

Hiring difficulties in manufacturing

Claude Robillard

The proportion of manufacturers reporting labour shortages as a production impediment rises and falls with the business cycle. According to Statistics Canada's quarterly Business Conditions Survey (BCS), even in recessions there are shortages of skilled labour, although the need for unskilled workers is another story.¹ Shortages tend to be more prevalent among small than among large manufacturers, especially during periods of economic growth.

Skilled labour shortages persist

Among the questions the BCS (see *Data source*) asks Canadian manufacturers is whether a shortage of skilled or unskilled workers is impeding their production. Reported shortages of skilled labour persist through recessions. For instance, during the last recession the proportion of manufacturing firms with shortages of skilled workers never fell below 2% (Chart A). By the third quarter of 1994, the figure had risen to 4%, reflecting the overall improvement in the economy that year, particularly in manufacturing, which sustained employment growth during the last three quarters (Akyeampong, 1995).

By contrast, even in periods of expansion few manufacturers report shortages of unskilled workers. In late 1994 and early 1995, the share of firms citing a lack of unskilled labour as a production impediment was so small that it was reported as zero.

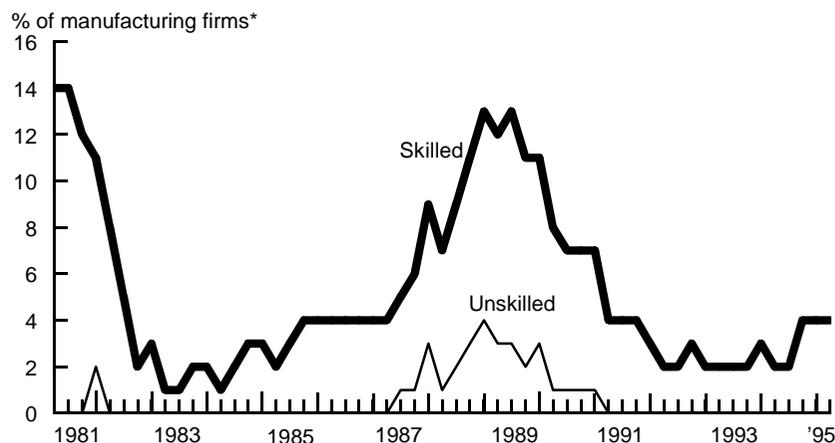
Small firms ... more shortages

Shortages of skilled labour characterize both small and large manufacturers. However, small firms are more

Claude Robillard is with the Industry Division. He can be reached at (613) 951-3507.

Chart A

Regardless of business conditions, some manufacturing production is impeded by a shortage of skilled labour.



Source: Business Conditions Survey

Note: This survey is conducted four times a year

* Reporting labour shortages as production impediment

Data source

The Industry Division of Statistics Canada conducts the Business Conditions Survey (BCS) every January, April, July and October. The BCS is a voluntary survey reaching more than 9,000 establishments and using virtually the same sample as the monthly Survey of Manufacturing. Results are based on the responses of some 5,000 manufacturers. No adjustments are made for non-response.

Firm size is determined on the basis of 1992 shipments. Establishments with manufacturing shipments totalling more than \$10 million are considered to be large manufacturers.

Among other things, the BCS asks manufacturers if shortages of skilled and unskilled labour have impeded their production. Responses are weighted by the shipment value of each establishment. Production impediments of large manufacturers have a greater effect on the reported percentage than do those of

small firms. For instance, an establishment with annual manufacturing shipments of \$100 million would have twice the impact of a firm with \$50 million.

Survey results are released in the Statistics Canada *Daily* the first week after the reference month. In addition to employment prospects information, seasonally adjusted data on opinions about production prospects, current level of finished product inventories and new and unfilled orders are available at the national level. Data (not seasonally adjusted) are provided for total manufacturing by province and by establishment size, as well as for all characteristics (including production impediments) at the national level by major industry group. The information is available on CANSIM (matrices 2843 and 2845).

For further information, contact Claude Robillard, Monthly Survey of Manufacturing, Industry Division (613) 951-3507 or fax (613) 951-3522.



likely than large ones to report such shortages, particularly during periods of growth. For example, in 1988 and 1989, the percentage of small firms with shortages of skilled workers ranged from 16% to 25% (Chart B). The corresponding range for large firms was 6% to 12%.

Small firms' reported shortages of skilled labour may be partly explained by their relatively low benefits and pay. Workers in small firms are less likely to be unionized, less likely to be covered by pension plans, and more subject to permanent layoff. But perhaps most importantly, large

firms pay higher wages (Morissette, 1991). The 1994 figures from the Survey of Employment, Payrolls and Hours show that hourly earnings in large manufacturing firms averaged \$18.45, compared with \$12.98 in small firms.²

A precursor?

During recessions, reported shortages of skilled labour decline, but remain more prevalent in small than in large firms. Moreover, as the economy recovers, small firms report such shortages sooner than do large establishments. After the recession of the early 1980s, the percentage of small manufacturers citing shortages of skilled workers as a production impediment started to rise in 1983, two years earlier than in large firms. Similarly, after the most recent recession, the share of small firms with labour shortages began increasing in 1992, with large establishments following in 1994.

Thus, shortages of skilled labour seem to affect large manufacturers only when economic growth is sustained. At such times, the labour market is tight, with both small and large firms competing for additional skilled workers to meet their increased production.

Unskilled labour

Small firms are also more likely than large ones to report shortages of unskilled workers, especially when the economy is growing. In the late 1980s, the proportion of small firms reporting a shortage of unskilled labour varied between 5% and 11% (Chart B). Over the same period, the share of large manufacturers with shortages of such workers never rose above 3%.

During recessions, shortages of unskilled workers are almost non-existent in large firms and minimal in small ones. For example, since the beginning of 1991, virtually no large firms have reported shortages of un-

skilled workers. With only two exceptions (the fourth quarters of 1991 and 1992), virtually no small firms reported such shortages from early 1991 to the second quarter of 1994. Since then, 1% of small firms have indicated shortages of unskilled workers.

Summary

The proportion of manufacturers citing labour shortages as a production impediment falls in recessions and rises as the economy recovers. However, even in economic downturns, some firms report shortages of skilled workers. And regardless of business conditions, a higher proportion of small than of large firms report labour shortages. Furthermore, shortages of skilled workers in small firms seem to herald similar requirements in

larger firms. If the rate of employment growth recorded in manufacturing in 1994 is sustained in 1995, labour market analysts and human resources specialists will want to monitor upcoming results of the Business Conditions Survey.

Update

Second quarter data for 1995, received just before press time, revealed that the proportion of manufacturing firms citing shortages of skilled and unskilled labour remained unchanged since the previous quarter. Fewer small firms (12%, compared with 14%) reported a shortage of skilled labour. Proportions remained the same for large firms, for both skilled and unskilled labour.

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Notes

1 Manufacturers polled by the BCS use their own definitions of skilled and unskilled labour.

2 A minor conceptual difference exists between the BCS and the Survey of Employment, Payrolls and Hours (SEPH) definitions of large and small firms. For the production impediments question, the BCS definition is based on annual manufacturing shipment values, while SEPH uses 300 employees as the small/large threshold.

References

Akyeampong, E.B. "The labour market: Year-end review." *Perspectives on Labour and Income* (Statistics Canada, Catalogue 75-001E)7, no.1 (Spring 1995): supplement.

Morissette, R. "Are jobs in large firms better jobs?" *Perspectives on Labour and Income* (Statistics Canada, Catalogue 75-001E)3, no.3 (Autumn 1991):40-50.