MANAGING UNDER RECESSION

PERSPECTIVES FROM NEW ZEALAND SMALL FIRMS

Report from Busines**SME**asure 2010

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Executive Summary

Does the global recession impact on all small firms in the same way? Are small firms vulnerable with regard to a downturn in the economy because of the their limited resources, customers and product range across which to spread their risk or are they resilient because of their flexibility to quickly adjust resource input, prices, processes and products? This report provides indications of answers to these current questions from the Centre's annual survey of SMEs in New Zealand over the trading conditions during 2010 and provides comparisons to 2009.

This report builds on an ongoing research project that is undertaken in collaboration with Kingston University. The first report was published in 2010 and investigated how New Zealand small firms have experienced the recession and how they adapted to the changing conditions.[1] The 2010 report indicated that diversity of experiences in relation to the economic conditions and, subsequently, a variety of business responses to it. The present report explores how business owners' experiences in relation to the recession and their responses to it have changed by comparing data from the 2009 survey with data from the 2010 survey.

The questions on which this study are based formed part of Busines**SME**asure, a yearly survey and longitudinal study of SMEs in New Zealand, targeted specifically to survey micro and small sized firms.

The number of firms that completed the survey was 1808. Fifty-three percent of these firms were micro (0 – 5 FTEs)[2] 44 percent were small (6 – 49 FTEs) and three percent were medium (50 – 99 FTEs). About one third of the firms operated in the services and manufacturing sector respectively while the remainder were from construction (12 percent) and wholesale/retail sector (22 percent). A minority of businesses were from the primary sector (5 percent).

Overall results showed that:

- The number of medium-sized firms that reported increased turnover has risen considerably in 2010 indicating that more medium-sized firms are on the road to recovery compared to micro and small firms.
- The number of growing firms is increasing for the first time since 2007.
- It seems that the longer the recession lasts, the more important product/ service quality becomes as a competitive advantage. In long-lasting, tight economic conditions the quality of products/services offered seem to outweigh the competitive advantage of established customer relationships.
- In 2010 growing firms took more investment actions compared to 2009 and non-growing firms took more retrenchment actions. It seems that in the continuing tight economic conditions firms need to take increasingly more and different investment actions to achieve growth. For non-growing firms this result might indicate that they as well need to take increasingly more and different retrenchment actions to survive.
- Non-growing firms, however, have stopped taking this action in 2010, indicating that firms are exhausting their personal savings. At the same time, we found an increase in the use of personal credit cards from 67 percent in 2009 to 78 percent in 2010 making it the most widely used form of business finance alongside trade credits.

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[1] Battisti, M. & Deakins, D. (2010). Managing under recession: Perspectives from New Zealand small firms. Wellington, New Zealand: New Zealand Centre for SME Research, Massey University.

[2] FTE full time equivalent staff

Acknowledgements

This research project is undertaken in collaboration with the Kingston Small Business Research Centre who conducted a similar, earlier SME survey in the UK. Results of this survey can be obtained from the SBRC. Further information on the SBRC can be obtained from their website:

http://business.kingston.ac.uk/researchgroup.php?pageid=25

Business**SME**asure is a project that has been designed with one goal in mind: delivering excellent research to all those who can use it — the managers of New Zealand's 450,000 firms, those working in banks and other organisations that make up the 'support infrastructure' and all those involved with developing government policies and programmes. The aim of Business**SME**asure is to examine small and medium-sized firms as they develop through an ongoing, longitudinal research programme.

In the first phase, researchers visited and interviewed 400 firms in eight separate studies. This produced a hugely valuable resource and formed the foundation for the second phase of Business**SME**asure, a quantitative survey. The specific objective of this survey is to gather data over time that relates both to the characteristics of the firm, and its performance, and to the owner-managers. The survey is administered annually by mail. Each survey has potential to gather data on an issue of current concern – using the approach typical of an 'omnibus survey', thus allowing the researchers to gather data on highly topical subjects.

Defining SMEs

Consistent with international definitions, but allowing for the fact that large firms in New Zealand are smaller than large firms in other countries, we define SMEs in the following way (Cameron & Massey, 1999):

Micro-enterprise: 5 staff and fewer

Small enterprise: between 6 and 49 staff

Medium enterprises: between 50 and 99 staff

Sixty-nine percent of enterprises in New Zealand have no employees and 89 percent employ five or fewer people (Ministry of Economic Development, 2009). Micro-enterprises are an important group that are not captured by nationwide business surveys, like the Business Operations Survey (BOS). Therefore, Business**SME**asure has been designed to produce regular, reliable and independent evidence on New Zealand SMEs and to complement existing surveys by including firms with fewer than five FTEs.

The duration and impact of the recession in New Zealand

The turmoil in financial markets at the end of 2007 did not affect New Zealand as severely as other countries because of a relatively sound financial system. New Zealand's major banks are Australian owned and not exposed to "toxic" assets. As such, the banks did not threaten to fail or to be in-need of large-scale government interventions. Despite having escaped the full effects of the 'credit crunch, New Zealand was the first country to be hit by the recession in the March 2008 quarter, but as a consequence of domestic factors rather than global impacts. The start of the recession resulted from domestic monetary tightening, decreasing housing market activity and temporary drought conditions (OECD, 2009). As a consequence of decreasing household demand the recession was delayed in the business sector.

The unemployment rate rose from three percent to 6.5 percent in the September 2009 quarter. Although this represents a relatively large rise in unemployment, the absolute rate is still low compared to other OECD countries. New Zealand's economy has only started to recover in the June and September quarters of 2009 with growth in real gross domestic product (GDP) of 0.2 percent. Growth in 2010, however, was weaker than previously expected. Despite the positive outlook for New Zealand's primary sector and commodity export prices increasing, domestic demand was still weak with households and businesses remaining cautious in their spending and investment decisions. The September 2010 earthquake in Christchurch had a further negative impact on the economy with slower than expected recovery and substantial rebuilding work not being scheduled before early to mid 2011. Fears of a entering a double-dip recession were raised. In early 2011 there were tentative signs of an economic recovery, but the February earthquake in Christchurch is expected to derail this already subdued recovery. The recent earthquake is expected to further delay reconstruction work and to lower confidence. In 2012, however, it is expected that economic activity will be boosted once the reconstruction work will be underway.

At the time of writing, overall New Zealand's recession, was comparatively shallow, but long-lasting with recovery still being subdued in 2010 and into 2011.

Two Approaches To Small Business Adaptation Under Recession Conditions[3]

Despite differences in the causes, depth and duration of particular recessions, two broad sets of views regarding how small businesses are affected by economic downturn may be identified, which we term the 'resilience' and 'vulnerability' views. In the vulnerability view, small businesses are treated as highly susceptible to external shocks, such as recessions. It is proposed, that this is a result of their limited internal resources compared with larger firms, as well as a typically narrower base of customers and product lines across which to spread risk; and less bargaining power with a variety of external actors, including customers, suppliers and sources of finance. They are also much more likely to cease trading than larger enterprises (Storey, 1994).

One study on established manufacturing small-firms pointed to time lag effects with an economic downturn. Sales would be affected first, then profitability and finally survivability — as short-term responses proved insufficient to keep the business alive in the medium-term. The study also raised questions about the long-term consequences of adaptation strategies cutting investment and substituting labour (sometimes own labour and that of family

[3] This sub section was written as context for the UK and NZ recession studies, see Acknowledgements

members) for capital (Smallbone et al, 1997). Under this view, falling GDP at the macro level causes performance decline at the micro level and, in severe cases, business closure.

In the resilience view, it is the flexibility and adaptability of small businesses that is emphasised, based on adjusting resource inputs, processes, prices and products, enabling them to survive, and possibly thrive, during periods of economic downturn (Reid, 2007). A deteriorating macroeconomic environment does not necessarily lead to small business performance decline and exit, nor does it constrain every small business in the same way, contrary to the pronouncements of some commentators. Indeed, a United States study has shown that recessions do not have a negative impact on the formation and survival of new businesses (Stangler, 2009): more than half of the companies on the 2009 Fortune 500 list began during times of economic downturn or bear market periods. Recessions are often periods of 'creative destruction' (Schumpeter, 1942) in which old technologies, products and industries go into terminal decline while new ones emerge.

Studies demonstrate the importance of retrenchment activity (Churchill & Lewis, 1984; DeDee & Vorhies, 1998; Michael & Robbins, 1998) and revenue-generation practices (Latham, 2009; Shama, 1993) by small firms during downturns. Recession may stimulate activity in particular sectors, or in particular kinds of business. An example of this is in cases where customers switch to cheaper products to restrict expenditure. This may boost suppliers of such goods and weaken the position of higher-priced providers. Some businesses might be willing to undertake risky investment, innovation or diversification because they perceive performance levels cannot be sustained with current practices. Business performance does not translate to business size in a direct way. One study on the early-1990s United Kingdom recession found that the number of smaller sized firms with sales of £51-100k held up better than among slightly larger firms with £501k to £5m turnover (Fuller, 1996).

Recessions impact unevenly on industries, regions and businesses and this helps to shape the diversity of experience of recession and business responses to it. Analysis should focus on the particular circumstances shaping individual firms' activities, business owners' responses, and the variable levels of performance achieved. Size is only one influence on small firms' adaptations and performance under recession conditions.

Recessions generate contradictory tendencies, some constraining business owners from achieving their objectives, while others are enabling. Recessions are characterised by falling *aggregate* business sales, and typically by downward pressure on asset prices, which has benefits for resource acquisition. To the extent that recession increases market exit, this is also beneficial for surviving firms. Recessions, therefore, present small businesses with a major dilemma. One, to cut costs in order to maintain survival in the short-run at the risk of reducing the capacity to adapt adequately when recovery comes; or, two, to maintain greater capacity, incurring higher costs in the short-run, in order to retain the capability to realise opportunities for long-term value creation when the upswing comes. Both processes – constraining and enabling surviving firms, occur simultaneously, but unevenly during recession.

RESEARCH OBJECTIVES

This report builds on an ongoing research project that is undertaken in collaboration with Kingston University. The purpose of the research is to explore how New Zealand small firms have experienced the recession as well as how they adapted to the changing conditions. In more detail, the specific objectives for the study are to:

- explore the timing and the impact the global recession had on New Zealand small firms

- identify the specific actions small firms have taken to increase or maintain their performance since the start of the recession
- explore how small firms are financed and how the use and the sources of finance have changed since the start of the recession

The first report was published in 2010 and indicated that diversity of experiences in relation to the economic conditions and subsequently, a variety of business responses to it.[4] The present report explores how small business owners' experiences in relation to the continuing recession and their responses to it have changed, by comparing data from the 2009 survey with data from the 2010 survey.

[4] Battisti, M. & Deakins, D. (2010). Managing under recession: Perspectives from New Zealand small firms. Wellington, New Zealand: New Zealand Centre for SME Research, Massey University.

Methodological Background

The New Zealand Centre for SME Research has developed a sound methodological approach that has been evaluated by peer review and that adheres to the guidelines provided by Massey University's Human Ethics Committee. Busines**SME**asure is designed as a longitudinal study. Given the relatively high attrition rate in the SME sector we have opted to use a revolving panel. This means that we feed in new firms at each wave to keep the size of our panel stable.

SAMPLE AND RESPONSE RATE

The population of New Zealand SMEs comprises 468,902[5] private sector enterprises, equalling 99 percent of all enterprises in New Zealand. The following table provided the context for Busines**SME**asure and shows the New Zealand SME population by size group.

Size group	No. of enterprises	% of enterprises
0	319,463	68
1-5	100,459	21
6-49	46,401	10
50-99	2,579	1
Total	**468,902**	**100**

Table 1: Private sector enterprises in New Zealand by size (MED 2009)[6]

The sample for this study was purchased from Martins (formerly APN Infomedia), a commercial provider of business-to-business information in New Zealand.

The 2009 survey involved 4,165 firms (including 1437 firms who responded in the 2007 and/or 2008 survey). There were 1,447 usable responses which translates into an overall response rate of 35 percent.

The 2010 survey involved 4,222 firms (including 1440 firms who responded in the 2007, 2008 and/or 2009 survey). There were 1,808 usable responses which translates into an overall response rate of 43 percent.

In both years, the response rate is well above an acceptable rate for this type of mail survey (Bartholomew & Smith, 2006).

DATA COLLECTION

The study followed Dillman's (2000) Total Design Method (TDM) in choosing the sample, developing, designing and pilot testing the questionnaire. Busines**SME**asure is a postal survey. The mail survey was carried out between 10 October and 19 December 2010 using a four-stage approach at an interval of two weeks. The first mail-out contained an information letter and the survey questionnaire. Step two in the mail-out process entailed a postcard reminder. Another reminder letter with a survey questionnaire was next, followed by the final step of another postcard reminder. The survey form was addressed to the Owner, Owner-

[5] Based on the 2007 Longitudinal Business Frame which covers all industries, including agriculture. For more information see www.statistics.govt.nz.

[6] Ministry of Economic Development. (2008). SMEs in New Zealand. Structure and Dynamics. Wellington, New Zealand: Ministry of Economic Development.

manager or Managing Director. For our 2010 survey, data were collected in different thematic sections:

- Section A: Operation of the business
- Section B: Managing under recession
- Section C: Use of ICT
- Section D: Exit intentions
- Section E: Membership of business associations
- Section F: Marketing activities
- Section G: Development activities
- Section H: Firm demographics

Data Quality

In order to check for non-response bias, a comparison on the demographic profile (gender, ethnicity, legal form of firm and family firm) was made between respondents who replied to both 2009 and 2010 surveys and those who replied in 2009 but did not reply in 2010, following Armstrong and Overton's (1977) approach. The insignificant differences between the two groups of respondents suggested that non-response bias was non-existent or too small for detection.

To account for common method bias, given that the study used a single instrument to measure all the variables of the study, Harman's single-factor test was performed on selected items (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). The un-rotated factor solution reported ten underlying factors with eigenvalues greater than one. These seven factors accounted for variances ranging from 1.46 percent to 20.08 percent and no factor accounted for more than 50 percent of the total variance. The results offered some evidence that the common method bias per se, could not explain the variations in the responses to the questions.

Overall, data quality was considered satisfactory for the relevant variables. No missing data techniques were applied.

Statistical Methods

This report is based on descriptive statistics i.e. frequencies and cross tabulation of the data.

Further, chi-square test was used to examine differences with categorical variables. For the purpose of this report, a two-tailed test chi-square test was applied.

If a result is referred to as "statistically significant", there is statistical evidence that there is a difference. For the purpose of this report a 5 percent level of significance was applied. This means that the finding has a 5 percent probability of being incorrect.

Sample Profile[7]

ABOUT THE OWNERS

The survey revealed demographic results about the individual owners and owner-managers who make up the respondents of the 2010 Busines**SME**asure survey. The information collected includes: owner age, type of firm entry, age at firm entry, gender and ethnicity of owner.

Owner age

The age range of the owners who responded to the survey was between 18 and 91, with an average age of 55 years. The majority (63 percent) of owners were between 41 and 60 years old. The biggest group (38 percent) was the 51 to 60 year olds, whereas only eight percent of the sample were under 40 years old. Table 2 shows a more detailed analysis of the age distribution.

Age	2009		2010	
	N	Percent	N	Percent
30 and younger	5	<1	18	1
31 to 40	90	7	128	7
41 to 50	360	26	433	25
51 to 60	553	40	667	38
61 to 70	323	23	429	25
71 and older	53	4	72	4
Total	1384	100	1747	100

Table 2: Number of owners by age

Firm entry

As the results in Table 3 show, the predominant form of business entry is personal start-up. More than half of the respondents (54 percent) had reported this method, followed by 34 percent who bought it as a going concern. A small group (six percent) entered the firm by way of a management buy-out and five percent had inherited the firm in question.

Firm entrance	2009		2010	
	N	Percent	N	Percent
Started it up	784	57	945	54
Bought going concern	460	34	106	34
Management buy-out	63	5	600	6
Inherited	66	5	89	5
Total	1373	100	1740	100

Table 3: Number of owners by the way they entered the firm

[7] The number of respondents varies by question as not all respondents answered all demographic questions. Further, percentages might not round to 100 due to rounding.

Firm entry age

On average, the owners were 37 when they entered the business. Slightly more than one quarter of respondents indicated that they were 30 years and younger at firm entry, while 35 percent entered the firm between the ages of 31 and 40 and a quarter were between 41 and 50 years old.

Age at firm entry	2009		2010	
	N	Percent	N	Percent
30 and younger	388	29	490	29
31 to 40	483	35	585	35
41 to 50	350	26	436	26
51 and older	142	10	167	10
Total	1363	100	1678	100

Table 4: Number of owners at firm entry by age of owner

Gender

As Table 5 shows, 81 percent of the owners were male and 19 percent were female.

Gender	2009		2010	
	N	Percent	N	Percent
Male	1097	78	1446	81
Female	307	22	334	19
Total	1404	100	1780	100

Table 5: Number of owners by gender

Ethnicity

As shown in Table 6, 89 percent of the respondents were of New Zealand European descent, which indicates that other different ethnic groups are underrepresented in the sample.

Ethnicity	2009		2010	
	N	Percent	N	Percent
New Zealand European	1247	89	1585	89
Maori & Pacific Islander	29	2	51	2
Chinese	11	1	12	<1
Indian	11	1	15	<1
Other	100	7	111	6
Total	1398	100	1774	100

Table 6: Number of owners by ethnicity

About the Firm

The survey also collected data about firm size, types of employees, age and type of firm, industry, location, whether the firm exported or not, and the size of the turnover.

Size

Based on the number of full time equivalent (FTE) employees, a quarter of firms did not have any employees. 38 percent of the firms employed one to five FTEs, 37 percent employed six to 49 FTEs and two percent employed 50 to 99 FTEs. The average number of FTEs per firm was seven. The average number of full-time employees was nine while the average number of part-time employees was three. Excluding non-employing firms, 52 percent of firms had unpaid family workers.

Firm size (FTEs)	2009		2010	
	N	Percent	N	Percent
0 employees	223	17	208	12
1 to 5	545	41	745	41
6 to 49	534	40	802	44
50 to 99	26	2	53	3
Total	1328	100	1808	100

Table 7: Number of firms by size (FTEs)

The firm size distribution reflects the sampling design rather than national context, to ensure micro firms (those employing five staff or fewer) are adequately represented.

Turnover

The average turnover for the firms in our sample over the last 12 months was $2.8m. Table 9 shows that while the majority of respondents (64 percent) had a turnover of more than $500k, 37 percent had a turnover of $500k or less, with 27 percent falling in the $100k to $500k band.

Turnover	2009		2010	
	N	Percent	N	Percent
$100k or less	156	13	152	10
$100k - $500k	366	29	416	27
$500k - $1m	238	19	269	17
$1m - $5m	377	30	526	34
$5m and more	108	9	201	13
Total	1245	100	1564	100

Table 8: Number of firms by turnover

Growth in the last 12 months

Growth was measured as increased turnover and profitability in the last 12 months. Overall, 21 percent of firms showed performance growth an increase of 5 percent from the previous year.

Growth	2009		2010	
	N	Percent	N	Percent
Growth	222	16	364	21
Non-growth	1194	84	1402	79
Total	1416	100	1766	100

Table 9: Number of growth firms

Age of firm

Most firms were mature and well established. For example, the average age of the firms in our sample was 26 years. Eighty-four percent were over 10 years old, while only four percent had been operating for less than five years. Table 10 shows the age distribution of the firms in more detail:

Firm age (years)	2009		2010	
	N	Percent	N	Percent
5 or younger	48	4	66	4
6 – 10	162	13	181	12
11 – 20	420	34	484	31
21 and older	604	49	822	53
Total	1234	100	1553	100

Table 10: Number of firms by firm age

Type of firm

Four fifths (83 percent) of the respondents indicated that their firms were set up as a limited liability company. Nine percent reported that their firm was a partnership, while eight were sole traders. Over half of the respondents described their firms as a family business. The high number of limited liability companies reflects the national context. New Zealand is considered to be the easiest country worldwide to establish a business by the World Bank's rankings (World Bank, 2009).

Form of legal ownership	2009		2010	
	N	Percent	N	Percent
Limited Liability	1087	78	1473	83
Partnership	152	11	156	9
Sole trader	157	11	138	8
Total	1396	100	1767	100

Table 11: Number of firms by type of ownership.

Industry sector

About one third of the firms were manufacturing firms (30 percent) and services firms (32 percent) respectively. About one fifth of firms operated in the wholesale or retail sector (22 percent) with the remaining coming from construction (12 percent) and primary production (5 percent). Table 12 shows the distribution of the sample by industry sectors:

Industry sector	2009		2010	
	N	Percent	N	Percent
Primary Production	53	4	82	5
Manufacturing	303	22	544	30
Construction	217	15	207	12
Wholesale/Retail	330	23	393	22
Business, Property and Finance Services	183	13	184	10
Other services	324	23	387	22
Total	1410	100	1797	100

Table 12: Number of firms by industry sector (ANZSIC).

Regional location

Using the physical address data and guided by the Statistics New Zealand classification of urban and rural locations, the sample has been categorised, for analytical purposes, into urban and rural locations. To allow for international comparison, the urban category comprises of main urban and satellite urban areas, but excludes independent urban areas. This group has been combined into the rural category.

Location		2009		2010	
		N	Percent	N	Percent
Urban	Main urban	976	70	1254	71
	Satellite urban	61	4	75	4
Rural	Independent urban	302	22	351	20
	Rural	61	4	83	5
	Total	1432		1763	100

Table 13: Number of firms by location

Export

The percentage of firms exporting in the previous 12 months was 18. Of these firms 11 percent reported that exporting accounted for less than 10 percent of their annual turnover, three percent that it accounted for 11 to 25 percent of their annual turnover and two percent that it accounted for 26 to 50 percent of their annual turnover. Table 15 gives more detail about the percentage of turnover generated by exports.

Export status	2009		2010	
	N	Percent	N	Percent
Not exporting	1166	81	1383	77
Exporting	252	19	408	23
Percentage of turnover of exporters	N	Percent	N	Percent
1% to 10%	149	59	233	57
11% to 25%	35	14	56	14
26% to 50%	24	10	46	11
51% to 75%	14	6	31	8
More than 75%	30	12	42	10
Total	252	100	408	100

Table 14: Percentage of turnover generated by exports in the last 12 months

Managing under Recession

This chapter discusses how the impacts of the recession on small firms and their response to the downturn in the economy have changed from 2009 to 2010. While the macroeconomic environment is the same for all firms, the effect of the recession is likely to vary for particular businesses, as are the actions owner-managers take in response to the changing economic conditions.

Firm Performance During The Recession

Respondents were asked to compare their firm's performance to 12 months ago and to indicate on a five-point Likert scale whether their performance had increased, stayed the same or decreased. The results indicated that the recession did not affect all firms equally, but that there is a range of performance outcomes.

For turnover and profitability the sample was quite evenly split with about one third each reporting increased performance, same performance and decreased performance. When comparing the data to the previous year, one can see that there has been a slight shift towards more respondents reporting stable or increased turnover and profitability in 2010 compared to 2009. While in 2009, 29 percent of respondents reported stable turnover and 25 percent reported increased turnover, these numbers have increased to 35 percent and 31 percent respectively. A similar trend was evident with regard to profitability. The number of respondents who reported stable profitability has slightly increased from 32 percent in 2009 to 36 percent in 2010, but those who reported increased profitability rose from 21 percent to 30 percent in 2010.

With regard to the number of staff, only 15 percent of respondents increased the number of employees in the last 12 months and 32 percent decreased their staffing levels. Compared to the previous year, there was no change in employment patterns with more than half of the respondents reporting stable levels of employment.

	Turnover		*Profitability*		*No of staff*	
Percent (%)	*2009*	*2010*	*2009*	*2010*	*2009*	*2010*
Strongly increased	3	5	2	4	1	1
Increased	22	26	19	26	12	14
About the same	29	35	32	36	56	55
Decreased	37	29	37	29	28	28
Strongly decreased	9	6	9	6	4	3

Table 15: Changes in firm performance from 2009 to 2010

To examine if the change in firm performance in the last 12 months was associated with characteristics such as firm size, sector, or location, we distinguished two groups of respondents. The first group consists of those reporting increased turnover, and the second, those reporting same or decreased turnover. Results in 2010 showed a similar pattern as results in 2009. In both years no significant difference was found with regard to location and sector. For firm size however, a significant difference was found. In 2009 only about one quarter of micro and small firms reported increased turnover in the last 12 months, almost half of medium sized firms did so. In 2010 this trend continued and the gap between micro, small and medium sized firms became even wider. This means that while the number of micro and small firms that reported increased turnover remained almost stable (23 percent in 2009 and 24 percent in 2010 for micro firms and 27 percent in 2009 and 36 percent in 2010), the number of medium-sized firms that reported increased turnover has risen considerably. In 2009, 46 percent of medium-sized firms reported increased turnover compared to 62 percent in 2010.

Percent (%)	*Increased turnover in the last 12 months*		*Same of decreased turnover in the last 12 months*	
	2009	*2010*	*2009*	*2010*
Location				
Urban	25	31	76	69
Rural	27	27	73	73
*Firm size**				
Micro (1-5)	23	24	77	76
Small (6-49)	27	36	73	64
Medium (50-99)	46	62	54	39
Sector				
Production	24	31	76	69
Trade	25	29	75	71
Services	27	31	73	69

* X^2 significant at the 5% level or higher

Table 16: Changes in turnover by sector, size and location

The longitudinal nature of Busines**SME**asure allows us to look at the changes in firm performance over a period of four years – from 2007 to 2010. To identify growing firms we distinguished two groups in the sample – those who reported increased turnover and profitability, and those who reported similar or decreased turnover and profitability. Table 20 shows that firm performance was constantly deteriorating from 2007 to 2009 as a result of the global economic downturn. In 2007 there were 37 percent of firms who reported growth in turnover and profitability. This number decreased to 24 percent in 2008 and 16 percent in 2009. In 2010, however, the number of growing firms increased for the first time since 2007. Twenty-one percent of firms reported growth in turnover and profitability which is higher than reported levels in 2009, but still lower than the 2008 and 2007 growth levels.

Percent (%)	*2007*	*2008*	*2009*	*2010*
Growth in turnover and profitability	37	24	16	21
N	**1208**	**1481**	**1416**	**1766**

Table 17: Changes in firm performance from 2007 to 2010

Impact Of The Recession

Respondents were asked to indicate if they have felt the impact of the recession.

In 2010 only 14 percent of our sample indicated that they have not yet felt the recession, a number that was down from 27 percent in 2009. Of those firms that have felt the recession, only less than one quarter has recovered to pre-recession level with the remaining three quarter still feeling the impact.

Overall, this result clearly indicates the continuing depth of the recession and the prolonged effect it had on businesses.

		2009		2010	
		N	% of firms	N	% of firms
Have not felt the recession		367	27	244	14
Have felt the recession	Recovered to pre-recession level	991	73	342	19
	Still feeling the impact			1193	67
Total		1358	100	1779	100

Table 18: Impact of the recession in 2009 and 2010

We examined the differences between the firms who reported to have felt the recession and those who have not. Results show that the recession has equally affected businesses across all sectors and location. Significant differences were only found with regard to firm size. Those firms who indicated that they did not feel the recession were significantly more likely to be micro in size i.e. employing less than 5 staff. However, those micro businesses that have felt the recession were the least likely to have recovered to pre-recesssion levels. Small and medium-sized businesses were more likely to have recovered at 22 and 25 percent respectively, compared to that micro businesses for which only 16 percent reported recovery to pre-recession levels..

Table 22 shows the differences between the two groups in percentage.

Percent (%)	*NOT felt recession*	*Felt recession, but recovered*	*Still feeling recession*
Location			
Urban	14	19	67
Rural	12	20	68
*Firm size**			
Micro (1-5)	16	16	68
Small (6-49)	12	22	66
Medium (50-99)	10	25	65
Sector			
Manufacturing	13	21	67
Construction	13	20	66
Wholesale/Retail	14	18	68
Business/Property/Finance Services	18	15	67
Other Services	14	19	67

* X^2 significant at the 5% level or higher

Table 19: Recession impact by firm characteristics

RESPONDING TO THE RECESSION

Respondents were asked to indicate what their main source of competitive advantage was during the economically challenging times. In 2010, forty percent of respondents identified product/service quality as their main source of competitive advantage, followed by 26 percent who identified customer relationships. A further 18 percent saw the uniqueness of their product/service as the main source of competitive advantage. Only a minority of respondents indentified price, location and speed of response as their main source of competitive advantage. Compared to 2009 there has been a shift in the importance of the first two sources of competitive advantage. While in 2009 customer relationships were considered to be the main source of competitive advantage for 36 percent of respondents, this number dropped to 26 percent in 2010. Product/service quality, however, was ranked first in 2010 with 40 percent of respondents agreeing that this was their main source of competitive advantage compared to 26 percent in 2009.

Overall it seems that the longer the recession lasts, the more important product/ service quality becomes for maintaining a competitive advantage. In long-lasting, tight economic conditions the quality of products/services offered seem to outweigh the importance of established customer relationships.

Percent of firms (%)	*2009*	*2010*
Established customer relationships	36	26
Product/Service quality	26	40
Product/Service uniqueness	17	18
Price	9	6
None – no specific advantage	5	3
Location	4	4
Speed of response	3	2

Table 20: Main source of competitive advantage

Further, respondents were asked which actions they undertook since the start of 2010 to increase or maintain their firm's performance. A prompt list was used with 38 specific actions that were categorised under nine general types of business strategies. These are shown together with the frequencies in table 30.

On the level of general business strategies, changes in sales and marketing ranked highest with 82 percent of respondents haven taken action in this area. Changes in employment and workforce skills ranked second with 79 percent of respondents reporting action. Ranked third were changes in finance identified by 70 percent of respondents. Other business strategies that were used by more than half of respondents included changes in products/services offered (64 percent), changes in markets (62 percent), changes in owner-manager behaviour (57 percent) and changes in production/business processes (56 percent). One third of respondents have taken action changes in business organisation (35 percent). Changes in premises were with 19 percent at the bottom of the ranking.

On the level of specific actions taken by respondents to increase or maintain their firms' performance only a slight shift was found with regard to the four most frequently reported actions. While in 2009 the four most frequently mentioned actions taken included two revenue generating and two cost-cutting measures (i.e. personally worked longer hours and reduced numbers of employees), 2010 included only one cost-cutting measure (i.e. personally worked longer hours).

Ranking	2009	2010
1	Introducing new/improved products/services	
2	Personally worked longer hours	Increased sales effort
3	Increased sales effort	Personally worked longer hours
4	Reduced numbers employed	Selling to new types of customers

Table 21: Changes in most frequently take actions from 2009 to 2010

Of the 38 actions that were included in the questionnaire, 24 were taken more frequently by business owners in 2010 compared to 2009. Only eight actions were taken less frequently and six actions remained unchanged as a measure to increase or maintain performance. All of the actions that were taken less frequently in 2010 were associated with cost-cutting measures.

Percent of firms (%)	*2009*	*2010*
Changes in products/services offered	*63*	*64*
Introduced new or improved products/services	54	55
Reduced the range of products/services	14	14
Increased the use of intellectual property rights	5	5
Changes in markets	*63*	*62*
Selling in new geographic markets	13	19
Selling more to existing customers	31	35
Selling to new types of customers	38	41
Changes in sales and marketing	*79*	*82*
Increased sales effort	44	51
Increased advertising/promotional expenditure	30	32
Reduced advertising/promotional expenditure	19	20
Reduced selling prices/held prices below inflation	27	34
Changes in production/business processes	*49*	*56*
Invested in new equipment	27	33
Used new suppliers	30	39
Changes in business organisation	*32*	*35*
Made changes in the management team	15	23
Made changes in managerial roles/functions	25	26
Changes in employment and workforce skills	*75*	*79*
Reduced numbers employed	40	39
Increased numbers employed	11	16
Increased use of unpaid family labour	13	11
Introduced wage/salary freeze	21	22
Introduced new working practices	18	23
Taken greater care in recruitment of staff	18	28

Increased use of external labour	14	18
Increased employee training	20	24
Reduced employee training	3	3
Changes in finance	*70*	*70*
Reduced debt to external sources	23	26
Increased debt financing	16	14
Invested personal savings	27	25
Reduced investment expenditure	13	11
Renegotiated the cost of supplies	21	29
Extended payment periods to suppliers	13	19
Shortened payment periods from customers/suppliers	10	13
Changes in premises	*20*	*19*
Opened new branches/outlets	4	5
Relocated the business to cheaper premises	6	6
Negotiated a reduction in the cost of the lease	8	8
Negotiated a reduction in the cost of the lease	5	4
Changes in owner-manager behaviour	*59*	*57*
Sold personal assets to compensate for poor business performance	9	9
Personally worked longer hours	48	47
Cancelled personal holidays	28	32
Other changes in owner-manager behaviour	7	3

Table 22: Actions taken to maintain or increase business performance (continued).

In 2009 we found some significant differences in the specific actions taken with regard to firm performance. To this end, respondents were divided into two groups – those who have reported growth in the last 12 months and those who have not. Growth was measured by combining increased turnover with increased profitability in the last 12 months. Results are summarized in tables 32 and 33. In 2009 results showed that growth orientated firms were more likely to undertake investment as an action rather than retrenchment, which is a characteristic action for lower performing firms. While this finding was confirmed in 2010, we found that the number of actions taken has changed. Firms with growth in turnover and profitability took nine investment options in 2009 as shown in table 23. In 2010, growing firms took almost the same set of action (only opening of new branches and outlets was discontinued), plus an additional seven actions.

Actions to increase or maintain performance	**Growth**	
	2009	**2010**
Introduced new or improved products/services	yes	yes
Selling more to existing customers	yes	yes
Selling more to new types of customers	yes	yes

Invested in new equipment	yes	yes
Made changes to the mgt team	yes	yes
Increased numbers employed	yes	yes
Taken greater care in recruitment of staff	yes	yes
Increased employee training	yes	yes
Opened new branches and outlets	yes	no
Increased use of intellectual property	no	yes
Selling in new geographic markets	no	yes
Increased sales effort	no	yes
Made changes to managerial roles	no	yes
Increased numbers employed	no	yes
Introduced new working practices	no	yes
Reduced debt to external sources	no	yes

Table 23: Relationship between recession strategies with turnover and profitability in the last 12 months.

Non growing firms showed a similar pattern. Firms with no growth in turnover and profitability took eight retrenchment actions in 2009 as shown in table 24. In 2010, these firms took an additional four retrenchment actions. Investment of personal savings was the only action that was taken in 2009, but no longer in 2010 which might be an indication of personal financial resources running dry.

Actions to increase or maintain performance	**Non-growth**	
	2009	**2010**
Reduced selling prices	yes	Yes
Reduced numbers employed	yes	Yes
Introduced wage/salary freeze	yes	Yes
Invested personal savings	yes	No
Reduced investment expenditure	yes	Yes
Extended payment periods to suppliers	yes	Yes
Sold personal assets	yes	Yes
Cancelled personal holidays	yes	Yes
Reduced range of products/services offered	No	Yes
Reduced advertisement expenditure	No	Yes
Increased use of family labour	No	Yes
Reduced employee training	No	Yes

Table 24: Relationship between recession strategies with turnover and profitability in the last 12 months.

There were some significant differences in the specific actions taken by those who did not feel the recession, those who have felt it but have already recovered to pre-recession levels and those who still feel the impact (see figure 1). Those who reported still feeling the effects of the recession were more likely to report taking actions to increase or maintain their firm's performance that those who did not (nine actions compared to six actions).

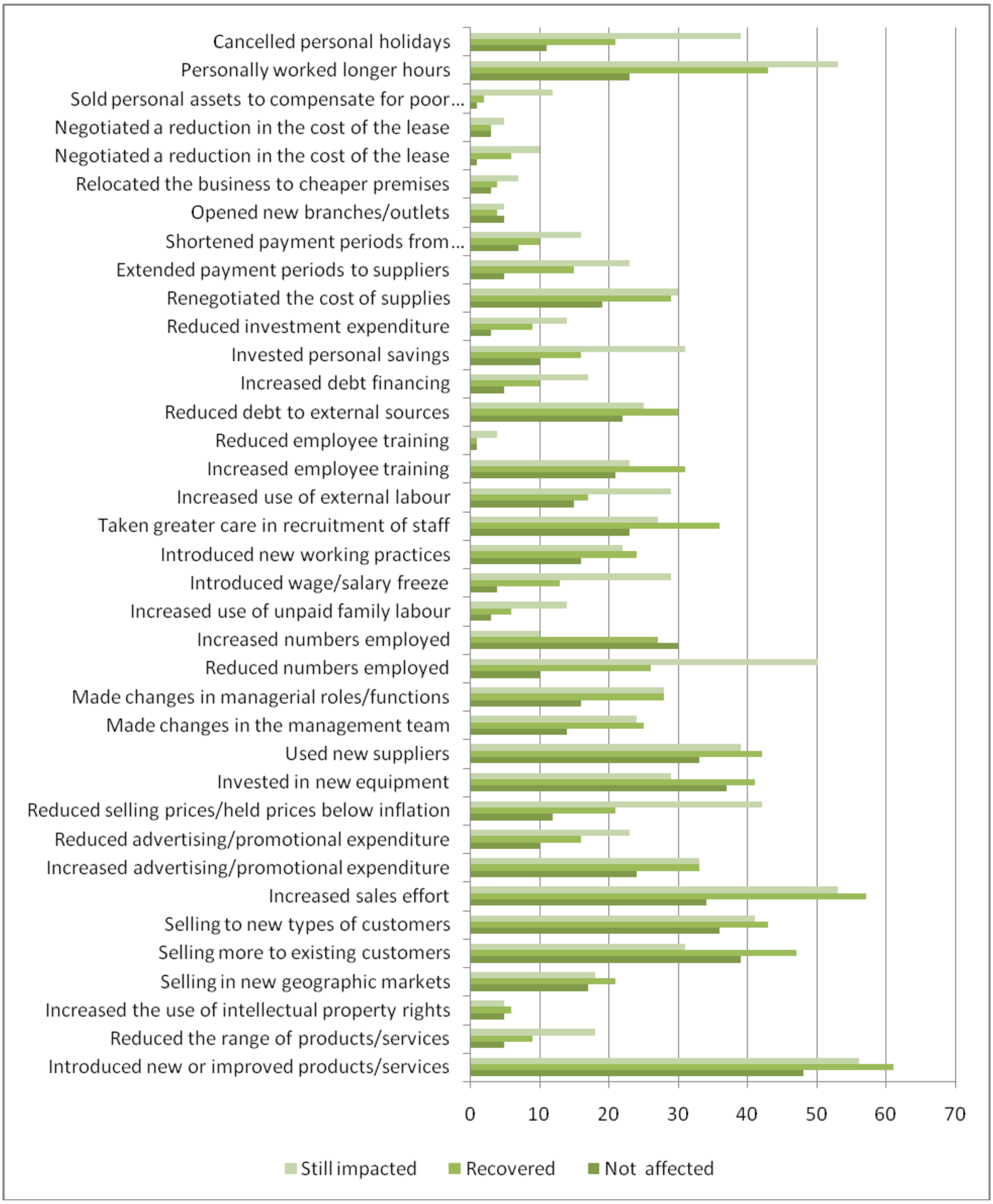

Figure 1: Differences in the specific actions taken between those that have not felt the recession, those that have already recovered and those that are still affected.

This part of the report aims to identify how small firms' use of finance has changed since the start of the recession.

Changes in the Types of Finance Used

Respondents were asked which types of finance they used and if they have changed their use of finance in the last 12 months.

In 2009 the most commonly used forms of finance which were used by at least half of the respondents were trade credit (69 percent), bank overdrafts (68 percent), personal credit cards (67 percent), business credit cards (63 percent), bank loans (60 percent) and personal savings (54 percent).

	2009				*2010*			
Percent (%)	*Increased use*	*No change*	*Decreased use*	*Ever used*	*Increased use*	*No change*	*Decreased use*	*Ever used*
Bank overdraft	25	33	10	68	28	32	9	69
Bank loans	18	29	13	60	16	35	13	64
Business credit cards	11	46	6	63	9	52	6	67
Personal credit cards	11	47	9	67	11	58	9	78
Leasing or hire purchase	7	31	8	45	6	37	8	51
Trade credit	10	57	3	69	16	56	6	77
Factoring, invoice discounting or stock finance	3	16	1	20	5	17	1	23
Grants or subsidised loans	2	6	1	8	1	6	1	8
Informal equity finance	8	11	1	20	8	11	2	19
Formal equity finance	1	5	1	6	1	6	1	7
Personal savings	22	29	4	54	24	33	3	60
Other types of finance	2	7	1	10	3	4	1	7

Table 26: Change in the use of different types of finance from 2009 to 2010

In 2010, results suggest a slight shift in finance pattern. The use of personal credit cards increased from 67 percent in 2009 to 78 percent in 2010 making it the most widely used form of business finance alongside trade credits. This type of finance has increased from 69 percent to 77 percent. Further, the use of leasing and hire purchase has increased from 45 percent to 51 percent and the use of personal savings has increased from 54 percent to 60 percent. The increase of bank loans and business cards has increased by 4 percent from 2009 to 2010, with 64 percent and 67 percent of respondents using these types of finance respectively.

Within the different types of finance, however, usage remained mostly unchanged, confirming the behavioural pattern from 2009. Similar to 2009, the only significant increase that was reported in 2010 was with regard to bank overdrafts (28 percent increased use), personal savings (24 percent increased use), bank loans and trade credits (16 percent respectively).

Innovation activity

This study followed the OECD's broad definition of innovation (2005) which includes the following four categories: "*the implementation of a new or significantly improved product (good or service), or process; a new marketing method; or a new organisational method in business practice; workplace organisation or external relations*".

Innovation	2008		2009		2010	
	N	Percent	N	Percent	N	Percent
Products or services	349	23	405	30	480	27
Operational processes	323	21	378	28	315	17
Organisational processes	344	23	447	33	406	23
Sales or marketing	379	25	578	42	435	24

Table 27: Percentage of respondents reporting innovation activity from 2008 to 2010

A comparison of innovation activity from 2008 to 2010 showed a spike of activity across all four types of innovation in 2009. In 2010 innovation activity dropped to a level comparable to 2008.

Sales or marketing innovation had the highest fluctuation across the three years. Activity increased from 25 percent in 2008 to 42 percent in 2009, but dropped again to 24 percent in 2010.

The same pattern was found for organisational, operational and product/services innovation. Organisational innovation increased from 23 percent in 2008 to 33 percent in 2009. In 2010, however, organisational innovation activity dropped again to the 2008 innovation rate of 23 percent. Operational innovation increased from 21 percent in 2008 to 28 percent in 2009. In 2010 the operational innovation rate dropped to 17 percent, an even lower rate than 2008. Products/services innovation increased from 23 percent in 2008 to 30 percent in 2009. In 2010 product/services innovation slightly dropped by 3 percent. With 27 percent of respondents reporting product/services innovation this number remains still higher than the 2008 innovation rate. In 2010 product/service innovation was the most frequently reported form of innovation in small businesses.

In comparison, the Business Operation Survey (BOS) undertaken by Statistics New Zealand, reported rather consistent innovation rates in 2007 and 2009. The following table shows the innovation rate for businesses with six to 19 staff. Businesses with six to 19 staff make up 93 percent of our sample. Therefore this size group is considered best to make comparisons between the two datasets.

The BOS reports 25 percent of businesses undertaking product/service innovation, 21 percent undertaking operational innovation and 24 percent undertaking organisation innovation and sales/marketing innovation respectively.

Innovation (%)	2007	2009
Products or services	23	25
Operational processes	20	21
Organisational processes	23	24
Sales or marketing	23	24

Table 28: Innovation activity of businesses employing six to 19 staff (Statistics New Zealand, 2010)

Conclusions

This report explored how small business owners' experiences in relation to the recession and their responses to it have changed by comparing data from the 2009 survey with data from the 2010 survey. We investigated changes in relation to the impact of the recession, changes in specific actions that business owners used to increase or maintain their firms' performance, changes in finance patterns and changes in the firms' innovation activity.

Responses from 1808 small firm owner-managers allowed us to assess changes in adaption strategies of small firms during a time of economic crisis and early recovery.

- Results provided a mixed picture in terms of recovery from the recession. In 2010 only 14 percent of our sample indicated that they have not yet felt the recession, a number that was down from 27 percent in 2009. Overall, this result clearly indicates the depth of the recession and the prolonged effect it has had on businesses. On the other hand, results showed a trend towards more businesses reporting stable or increased turnover and profitability. Further, in 2010, the number of growing firms increased for the first time since 2007.
- Results from 2009 and 2010 show that the recession has affected businesses across all sectors and location equally. The trend of medium-sized firms doing better, however, has continued. The number of medium-sized firms that reported increased turnover has risen considerably from 46 percent in 2009 to 62 percent in 2010 indicating that more medium-sized firms are on the road to recovery compared to micro and small firms.
- With regard to the sources of competitive advantage, results showed that product and services quality are becoming more important the longer the recession lasts. The importance of product and services quality has significantly increased from 2009 to 2010 – in contrast to established customer relationships which have significantly decreased in importance over the same time period. Overall this suggests that the longer the recession lasts, the more important product/ service quality becomes. In long-lasting, tight economic conditions the quality of products/services offered seem to outweigh the competitive advantage of established customer relationships.
- In 2009 we found that growth orientated firms were more likely to undertake investment as an action rather than retrenchment, which is a characteristic action for lower performing firms. This pattern in relation to the firms' actions was confirmed in 2010. In 2010, however, the number of actions has increased. While growing firms took more investment actions (15 actions in 2010 compared to nine in 2009), non-growing firms took more retrenchment actions (eleven actions in 2010 compared to eight in 2009). This result might indicate the growing need for diversified business strategies for firms to grow as well as to simply survive. It seems that in the continuing tight economic conditions firms need to take increasingly more and different investment actions to achieve growth. For non-growing firms this result might indicate that they need to take increasingly more and different retrenchment actions to actually survive.
- Overall, the number of businesses that invested personal savings has remained fairly stable with about one quarter of firms taking this action (27 percent in 2009 compared to 25 percent in 2010). Non-growing firms, however, have stopped taking this action in 2010, suggesting that firms are exhausting their personal savings. At the same time, we found an increase in the use of personal credit cards from 67 percent in 2009 to 78 percent in 2010 making it the most widely used form of business finance alongside trade credits.

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