



NEWS RELEASE

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Tenth District Manufacturing Activity Declined at a Slightly Faster Pace
Federal Reserve Bank of Kansas City Releases December Manufacturing Survey

KANSAS CITY, Mo. – The Federal Reserve Bank of Kansas City released the December Manufacturing Survey today. According to Chad Wilkerson, senior vice president at the Federal Reserve Bank of Kansas City, the survey revealed that Tenth District manufacturing activity declined at a faster pace than last month, while expectations for future activity were mostly flat or slightly positive.

“Regional factory activity declined at a slightly faster pace in December than the previous month,” said Wilkerson. “The index for raw materials prices also fell to its lowest level since July 2020.”

A summary of the survey is attached. Historical data, results from past surveys, and release dates for future surveys can be found at <https://kansascityfed.org/surveys/manufacturing-survey/>.

The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, encompassing the western third of Missouri; all of Kansas, Colorado, Nebraska, Oklahoma and Wyoming; and the northern half of New Mexico. As part of the nation’s central bank, the Bank participates in setting national monetary policy, supervising and regulating numerous commercial banks and bank holding companies, and providing financial services to depository institutions. More information is available online at www.kansascityfed.org.

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TENTH DISTRICT MANUFACTURING SUMMARY

Tenth District manufacturing activity declined at a slightly faster pace than last month, while expectations for future activity were mostly flat or slightly positive (Chart 1, Tables 1 & 2). The monthly index of raw materials prices continued to slow in December, but materials prices were still higher than a year ago at most firms and expected to rise moderately in the months ahead. Finished goods price increases were also smaller than last month and more firms than in previous surveys anticipated further easing.

Factory Activity Declined at a Slightly Faster Pace

The month-over-month composite index was -9 in December, down from -6 in November and -7 in October (Tables 1 & 2). The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. The slower pace in factory growth in December was driven by decreased activity in printing, wood products, machinery manufacturing, and food manufacturing. Month-over-month indexes were mostly negative in December. The monthly employment index fell from 3 to 0, its lowest level since 2020 but still indicative of flat employment for the month. Indexes for year-over-year factory activity slowed slightly in December, including the composite index, which decreased from 19 to 15. The future composite index increased from 0 to 2 in December, with the expected volume of new orders index also moving into positive territory for the first time in two months.

Special Questions

This month contacts were asked special questions about price pass through and expectations for wages and prices. In December, 43% of firms expected wages to rise faster compared to the past 12 months, while 23% of firms expected wages to rise at a similar rate and 35% of firms expected wages to rise more slowly (Chart 2). About 27% of all firms facing higher costs (inputs and labor) were able to pass through 80 to 100% of increased costs, while a quarter of firms could only pass through 0 to 20% (Chart 3).

Selected Manufacturing Comments

“All we have done over the last two years is increase costs. Pass through percentages averaged only 55% and we absorbed the remaining.”

“Costs of raw materials have risen at a rapid rate, but the possibility exists we have weathered the storm and these prices will begin to level out.”

“We are definitely seeing a decrease in customer demand for almost all our items. December has been extremely slow, and we fear a recession is under way.”

“Sales remain strong although softening a little. Workforce shortages continue with no end in sight. Parts shortages continue to limit production but slowly improving.”

“Everything in our world is still very aggressive – both cost wise and volume of business wise. We have seen some stabilizing on some commodities and freight – but other items are still climbing aggressively. Hard situation with how much we can really pass through to customers. Our profitability is not where it needs to be despite record sales and manufacturing volumes.”

Table 1. Summary of Tenth District Manufacturing Conditions, December 2022

Plant Level Indicators	December vs. November (percent)*					December vs. Year Ago (percent)*					Expected in Six Months (percent)*			
	Increase	No Change	Decrease	Diff Index [^]	SA Index ^{^^}	Increase	No Change	Decrease	Diff Index [^]	Increase	No Change	Decrease	Diff Index [^]	SA Index ^{^^}
Composite Index				-13	-9				15				6	2
Production	13	52	35	-22	-13	47	20	33	14	43	32	25	17	12
Volume of shipments	23	42	35	-12	-1	50	18	32	17	43	29	28	15	11
Volume of new orders	15	43	43	-28	-17	41	22	37	4	34	37	29	5	2
Backlog of orders	13	43	45	-32	-25	39	24	37	2	28	30	42	-14	-18
Number of employees	17	64	18	-1	0	46	29	25	20	37	44	19	17	10
Average employee workweek	14	67	19	-6	-3	28	50	21	7	18	59	22	-4	-10
Prices received for finished product	23	62	15	9	13	83	8	10	73	51	32	17	34	32
Prices paid for raw materials	39	41	20	18	13	85	3	12	74	52	29	18	34	28
Capital expenditures						35	42	23	12	35	44	21	14	7
New orders for exports	4	88	8	-4	-4	13	76	10	3	14	74	11	3	-1
Supplier delivery time	16	63	22	-6	-7	44	25	32	12	23	53	25	-2	-5
Inventories: Materials	21	49	30	-10	-8	47	33	20	27	22	48	30	-9	-11
Inventories: Finished goods	13	68	19	-6	-5	33	49	18	15	22	58	20	2	-2

*Percentage may not add to 100 due to rounding.

[^]Diffusion Index. The diffusion index is calculated as the percentage of total respondents reporting increases minus the percentage reporting declines.

^{^^}Seasonally Adjusted Diffusion Index. The month vs. month and expected-in-six-months diffusion indexes are seasonally adjusted using Census X-13.

Note: The December survey was open for a five-day period from December 14-19, 2022 and included 103 responses from plants in Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico, and western Missouri.

Chart 1. Manufacturing Composite Indexes

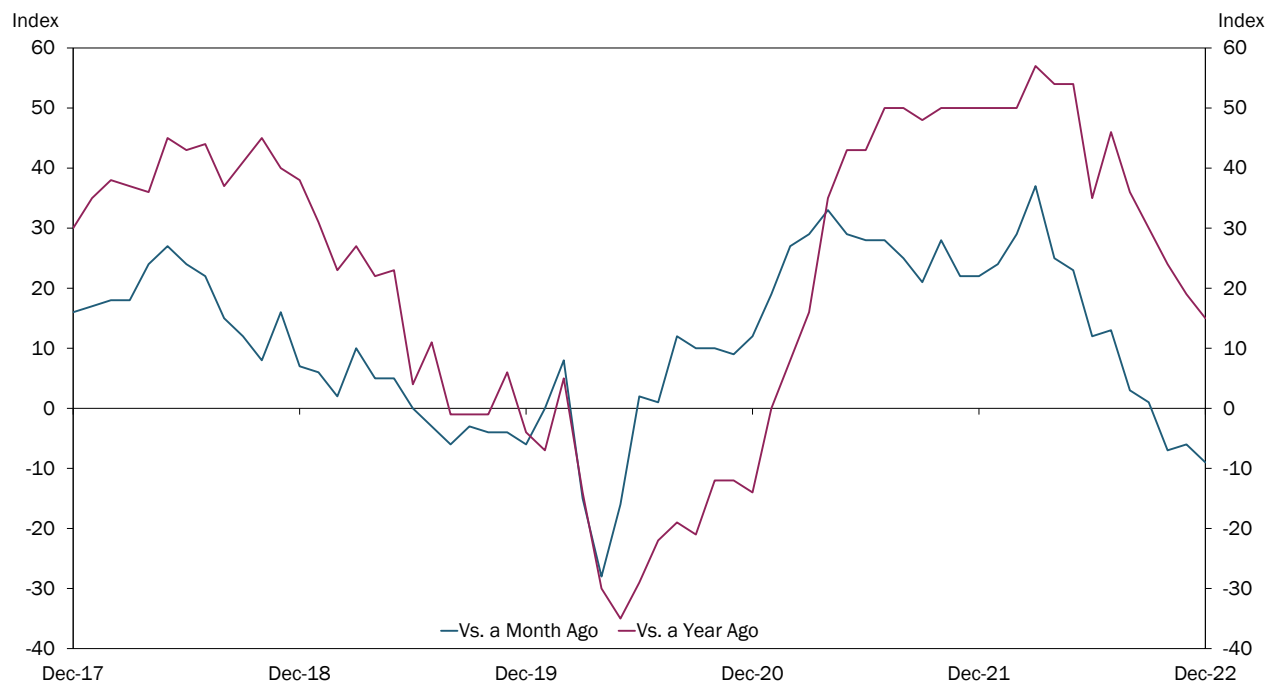


Chart 2. Special Question: Over the next year, what are your expectations for wages at your firm compared to the past 12 months?

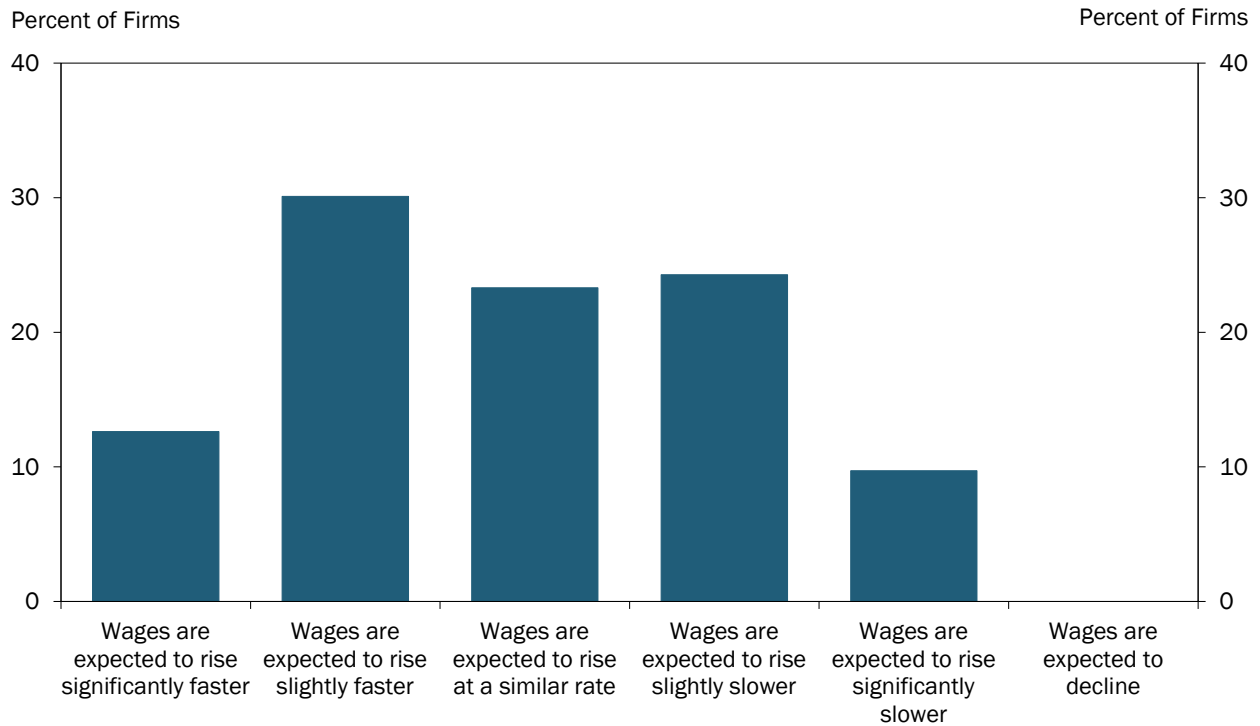


Chart 3. Special Question: If your firm is facing higher costs (inputs and labor), what share of those increases are you able to pass through to customers in the form of higher prices?

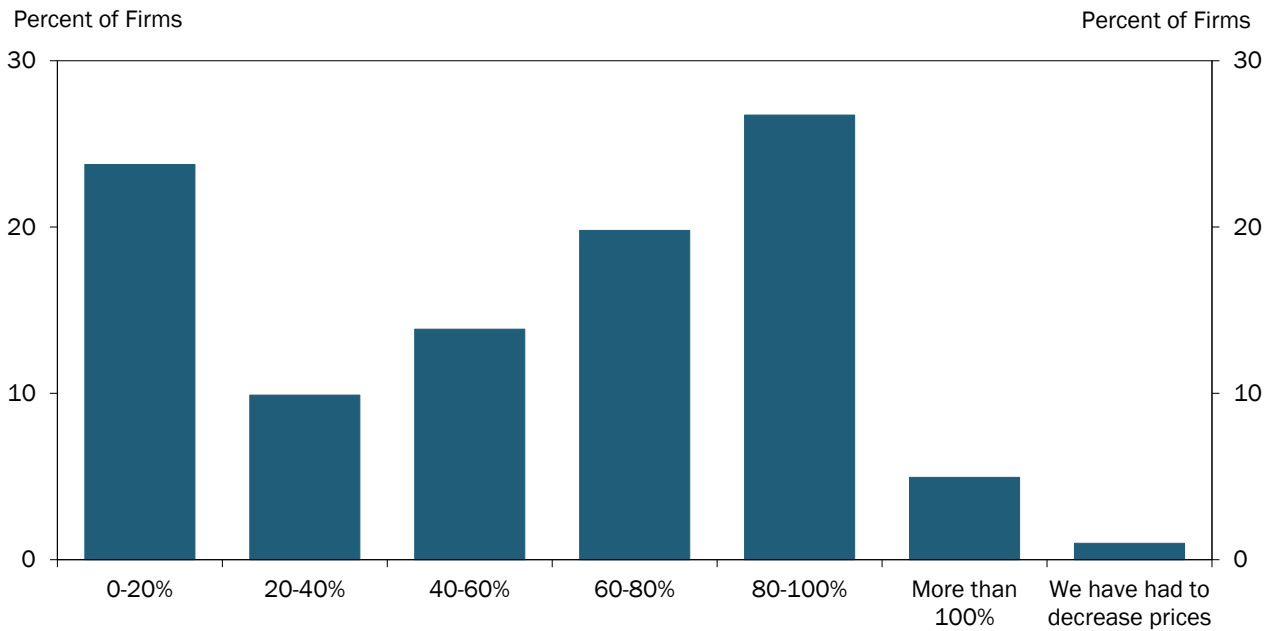


Table 2
Historical Manufacturing Survey Indexes

	Dec'21	Jan'22	Feb'22	Mar'22	Apr'22	May'22	Jun'22	Jul'22	Aug'22	Sep'22	Oct'22	Nov'22	Dec'22
Versus a Month Ago (seasonally adjusted)													
Composite Index	22	24	29	37	25	23	12	13	3	1	-7	-6	-9
Production	11	20	31	46	28	19	-1	7	-9	2	-22	-10	-13
Volume of shipments	13	5	24	46	27	17	-3	9	-13	0	-18	-5	-1
Volume of new orders	22	14	32	33	10	15	-8	-2	-16	-11	-16	-12	-17
Backlog of orders	9	27	22	29	9	20	-4	5	-7	-4	-19	-25	-25
Number of employees	18	24	26	18	19	34	18	17	10	10	3	3	0
Average employee workweek	8	8	24	14	10	13	9	5	-8	15	-3	5	-3
Prices received for finished product	46	49	47	51	57	42	51	36	25	27	13	19	13
Prices paid for raw materials	67	64	64	81	83	72	71	41	38	41	26	22	13
Capital expenditures	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New orders for exports	1	6	10	8	4	8	4	-1	-3	-2	-5	-11	-4
Supplier delivery time	44	38	36	55	42	29	25	23	22	-2	-1	-12	-7
Inventories: Materials	17	27	19	32	26	19	23	22	9	6	1	2	-8
Inventories: Finished goods	4	8	7	19	5	1	9	-5	-3	-8	2	11	-5
Versus a Year Ago (not seasonally adjusted)													
Composite Index	50	50	50	57	54	54	35	46	36	30	24	19	15
Production	54	49	52	63	63	52	25	43	23	28	23	16	14
Volume of shipments	49	38	55	53	65	51	29	40	23	34	27	21	17
Volume of new orders	60	51	47	58	53	53	30	37	25	24	16	5	4
Backlog of orders	48	53	54	60	52	44	20	33	39	39	16	5	2
Number of employees	38	41	51	38	48	44	39	44	37	30	23	20	20
Average employee workweek	32	34	32	28	23	19	22	19	3	23	12	15	7
Prices received for finished product	88	88	86	87	92	90	87	78	79	78	71	75	73
Prices paid for raw materials	98	97	99	98	98	95	93	87	79	88	78	73	74
Capital expenditures	43	26	29	16	28	30	21	27	23	24	10	11	12
New orders for exports	14	13	10	16	12	9	10	4	3	5	4	4	3
Supplier delivery time	66	62	63	71	57	67	44	53	46	28	22	19	12
Inventories: Materials	34	49	38	56	52	53	38	53	51	39	35	37	27
Inventories: Finished goods	12	17	18	28	21	28	19	10	13	10	14	18	15
Expected in Six Months (seasonally adjusted)													
Composite Index	26	37	38	41	34	31	10	26	10	9	-1	0	2
Production	33	44	57	61	49	39	13	29	22	16	-1	6	12
Volume of shipments	34	45	55	57	51	32	13	37	31	17	2	7	11
Volume of new orders	22	30	36	40	31	28	10	25	10	9	-14	-1	2
Backlog of orders	11	33	29	22	11	18	-3	14	-2	10	-18	-16	-18
Number of employees	34	57	52	46	41	40	26	44	19	17	11	12	10
Average employee workweek	13	30	26	25	19	22	7	10	-2	11	-3	3	-10
Prices received for finished product	52	67	70	75	74	68	67	45	51	51	43	37	32
Prices paid for raw materials	65	73	85	84	79	69	66	60	47	58	35	24	28
Capital expenditures	21	28	35	29	29	24	14	20	29	11	5	0	7
New orders for exports	1	17	14	20	10	13	12	6	7	-1	-1	-6	-1
Supplier delivery time	31	37	30	48	29	39	9	20	9	10	-4	-19	-5
Inventories: Materials	11	16	14	11	17	8	-8	14	-8	-9	6	1	-11
Inventories: Finished goods	1	10	19	12	10	7	-4	-8	-10	-11	-3	5	-2