

Online Appendix C: Surveys

MAIN WAVE SURVEY

SECTION A: BASIC CHARACTERISTICS OF THE FIRM

1. **What is the main product of the firm?**

“Main product”: The product (good or service) or product group from which this firm gets its largest share of revenue.

Answer:

2. **What is the total number of employees working at this firm? How many are used for the main product or product line?**

Employment for firm:

Employment for main product:

Number:

.....

3. **How many years old is the firm?**

Answer: year(s) old

4. **Report the dollar value of the total amount produced by this firm over the last twelve months and that for the main product or product line. Please also report the dollar value of the amount the firm *could* have produced over the last twelve months if it had been operating at full capacity (i.e. given the equipment and machinery already in place and ready to operate; with normal downtime; with the number of shifts, hours of operation and overtime pay that can be sustained under normal conditions and a realistic work schedule in the long run; labor, materials, utilities, etc. are fully available; the same product mix as the actual production).**

Total Production Value

Production Value for Main Product

Actual Production: \$

..... \$

Potential Production: \$

..... \$

5. **What percentage of the firm’s revenues in the last 12 months came from sales in New Zealand (vs. other countries)?**

Answer: % of sales originating in New Zealand

6. **How many direct competitors does the firm face in its main product line?**

Answer: firms.

7. **Out of the total revenues of the firm, what fraction is used for compensation of all employees and what fraction is used for the costs of materials and intermediate inputs (raw materials, energy inputs, etc.)?**

Labor Costs

Energy Costs

Costs of Raw Materials

Share of total revenues: %

..... %

..... %

8. **If your firm was free to change its price right now (i.e. suppose there was no cost to renegotiating contracts with clients, no costs of reprinting catalogues, etc.), by how much would it change its price? Please provide a numerical answer in (%). By how much do you think profits would change as a share of revenues (Please provide a numerical answer in %).**

If price changed this month:

Expected change in price: %

Expected change in profits: %

9. **How much would you be willing to pay per year to have access to a monthly magazine of professional macroeconomic forecasts?**

..... \$ per year

10. **For this next question, we would like you to think about the ways in which *uncertainty about the overall economy* may (or may not) affect the decisions in your firm. In particular, for each of the following options, please provide an answer ranging from “much more likely” to “much less likely” that best describes how you would be affected by an *increase* in macroeconomic uncertainty. [RANDOMIZE: HALF OF FIRMS GET DECREASE IN UNCERTAINTY]**

	If macroeconomic uncertainty went up[down], I/my firm would be...					
	Much more likely	Somewhat more likely	Neither more nor less likely	Somewhat less likely	Much less likely	Does not apply to me/my firm
To hire more employees						
To raise my price(s)						
To purchase more machinery/physical equipment						
To open/invest in new facilities						

To increase average wages						
To open new export markets						
To apply for new loans						
To increase cash reserves						
To introduce new products/services						
To make plans for ten or more years from now						
To do more advertising						
To engage in more R&D						
To see my operating margins increase						

SECTION B: CHARACTERISTICS OF THE FIRM MANAGER

11. **How many years of work experience do you have:**
 At this firm: year(s) In this industry: year(s)
12. **What is your gender?**
 a. Male b. Female
13. **What is your highest educational qualification?**
 a. Less than high school, b. High school diploma, c. Some college or Associate degree, d. College Diploma, e. Graduate Studies (Masters or PhD)
14. **Are you a member of any professional association(s)?**
 a. Yes, many b. Yes, one c. No
15. **[If answer to 4 is YES] What type of professional association do you**
 a. Union b. Trade organization c. Government department d. Business association e. Other (specify)
16. **How often do you attend events/meetings in this/these association(s)?**
 a. Daily, b. Weekly c. Monthly d. Quarterly e. Semiannually f. Annually g. Not even once a year, h. Never
17. **How often do you contribute information or knowledge to this/these association(s)?**
 a. Daily, b. Weekly c. Monthly d. Quarterly e. Semiannually f. Annually g. Not even once a year, h. Never
18. **How often would you say you communicate or share information about economic trends and conditions with peer companies/organizations or competitors in your industry, informally outside of meetings of professional associations?**
 a. Daily, b. Weekly c. Monthly d. Quarterly e. Semiannually f. Annually g. Not even once a year, h. Never
19. **How often would you say you communicate or share information with customers about economic trends and conditions?**
 a. Daily, b. Weekly c. Monthly d. Quarterly e. Semiannually f. Annually g. Not even once a year, h. Never
20. **How often would you say you communicate or share information with suppliers about economic trends and conditions?**
 a. Daily, b. Weekly c. Monthly d. Quarterly e. Semiannually f. Annually g. Not even once a year, h. Never
21. **For a typical customer/supplier/peer, how many times do you talk to about economic trends and conditions?**
 Talks with a typical customer per month:
 Talks with a typical suppliers per month:
 Talks with a typical peer firm or competitor per month:
22. **If you had to place a dollar value on the information that you acquire from suppliers, customers, peer firms, competitors and professional organizations about economic trends and conditions each year, how much do you think that \$ value would be?** \$ per year
23. **Suppose you are looking ahead to 2022. You are choosing how to allocate the first \$100 to acquire information. You can learn about economic conditions in your industry and/or the aggregate New Zealand economy. How much would you allocate to acquiring information about each? The total should sum to \$100.**
 Your industry: \$ New Zealand economy: \$
24. **Suppose you buy a \$2 charity ticket and you enter into a draw to win a prize. If you win the ticket, you will be offered to choose one of the two prizes. Which prize will you choose from below (Please select one)?**
 a. Annual subscription to a national newspaper b. Annual subscription to your industry magazine

SECTION C: MACROECONOMIC EXPECTATIONS

25. **How would you characterize the current macroeconomic outlook in over the next 6-12 months New Zealand?**
 a. Extremely uncertain b. Quite uncertain c. Somewhat uncertain d. Not particularly uncertain e. Not uncertain at all
26. **Now we'd like you to think about what you perceive as the most pessimistic and most optimistic economic outlooks for New Zealand over the next 6 months. What do you think the lowest annualized GDP growth rate might be for this time period and what do you think the highest might be?** (please provide an answer as % per year).
 Lowest growth rate:% per year Highest growth rate: % per year
27. **You said that the lowest value is XXX and the highest value is YYY. The midpoint of this range is ZZZ=[(min+max)/2] % per year. What is the probability that the growth rate of the economy exceeds this midpoint at an annualized rate over the next six months?** %
28. **Now we'd like you to think about what you perceive as the most highest and lowest possible inflation rates in New Zealand over the next 6 months. What do you think the lowest annualized inflation growth rate might be for this time period and what do you think the highest might be?** (please provide an answer as % per year).
 Lowest inflation rate:% per year Highest inflation rate: % per year
29. **What is the probability that the annualized inflation rate exceeds [(min+max)/2] % per year over the next six months?** %
30. **Now we'd like you to think about what you perceive as the most highest and lowest possible annualized growth rate in sales for your firm over the next 6 months. What do you think the lowest and highest growth rates might be for this time period?** (please provide an answer as % per year).
 Lowest sales growth rate:% per year Highest sales growth rate: % per year
31. **What is the probability that annualized growth rate of your sales exceeds [(min+max)/2] % per year over the next six months?** %

SECTION D: ANTICIPATED ACTIONS

32. **Over the next 6 months, by how much (in % changes relative to current levels) do you anticipate to change:**
 a) The price of your main product: %
 b) Total employment at your firm: %
 c) Capital stock at your firm: %
 d) Average wages at your firm: %
33. **Over the next 6 months, do you plan to do any of the following:**
- | | | |
|---|-----|----|
| Introduce any new major products or services | Yes | No |
| Expand to new export markets | Yes | No |
| Invest in major new technologies/equipment? | Yes | No |
| Open new production, retail, or office facilities | Yes | No |
34. **Do you invest in advertising? If so, by how much do you expect your monthly advertising budget to change over the next 6 months?** (please provide a quantitative answer as a % change)
 Yes No [If Yes]: %
35. **Do you engage in research and development? If so, by how much do you expect your monthly research and development budget to change over the next 6 months?** (please provide a quantitative answer as a % change)
 Yes No [If Yes]: %
36. **Now think of your percentage operating margin, i.e. the % by which your average price exceeds your average operating cost** (the cost of material inputs if any plus labor costs but not overhead). **By how many percentage points do you think this margin is likely to change over the next six months?**
 I expect my operating margin to increase by % points over the six months.
 I expect my operating margin to stay about the same over the next six months.
 I expect my operating margin to decline by % points over the next six months.

EXPERIMENT: INFORMATION TREATMENTS [RANDOMIZE]

Group 0 (Control): No information

Group 1 (Mean treatment): We are going to give you information from a group of leading experts about the economy. The average prediction among professional forecasters is that New Zealand's GDP will grow 4% in 2021.

Group 2 (Uncertainty Treatment): We are going to give you information from a group of leading experts about the economy. These professional forecasters are quite uncertain about the outlook for the New Zealand economy. The difference between their optimistic forecast and pessimistic forecast is approximately 3.1 percentage points for the 2021 GDP growth rate.

Group 3 (Joint): We are going to give you information from a group of leading experts about the economy. The average prediction among professional forecasters is that New Zealand's GDP will grow 4% in 2021. They are quite uncertain about the outlook for the New Zealand economy. The difference between their optimistic forecast and pessimistic forecast is approximately 3.1 percentage points for the 2021 GDP growth rate.

SECTION F: FOLLOW-UP QUESTIONS

1. **What do you think the growth rate of the New Zealand economy will be over the next twelve months in each of the following scenarios:**
 - Your most pessimistic outlook: % per year
 - Your somewhat pessimistic outlook: % per year
 - Your middle-of-the-road outlook: % per year
 - Your somewhat optimistic outlook: % per year
 - Your most optimistic outlook: % per year
2. **Now, please tell us what probability you would assign to each of the five outlooks you just described. The probabilities should sum to 100.**
 - Probability that your most pessimistic outlook comes true: %
 - Probability that your somewhat pessimistic outlook comes true: %
 - Probability that your middle-of-the-road outlook comes true: %
 - Probability that your somewhat optimistic outlook comes true: %
 - Probability that your most optimistic outlook comes true: %
3. **What do you think the inflation rate in New Zealand will be over the next twelve months in each of the following scenarios:**
 - Your outlook with the lowest inflation rate: % per year
 - Your outlook with somewhat low inflation rate: % per year
 - Your middle-of-the-road outlook: % per year
 - Your outlook with somewhat high inflation rate: % per year
 - Your outlook with the highest inflation rate: % per year
4. **Now, please tell us what probability you would assign to each of the five outlooks you just described. The probabilities should sum to 100.**
 - Probability that your outlook with the lowest inflation rate: %
 - Probability that outlook with somewhat low inflation rate: %
 - Probability that your middle-of-the-road outlook comes true: %
 - Probability that outlook with somewhat high inflation rate: %
 - Probability that outlook with the highest inflation rate: %
5. **What do you think the growth rate of your firm's sales will be over the next twelve months in each of the following scenarios:**
 - Your most pessimistic outlook: % per year
 - Your somewhat pessimistic outlook: % per year
 - Your middle-of-the-road outlook: % per year
 - Your somewhat optimistic outlook: % per year
 - Your most optimistic outlook: % per year
6. **Now, please tell us what probability you would assign to each of the five outlooks you just described. The probabilities should sum to 100.**
 - Probability that your most pessimistic outlook comes true: %
 - Probability that your somewhat pessimistic outlook comes true: %
 - Probability that your middle-of-the-road outlook comes true: %
 - Probability that your somewhat optimistic outlook comes true: %
 - Probability that your most optimistic outlook comes true: %

7. **How would you characterize the current macroeconomic outlook in over the next 6-12 months New Zealand for people like you?**
 a. Extremely uncertain b. Quite uncertain c. Somewhat uncertain d. Not particularly uncertain e. Not uncertain at all

This is the end of the survey. Thank you very much for your time.

FOLLOW-UP SURVEY

SECTION A. BASIC CHARACTERISTICS OF THE FIRM

1. **What is the total number of employees working at this firm? How many are used for the main product or product line?**
 Employment for firm: Employment for main product:
 Number:
2. **Report the dollar value of the total amount produced by this firm over the last twelve months and that for the main product or product line. Please also report the dollar value of the amount the firm *could* have produced over the last twelve months if it had been operating at full capacity (i.e. given the equipment and machinery already in place and ready to operate; with normal downtime; with the number of shifts, hours of operation and overtime pay that can be sustained under normal conditions and a realistic work schedule in the long run; labor, materials, utilities, etc. are fully available; the same product mix as the actual production).**
 Total Production Value Production Value for Main Product
 Actual Production: \$ \$
 Potential Production: \$ \$
3. **Out of the total revenues of the firm, what fraction is used for compensation of all employees and what fraction is used for the costs of materials and intermediate inputs (raw materials, energy inputs, etc.)?**
 Labor Costs Energy Costs Costs of Raw Materials
 Share of total revenues: % % %
4. **If your firm was free to change its price right now (i.e. suppose there was no cost to renegotiating contracts with clients, no costs of reprinting catalogues, etc.), by how much would it change its price? Please provide a numerical answer in (%). By how much do you think profits would change as a share of revenues (Please provide a numerical answer in %).**
 If price changed this month:
 Expected change in price: % Expected change in profits: %
5. **How much would you be willing to pay per year to have access to a monthly magazine of professional macroeconomic forecasts?** \$ per year

SECTION B: VALUE OF INFORMATION

1. **If you had to place a dollar value on the information that you acquire from suppliers, customers, peer firms, competitors and professional organizations about economic trends and conditions each year, how much do you think that \$ value would be?** \$ per year
2. **Suppose you are looking ahead to 2022. You are choosing how to allocate the first \$100 to acquire information. You can learn about economic conditions in your industry and/or the aggregate New Zealand economy. How much would you allocate to acquiring information about each? The total should sum to \$100.**
 Your industry: \$ New Zealand economy: \$

SECTION C: ACTUAL ACTIONS

1. **Over the last 6 months, by how much (in % changes relative to current levels) did you change:**
 1. The price of your main product: %
 2. Total employment at your firm: %
 3. Capital stock at your firm: %
 4. Average wages at your firm: %
2. **Over the last 6 months, did you do any of the following:**

Introduce any new major products or services	Yes	No
Expand to new export markets	Yes	No
Invest in major new technologies/equipment?	Yes	No
Open new production, retail, or office facilities	Yes	No

- Did you invest in advertising over the previous 6 months? If so, by how much did you change your monthly advertising budget?** (please provide a quantitative answer as a % change) Yes No [If Yes]: %
- Did you engage in research and development over the previous 6 months? If so, by how much did you change your monthly research and development budget?** (please provide a quantitative answer as a % change) Yes No [If Yes]: %
- Now think of your percentage operating margin, i.e. the % by which your average price exceeds your average operating cost** (the cost of material inputs if any plus labor costs but not overhead). **By how many percentage points do you think this margin changed over the last 6 months?**
 My operating margin increased by % points over the last six months.
 My operating margin stayed about the same over the last six months.
 My operating margin declined by % points over the last six months.

SECTION D: UNCERTAINTY OUTLOOK

- What do you think the growth rate of the New Zealand economy will be over the next twelve months in each of the following scenarios:**
 Your most pessimistic outlook: % per year
 Your somewhat pessimistic outlook: % per year
 Your middle-of-the-road outlook: % per year
 Your somewhat optimistic outlook: % per year
 Your most optimistic outlook: % per year
- Now, please tell us what probability you would assign to each of the five outlooks you just described. The probabilities should sum to 100.**
 Probability that your most pessimistic outlook comes true: %
 Probability that your somewhat pessimistic outlook comes true: %
 Probability that your middle-of-the-road outlook comes true: %
 Probability that your somewhat optimistic outlook comes true: %
 Probability that your most optimistic outlook comes true: %
- What do you think the inflation rate in New Zealand will be over the next twelve months in each of the following scenarios:**
 Your outlook with the lowest inflation rate: % per year
 Your outlook with somewhat low inflation rate: % per year
 Your middle-of-the-road outlook: % per year
 Your outlook with somewhat high inflation rate: % per year
 Your outlook with the highest inflation rate: % per year
- Now, please tell us what probability you would assign to each of the five outlooks you just described. The probabilities should sum to 100.**
 Probability that your outlook with the lowest inflation rate: %
 Probability that outlook with somewhat low inflation rate: %
 Probability that your middle-of-the-road outlook comes true: %
 Probability that outlook with somewhat high inflation rate: %
 Probability that outlook with the highest inflation rate: %
- What do you think the growth rate of your firm's sales will be over the next twelve months in each of the following scenarios:**
 Your most pessimistic outlook: % per year
 Your somewhat pessimistic outlook: % per year
 Your middle-of-the-road outlook: % per year
 Your somewhat optimistic outlook: % per year

Your most optimistic outlook: % per year

6. **Now, please tell us what probability you would assign to each of the five outlooks you just described. The probabilities should sum to 100.**

Probability that your most pessimistic outlook comes true: %

Probability that your somewhat pessimistic outlook comes true: %

Probability that your middle-of-the-road outlook comes true: %

Probability that your somewhat optimistic outlook comes true: %

Probability that your most optimistic outlook comes true: %

7. **How would you characterize the current macroeconomic outlook over the next 6-12 months New Zealand for people like you?**

a. Extremely uncertain b. Quite uncertain c. Somewhat uncertain d. Not particularly uncertain e. Not uncertain at all

This is the end of the survey. Thank you very much for your time.