Manufacturing activity in the Tenth Federal Reserve District appeared to weaken somewhat in March. However, despite some weakening in production, shipments, and new orders, firms remained optimistic about factory activity later in the year.

A summary of the March survey is attached to this press release.

For more information about the monthly manufacturing survey, contact Chad Wilkerson, Economic Research Department, (816) 881-2869. The March manufacturing survey, as well as background information and results from past surveys, can be found on the Federal Reserve Bank of Kansas City’s web site, http://www.kc.frb.org.
Survey of Tenth District Manufacturers  
by Chad R. Wilkerson

Manufacturing activity in the Tenth Federal Reserve District appeared to weaken somewhat in March, but firms remained optimistic about future activity. Production and shipments fell back below year-ago levels following two months of modest gains, and factories continued to shed employees. Still, expectations for future production and hiring were as positive as in recent months. Production versus a month ago rose moderately, but the monthly data are not seasonally adjusted, so caution must be taken in basing analyses on month-to-month comparisons. Production increased sharply in March 2002, suggesting that some of the increase this March was due to seasonal factors. Until several years of data are available for seasonal adjustment, this report will focus primarily on changes in activity versus a year ago.

The net percentage of firms reporting year-over-year increases in production fell to -4 in March, down from 12 in February and 6 in January (Tables 1 & 2). Several firms attributed the pullback in activity to the onset of war in Iraq, although most firms said the war has had little impact on their business. Activity remained slightly above year-ago levels at durable goods-producing plants in the district but was considerably weaker than a year ago at nondurable goods-producing factories. Although sample sizes make it more difficult to draw firm conclusions about individual states, the data available suggest that production was furthest below year-ago levels in Kansas and western Missouri.

Like production, several other year-over-year indexes of factory activity worsened in March. The indexes for shipments and backlog of orders both fell back below zero and the new orders index was much less positive than in February. Other indexes showed little or no improvement from previous months. The employment index rose slightly but remained well below zero. Likewise, the capital spending index edged up but was still quite negative.

The year-over-year inventory indexes both rose to near year-ago levels in March. After dropping in February, the index for inventories of finished goods increased somewhat as customers appeared to delay their purchases. Meanwhile, the index for inventories of raw materials improved for the first time in five months.

The gap between changes in input prices and changes in output prices remained quite wide in March. The year-over-year index for raw materials prices edged down from February’s two-year peak but remained high. Meanwhile, the year-over-year index for finished goods prices was negative for the thirteenth straight month, as firms have been largely unable to pass recent cost increases through to customers.

Despite some weakening in production, shipments, and new orders in March, firms remained as optimistic about factory activity later in the year as in recent surveys. The future production index was 34, following readings in the 30s since last October. Likewise, the future shipments, new orders, and employment indexes were at or near six-month highs. On a somewhat less positive note, the future capital spending index fell back close to zero after edging up in February. In addition, the future index for prices paid for raw materials remained relatively high while the future finished goods price index fell below zero following positive readings in January and February.
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* The diffusion index is calculated by subtracting the percentage of total respondents reporting decreases in a given indicator from the percentage of those reporting increases. Index values greater than zero generally suggest expansion, while values less than zero indicate contraction. When index values are closer to 100, the increases among respondents are more widespread. When index values are closer to -100, decreases are more widespread.

Note: The March survey included 84 responses from plants in Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico, and western Missouri.
## Table 2
### Historical Manufacturing Survey Indexes

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Production vs. a Year Ago

Federal Reserve Bank of Kansas City
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