing about how to manage the activities. Proper charge should be handed over to alternate staff by layoffs. Policies made by these layoffs should be reviewed properly.

This study has not only contributed to the literature but also provided basis for the policy makers especially in the banking sector regarding downsizing because downsizing is a very hot issue nowadays. As it is an empirical study, conclusion has been drawn on the basis of statistical tools; so top level management may consider its findings before taking any step regarding balancing number of staff. Different tools to measure financial performance are also elaborated in this study which can also be used in any other organization especially in banking sector throughout the world. It will also help out the employees getting worried about their careers due to downsizing.

REFERENCES

Amabile TM, Conti R (1999). Changes in the work environment for creativity during downsizing. Acad. Manag. J. 42(6):630-640.

Armstrong SM (2006). Determinants of how managers cope with organisational downsizing. Appl. Psychol. 55(1):1-26.

Baumol WJ, Blinder AS, Wolff EN (2003). Downsizing in America: Reality, causes, and consequences: Russell Sage Foundation Publications.

Begley TM (1998). Coping strategies as predictors of employee distress and turnover after an organizational consolidation: A longitudinal analysis. J. Occup. Organ. Psychol. 71:305-329.

Burke RJ, Nelson D (1998). Mergers and acquisitions, downsizing, and privatization: A North American perspective.

Cameron KS (1994). Strategies for successful organizational downsizing. Hum. Res. Manag. 33(2):189-212.

Cascio WF (1995). Whither industrial and organizational psychology in a changing world of work? Am. Psychol. 50(11):928.

Chakravarthy S, Mishra D (1994). Snoop: An expressive event specification language for active databases. Data Knowl. Eng. 14(1): 1-26.

Collett N (1999). Discussion of Corporate Reorganizations: Changes in the Intensity of Labor and Capital Expenditures. J. Bus. Financ. Account. 26(9/10):1239-1244.

Eby LT, Buch K (1998). The impact of adopting an ethical approach to employee dismissal during corporate restructuring. J. Bus. Ethics 17(12):1253-1264.

Edward FR, Wicks AC, Parmar B (2004). Stakeholder theory and" The Corporate objective revisited". Organiz. Sci. pp. 364-369.

Espahbodi R, John TA, Vasudevan G (2000). The effects of downsizing on operating performance. Rev. Quant. Financ. Account. 15(2):107-126.

Ferris GR, Rosen SD, Barnum DT (1995). Handbook of human resource management: Wiley.

Godkin L, Valentine S, Pierre SJ (2002). A multilevel appraisal and conceptualization of company downsizing. Employee Responsibilities Rights J. 14(2):57-68.

Harrigan KR (1983). Research methodologies for contingency approaches to business strategy. Acad. Manage. Rev. 8(3):398-405.

Havlovic SJ, Bouthillette F, Wal R (1998). Coping with downsizing and job loss: Lessons from the Shaughnessy hospital closure. Canadian J. Adm. Sci./Revue Canadienne des Sci. de l'Adm. 15(4):322-332.

Henkoff R (1994). Finding, training, and keeping the best service workers. Fortune 130(7):110-122.

Karake ZA (1998). An examination of the impact of organizational downsizing and discrimination activities on corporate social responsibility as measured by a company's reputation index. Manage. Decis. 36(3):206-216.

Kinicki A J, Prussia GE, McKee-Ryan FM (2000). A panel study of coping with involuntary job loss. Acad Manage. J., 43(1): 90-100.

Kinicki AJ, McKee-Ryan FM, Schriesheim CA, Carson KP (2002). Assessing the construct validity of the Job Descriptive Index: A review and meta-analysis. J. Appl. Psychol. 87(1):14.

Malik MI, Ahmad A, Hussain S (2010). How downsizing affects the job satisfaction and life satisfaction of layoff survivors. Afr. J. Bus. Manage. 4(16):3564-3570.

Meinzen DRS, Pradhan R (2001). Implications of legal pluralism for natural resource management. IDS Bull. 32(4):10-17.

Naumann E, Bies J, Martin L (1995). The roles of organizational support and justice during a layoff. Acad. Manage. J. 38(1):89-109.

Østhus S, Mastekaasa A (2010). The impact of downsizing on remaining workers' sickness absence. Soc. Sci. Med. 71(8):1455-1462.

Ozkanli O, Bumin M (2006). The relationship between downsizing and financial performance of turkish banks. ISSN 1816-7403 ISSN online 1991-7074, pp. 142.

Raj M, Forsyth M (2002). The efficiency and productivity implications of corporate layoffs. Econom. Issues-Stoke Trent. 7(2):59-70.

Rogers EW, Wright PM (1998). Measuring organizational performance in strategic human resource management: Problems, prospects and performance information markets. Hum. Res. Manage. Rev. 8(3):311-331.

Sadri G (1996). Reflections: The impact of downsizing on survivors-some findings and recommendations. J. Manage. Psychol. 11(4):56-59.

Sheaffer Z, Carmeli A, Steiner-Revivo M, Zionit S (2009). Downsizing strategies and organizational performance: a longitudinal study. Manage. Decis. 47(6):950-974.

Terry DJ, Callan VJ (1997). Employee adjustment to large-scale organisational change. Australian Psychol., 32(3): 203-210.

Terry DJ, Callan VJ, Sartori G (1996). Employee adjustment to an organizational merger: Stress, coping and intergroup differences. Stress Med., 12(2):105-122.

Tzafrir SS, Eitam-Meilik M (2005). The impact of downsizing on trust and employee practices in high tech firms: A longitudinal analysis. J. High Technol. Manage. Res. 16(2):193-207.

Vanderheiden PA, De Meuse KP, Bergmann TJ (1999). Response to haar's comment—and the beat goes on: Corporate downsizing in the twenty first century. Hum. Res. Manage. 38(3):261-267.

Wayhan VB, Werner S (2000). The impact of workforce reductions on financial performance: A longitudinal perspective. J. Manage. 26(2): 341.

Wright PM, McMahan GC (1992). Theoretical perspectives for strategic human resource management. J. Manage. 18(2):295.