# How Companies View the Prolonged Deflation -The Nissay Business Conditions Survey (February 2002) 

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## 1. Introduction

The consumer price index has declined for three straight years since 1999, and shows no sign of abating in 2002 as deflation continues to plague the economy. The impact on companies has been profound. While benefiting from lower costs for parts and materials, companies are also struggling with weak sales prices and rising labor and real interest costs.

The latest Nissay Business Conditions Survey, conducted jointly by Nippon Life Insurance Co. and NLI Research Institute in January and February 2002 (with 3,361 companies responding nationwide), examines how companies view the deflationary economy and its impact on business.

According to the results, over $80 \%$ of companies report declining sales prices, and believe that deflation has had a negative effect on business. Looking ahead, a pessimistic mood prevails that deflation will linger, including $37 \%$ who predict deflation to continue for at least three more years. As to causes of dedining sales prices, over 50\% cite domestic competition, while $30 \%$ cite weak demand. Anti-deflation measures being taken include reducing cost of materials, adding more value to products and services, and cutting labor cost.

## 2. Sales Prices Decline at Over $80 \%$ of Companies

Regarding sales prices of their own products or services, significantly more companies report a downtrend (81.05) than otherwise ( $17.9 \%$; Figure 1).

By industry, sales price declines are most pronounced in nonferrous metals and metal products (93.3\%), electrical machinery (92.3\%), construction and installation (88.1\%), and machinery and precision instruments (87.8\%). On the other hand, price declines are relatively less pronounced in electric power, gas, and water (53.7\%), and personal services (62.7\%).

By company size, while no clear pattern emerges, large companies (83.6\%) tend to be slightly more affected than second-tier companies ( $80.6 \%$ ) and small and medium companies ( $81.0 \%$ ).

Figure 1 Are Sales Prices Declining?

|  |  | Yes |
| :--- | :---: | :---: |
| All industries | No |  |
| Selected industries | 81.0 | 17.9 |
| Nonferrous metals, metal products | 93.3 | 6.7 |
| Machinery, precision instruments | 87.8 | 11.0 |
| Electrical machinery | 92.3 | 7.7 |
| Construction, installation | 88.1 | 10.4 |
| Personal services | 62.7 | 37.3 |
| Electric power, gas, water | 53.7 | 41.5 |
|  |  |  |
| Company size | 83.6 | 15.1 |
| Large | 80.6 | 18.0 |
| 2nd- tier | 81.0 | 18.3 |
| Small \& medium |  |  |

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## 3. Declining Sales Prices Blamed on Domestic Competition

As to the cause of declining sales prices, the most prominent is competition with other domestic companies (54.0\%), followed by weakness in demand (30.3\%). Few companies cite inexpensive imports (9.5\%) or distribution improvements such as electronic commerce ( $0.5 \%$; Figure 2).

By industry, demand weakness is the most prominent cause in real estate (48.6\%) and steel products (40.5\%). Domestic competition is cited most in electric power, gas and water (77.3\%), foods (68.9\%), communication (64.7\%) and personal services (63.5\%). Interestingly, inexpensive imports seem to have had little impact except in textiles and apparel (61.1\%), where the effect is large.

While no dear patterns emerge by company size, domestic competition tends to increase slightly as a factor with company size, while weak demand and inexpensive imports tend to decrease. While few companies overall cite ecommerce and other distribution innovations, the response of large companies (1.5\%) is relatively high.

Figure 2 Causes of Decline in Sales Prices

|  | Domestic <br> competition | Demand <br> decline | Import <br> competititon | Distribution <br> (e-business, <br> etc.) | Other |
| :--- | :---: | :---: | :---: | :---: | :---: |
| All industries | 54.0 | 30.3 | 9.5 | 0.5 | 5.6 |
| Selected industries |  |  |  |  |  |
| Textiles \& apparel | 13.9 | 25.0 | 61.1 | 0.0 | 0.0 |
| Steel products | 38.1 | 40.5 | 9.5 | 0.0 | 11.9 |
| Foods | 68.9 | 17.0 | 9.6 | 0.0 | 4.4 |
| Communication | 64.7 | 23.5 | 0.0 | 0.0 | 5.9 |
| Real estate | 32.4 | 48.6 | 2.7 | 0.0 | 16.2 |
| Personal services | 63.5 | 26.9 | 0.0 | 0.0 | 9.6 |
| Electric power, gas, water | 77.3 | 4.5 | 0.0 | 0.0 | 18.2 |
| Company size |  |  |  |  |  |
| Large | 58.8 | 27.8 | 6.2 | 1.5 | 5.7 |
| 2nd-tier | 54.0 | 29.4 | 9.6 | 0.3 | 6.5 |
| Small \& medium | 53.4 | 30.8 | 9.8 | 0.5 | 5.3 |

Note: Numbers may not add up to 100 due to incomplete responses.

## 4. $37 \%$ Predict Three or More Years of Deflation

The most common outlook is for deflation to continue at least three more years (36.7\%), followed by up to two years (26.8\%), and up to three years (20.1\%). Few companies predict a quick end to deflation: $10 \%$ believe it will continue up to one year, $0.8 \%$ that it will continue up to half a year, and $3.7 \%$ already see signs of a turnaround (Figure 3).

By industry, three or more years of deflation are expected by the majority of companies in textiles \& apparel (58.3\%), real estate (54.1\%), and transport equipment (52.6\%). On the other hand, relatively few companies share this outlook in steel products (14.3\%), restaurant (21.2\%) and foods (26.7\%).

Figure 3 Outlook for Sales Price Deflation

|  | At least 3 more years | Up to 3 more years | Up to 2 more years | Up to 1 more year | Up to half a year | Now ending |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 36.7 | 20.1 | 26.8 | 10.0 | 0.8 | 3.7 |
| Selected industries |  |  |  |  |  |  |
| Textiles \& apparel | 58.3 | 5.6 | 25.0 | 8.3 | 0.0 | 2.8 |
| Steel products | 14.3 | 21.4 | 26.2 | 33.3 | 2.4 | 0.0 |
| Foods | 26.7 | 22.2 | 26.7 | 11.1 | 0.7 | 5.9 |
| Electrical machinery | 42.6 | 14.8 | 27.2 | 9.5 | 1.2 | 4.1 |
| Transport equipment | 52.6 | 25.0 | 17.2 | 2.6 | 0.0 | 1.7 |
| Real estate | 54.1 | 21.6 | 21.6 | 2.7 | 0.0 | 0.0 |
| Restaurant | 21.2 | 24.2 | 21.2 | 18.2 | 3.0 | 12.1 |
| Company size |  |  |  |  |  |  |
| Large | 39.7 | 16.5 | 25.3 | 11.3 | 1.0 | 2.1 |
| 2nd-tier | 36.5 | 19.8 | 25.3 | 10.5 | 1.0 | 5.2 |
| Small \& medium | 36.4 | 20.6 | 27.5 | 9.7 | 0.7 | 3.3 |

Note: Numbers may not add up to 100 due to incomplete responses.

## 5. 80\% Say Deflation Hurts Business

Over $80 \%$ of companies report being negatively affected by deflation ( $34.1 \%$ negatively affected, 46.1\% somewhat negatively).

By industry, the negative impact is most widespread in mining, oil, glass \& ceramics (91.4\%), followed by furniture, fixture, and wood products (90.5\%), textiles \& apparel (89.6\%), nonferrous metals and metal products (86.5\%). On the other hand, the impact is less widespread in electric power, gas and water (41.5\%), finance (62.0\%), and information services (66.2\%).

Figure 4 Effects of Deflation on Business

|  | Positive | Somewhat <br> positive | No effect | Somewhat <br> negative | Negative |
| :--- | :---: | :---: | :---: | :---: | :---: |
| All industries | 0.4 | 2.6 | 15.8 | 46.1 | 34.1 |
| Selected industries |  |  |  |  |  |
| Mining, oil, glass \& ceramics | 0.0 | 4.3 | 4.3 | 50.0 | 41.4 |
| Textiles \& apparel | 0.0 | 2.1 | 8.3 | 33.3 | 56.3 |
| Nonferrous metals, metal product | 0.0 | 3.0 | 9.7 | 50.7 | 35.8 |
| Furniture, fixture, wood products | 0.0 | 9.5 | 0.0 | 52.4 | 38.1 |
| Information services | 1.3 | 3.9 | 27.3 | 50.6 | 15.6 |
| Finance | 0.0 | 10.3 | 27.6 | 44.8 | 17.2 |
| Electric power, gas, water | 0.0 | 7.3 | 43.9 | 24.4 | 17.1 |
|  |  |  |  |  |  |
| Company size | 0.9 | 3.0 | 12.9 | 50.0 | 31.9 |
| Large | 3.2 | 16.4 | 44.6 | 34.1 |  |
| 2nd-tier | 0.4 | 2.3 | 15.9 | 46.3 | 34.2 |
| Small \& medium | 0.4 |  |  |  |  |

Note: Numbers may not add up to 100 due to incomplete responses.

## 6. Main Benefit of Deflation: Lower Cost of Materials

Among companies benefiting from deflation, the most common benefit is lower cost of materials (59.4\%), followed by increased demand due to lower prices (28.7\%), lower nominal interest rates (19.8\%), lower real estate prices and rents (17.8\%), and lower labor cost of new workers (17.8\%; Figure 5).

By industry, increased demand due to lower prices is most pronounced in services (42.9\%), while lower cost of materials is cited most in process manufacturing (85.7\%). Lower real estate prices and rents are cited most in nonmanufacturing (22.4\%), while lower labor cost of new workers is most prominent in services (21.4\%), and lower nominal interest rates in materials manufacturing (27.3\%).

By company size, lower cost of materials is cited less by large companies (33.3\%) than second-tier (63.3\%) and small and medium companies (61.3\%).

Figure 5 Positive Effects of Deflation

|  | Lower <br> materials <br> cost | More <br> demand due <br> to price <br> decline | Lower <br> nominal <br> interest <br> rate | Lower real <br> estate <br>  <br> rent | Lower <br> cost <br> of new <br> labor | Other |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 59.4 | 28.7 | 19.8 | 17.8 | 17.8 | 21.8 |
| Selected industries |  |  |  |  |  |  |
| Manufacturing | 76.9 | 23.1 | 15.4 | 10.3 | 17.9 | 12.8 |
| $\quad$ Materials | 54.5 | 9.1 | 27.3 | 9.1 | 18.2 | 27.3 |
| $\quad$ Processing | 85.7 | 28.6 | 10.7 | 10.7 | 17.9 | 7.1 |
| Nonmanufacturing | 46.6 | 32.8 | 22.4 | 22.4 | 17.2 | 29.3 |
| $\quad$ Services | 42.9 | 42.9 | 7.1 | 21.4 | 21.4 | 35.7 |
| Company size |  |  |  |  |  |  |
| Large |  |  |  |  |  |  |
| 2nd- tier | 33.3 | 33.3 | 0.0 | 33.3 | 22.2 | 44.4 |
| Small \& medium | 63.3 | 26.7 | 20.0 | 20.0 | 13.3 | 10.0 |

Note: Numbers may not add up to 100 due to incomplete responses.

## 7. Main Drawback of Deflation: Lower Sales Prices

Among companies hurt by deflation, the most common complaint is decline in sales prices (77.9\%), followed by slower decline in materials cost relative to sales price (47.5\%), and high Iabor cost of present workers (29.3\%; Figure 6).

By industry, the decline in sales prices is cited most by nonferrous metals and metal products (84.5\%) and textiles \& apparel (83.7\%). The slow decline in cost relative to sales price is most prominent in foods (59.9\%) and nonferrous metals and metal products (55.2\%), while high labor cost of present workers is cited most by information services (43.1\%), steel products (41.5\%), and restaurant (40.0\%) industries.

By company size, the slower decline in cost relative to sales price tends to affect smaller companies more (large 41.1\%, second-tier $44.4 \%$, small and medium 49.4\%). On the other hand, high labor cost of present workers is slightly more common at large companies (33.2\%) than second-tier (32.0\%) and small \& medium companies (27.8\%).

Figure 6 Drawbacks of Deflation

|  | Lower <br> sales <br> prices | Costs <br> decline by <br> less than <br> sales price | High cost <br> of present <br> labor | Property <br> price <br> decline | High real <br> interest <br> rate | Other |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 77.9 | 47.5 | 29.3 | 9.9 | 2.8 | 3.9 |
| Selected industries |  |  |  |  |  |  |
| Textiles \& apparel | 83.7 | 46.5 | 39.5 | 11.6 | 0.0 | 2.3 |
| Steel products | 80.5 | 36.6 | 41.5 | 7.3 | 2.4 | 0.0 |
| Nonferr. metals, metal products | 84.5 | 55.2 | 28.4 | 6.0 | 0.9 | 0.0 |
| Foods | 81.0 | 59.9 | 21.2 | 7.3 | 0.7 | 2.9 |
| Real estate | 69.8 | 23.3 | 7.0 | 58.1 | 4.7 | 0.0 |
| Restaurant | 80.0 | 42.9 | 40.0 | 2.9 | 0.0 | 2.9 |
| Information services | 74.5 | 33.3 | 43.1 | 2.0 | 5.9 | 7.8 |
|  |  |  |  |  |  |  |
| Company size | 78.4 | 41.1 | 33.2 | 13.7 | 3.7 | 5.3 |
| Large |  |  |  |  |  |  |
| 2nd- tier | 76.4 | 44.4 | 32.0 | 9.4 | 2.1 | 3.8 |
| Small \& medium | 49.4 | 27.8 | 9.6 | 2.9 | 3.9 |  |

Note: Numbers may not add up to 100 due to incomplete responses.

## 8. Public Policy Expectations: No Consensus

With regard to anti-deflation policies that companies seek of the government, additional public works spending (21.9\%) is almost evenly balanced with further monetary easing (21.1\%), followed in third place by yen depreciation (13.1\%). On the other hand, as many as $12.6 \%$ of companies see no need for special measures (Figure 7).

However, expectations vary widely by industry. A weaker yen is favored by textiles \& apparel (31.3\%), machinery and precision instruments (23.2\%), and transport equipment (22.6\%). On the other hand, further monetary easing is favored by real estate ( $37.7 \%$ ), while additional public works spending is favored by construction and installation (60.1\%), mining, oil, glass \& ceramics (51.4\%), and steel products (42.9).

Figure 7 Expectations Regarding Public Policy

|  | More <br> public <br> works | More <br> monetary <br> easing | Weaker <br> yen | None | Other |
| :--- | :---: | :---: | :---: | :---: | :---: |
| All industries | 21.9 | 21.1 | 13.1 | 12.6 | 21.6 |
| Selected industries |  |  |  |  |  |
| Mining, oil, glass \& ceramics | 51.4 | 11.4 | 7.1 | 10.0 | 14.3 |
| Textiles \& apparel | 8.3 | 27.1 | 31.3 | 16.7 | 12.5 |
| Steel products | 42.9 | 14.3 | 14.3 | 8.2 | 8.2 |
| Machinery, precision instruments | 24.9 | 17.7 | 23.2 | 8.8 | 18.2 |
| Transport equipment | 14.6 | 25.5 | 22.6 | 14.6 | 13.1 |
| Construction, installation | 60.1 | 8.8 | 6.2 | 5.2 | 14.5 |
| Real estate | 13.2 | 37.7 | 7.5 | 13.2 | 20.8 |
|  |  |  |  |  |  |
| Company size | 18.1 | 18.5 | 14.2 | 9.9 | 28.0 |
| Large | 19.1 | 14.3 | 12.2 | 22.8 |  |
| 2nd-tier | 21.9 | 22.2 | 12.5 | 13.0 | 20.6 |
| Small \& medium | 22.2 |  |  |  |  |

Note: Numbers may not add up to 100 due to incomplete responses.

## 9. 30\% Emphasize Long-Term Growth in Value Added

As for measures already implemented to combat deflation, the most common is reducing the cost of materials (31.4\%), followed by increasing value added to products and services (26.7\%), reducing labor cost (24.7\%), and new product development (21.9\%; Figure 8).

By industry, significantly high responses are seen for new product development by textiles \& apparel (41.7\%) and electrical machinery (35.5\%); increasing value added to products and services by textiles \& apparel (41.7\%); reducing cost of materials by electrical machinery (41.5\%); and reducing labor cost by electrical machinery (33.3\%).

By company size, large companies generally tend to be more aggressive in implementing anti-deflation measures.

Figure 8 Anti-Deflation Measures Already Being Implemented

|  | Cut <br> input <br> cost | Add <br> more <br> value | Cut <br> labor <br> cost | New <br> prod. <br> dev. | Pay <br> down <br> debt | Trim <br> invest. | Expand <br> sales <br> volume | Sell <br> idle <br> assets | None | Other |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 31.4 | 26.7 | 24.7 | 21.9 | 15.0 | 13.8 | 12.1 | 3.3 | 5.4 | 0.9 |
| Selected industries |  |  |  |  |  |  |  |  |  |  |
| Textiles \& apparel | 22.9 | 41.7 | 25.0 | 41.7 | 8.3 | 8.3 | 6.3 | 2.1 | 0.0 | 0.0 |
| Steel products | 30.6 | 14.3 | 30.6 | 12.2 | 22.4 | 22.4 | 10.2 | 4.1 | 6.1 | 2.0 |
| Electrical machinery | 41.5 | 22.4 | 33.3 | 35.5 | 6.0 | 16.9 | 9.8 | 2.2 | 2.2 | 1.1 |
| Construction | 39.9 | 19.7 | 31.1 | 18.1 | 13.0 | 11.4 | 10.9 | 6.7 | 7.3 | 0.0 |
| Communication | 4.8 | 28.6 | 14.3 | 19.0 | 9.5 | 28.6 | 23.8 | 0.0 | 9.5 | 0.0 |
| Real estate | 18.9 | 13.2 | 22.6 | 1.9 | 18.9 | 17.0 | 9.4 | 13.2 | 17.0 | 1.9 |
| Information services | 20.8 | 41.6 | 5.2 | 20.8 | 10.4 | 7.8 | 3.9 | 2.6 | 10.4 | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |
| Company size |  |  |  |  |  |  |  |  |  |  |
| Large | 25.9 | 30.6 | 30.6 | 25.0 | 17.7 | 19.4 | 10.8 | 5.6 | 4.3 | 0.9 |
| 2nd- tier | 34.8 | 29.7 | 24.7 | 23.0 | 15.1 | 16.1 | 10.5 | 3.7 | 3.1 | 1.1 |
| Small \& medium | 30.8 | 25.3 | 24.0 | 21.3 | 14.7 | 12.3 | 12.8 | 2.9 | 6.4 | 0.7 |

Notes: Numbers may not add up to 100 due to incomplete responses.

As for measures planned in the medium to long-term future, there is a slight shift in priorities: the most cited measure is increasing value added to products and services (30.8\%), followed by reducing labor cost (28.3\%) and new product development (25.1\%; Figure 9).

By industry, significantly high responses are seen for increasing value added by electrical machinery (43.7\%) and machinery and precision instruments (42.5\%); reducing labor cost by
steel products (49.0\%) and warehousing \& harbor transport services (39.3\%); and developing new products by chemicals (47.9\%), machinery and precision instruments (47.5\%), and electrical machinery (44.8\%).

Figure 9 Anti-Deflation Measures Planned for the Future

|  | Cut <br> input <br> cost | Add <br> more <br> value | Cut <br> labor <br> cost | New <br> prod. <br> dev. | Pay <br> down <br> debt | Trim <br> invest. | Expand <br> sales <br> volume | Sell <br> idle <br> assets | None | Other |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| All industries | 21.6 | 30.8 | 28.3 | 25.1 | 15.5 | 10.4 | 8.2 | 8.4 | 4.2 | 1.9 |
| Selected industries |  |  |  |  |  |  |  |  |  |  |
| Steel products | 12.2 | 24.5 | 49.0 | 20.4 | 22.4 | 12.2 | 10.2 | 8.2 | 2.0 | 4.1 |
| Chemicals | 15.4 | 37.3 | 20.1 | 47.9 | 8.9 | 8.3 | 8.9 | 2.4 | 3.0 | 0.0 |
| Machinery, precis. instru | 21.5 | 42.5 | 22.7 | 47.5 | 9.4 | 7.2 | 7.2 | 3.9 | 2.2 | 1.1 |
| Electrical machinery | 20.2 | 43.7 | 21.9 | 44.8 | 7.1 | 7.1 | 7.1 | 4.4 | 2.2 | 2.7 |
| Warehous. \& harbor tran. | 17.9 | 26.6 | 39.3 | 6.6 | 23.1 | 13.5 | 7.0 | 13.1 | 4.8 | 1.7 |
| Information services | 20.8 | 49.4 | 24.7 | 18.2 | 7.8 | 6.5 | 6.5 | 3.9 | 6.5 | 2.6 |
| Specialized services | 17.6 | 32.4 | 38.2 | 20.6 | 2.9 | 2.9 | 5.9 | 2.9 | 2.9 | 0.0 |
|  |  |  |  |  |  |  |  |  |  |  |
| Company size |  |  |  |  |  |  |  |  |  |  |
| Large | 21.6 | 31.9 | 25.0 | 27.2 | 18.5 | 12.5 | 7.8 | 11.2 | 3.0 | 2.6 |
| 2nd- tier | 21.1 | 33.3 | 32.1 | 26.7 | 16.0 | 11.2 | 6.7 | 9.5 | 2.9 | 1.8 |
| Small \& medium | 21.9 | 29.7 | 27.3 | 24.3 | 15.0 | 9.8 | 8.8 | 7.6 | 4.8 | 1.9 |

Note: Numbers may not add up to 100 due to incomplete responses.

## The Nissay Business Conditions Survey

Survey period: From mid January to end of February 2002
Sample size and composition: 3,361 companies, as follows.

| By Company Size |  |  |
| :--- | :---: | :---: |
|  | No. of <br> companies | Composition <br> $(\%)$ |
| Large | 232 | 6.9 |
| Second- tier | 839 | 25.0 |
| Small \& medium | 2,279 | 67.8 |
| No response / other | 11 | 0.3 |


| By Region |  |  |
| :--- | :---: | :---: |
|  | No. of <br> companies | Composition <br> $(\%)$ |
| Hokkaido | 88 | 2.6 |
| Tohoku | 213 | 6.3 |
| Kanto | 765 | 22.8 |
| Koshinetsu / Hokuriku | 369 | 11.0 |
| Tokai | 538 | 16.0 |
| Kinki | 655 | 19.5 |
| Chugoku | 306 | 9.1 |
| Shikoku | 130 | 3.9 |
| Kyushu | 200 | 6.0 |
| No response / other | 97 | 2.9 |


[^0]:    Note: Numbers may not add up to 100 due to incomplete responses.

