FOR RELEASE Thursday, March 22, 2018 EMBARGOED FOR 10 A.M. CENTRAL TIME CONTACT: Pam Campbell 405-270-8617 Pam.Campbell@kc.frb.org

TENTH DISTRICT MANUFACTURING ACTIVITY CONTINUED AT A SOLID PACE Federal Reserve Bank of Kansas City Releases March Manufacturing Survey

KANSAS CITY, Mo. – The Federal Reserve Bank of Kansas City released the March Manufacturing Survey today. According to Chad Wilkerson, vice president and economist at the Federal Reserve Bank of Kansas City, the survey revealed that Tenth District manufacturing activity continued at a solid pace, and optimism remained high for future activity.

"Factory activity continued to grow steadily in March," said Wilkerson. "Firms continued to report high input and selling prices and many are concerned about higher steel and aluminum tariffs."

A summary of the March survey is attached. Results from past surveys and release dates for future surveys can be found at www.kansascityfed.org/research/indicatorsdata/mfg.

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 continued at a solid pace in March, and optimism remained high for future activity. In a special question on the effect of potential steel and aluminum tariffs, most contacts indicated some impact, with varying anticipated degrees of severity. Price indexes were little changed in March after considerable increases the past few months.

The month-over-month composite index was 17 in March, equal to 17 in February and higher than 16 in January (Tables 1 & 2, Chart 1). The composite index is an average of the production, new orders, employment, supplier delivery time, and raw materials inventory indexes. Factory activity grew modestly at durable goods plants, particularly for machinery and aircraft, while production of nondurable goods moderated slightly. Month-over-month indexes were mixed. The shipments and new orders indexes decreased moderately, while the production, order backlog, and new orders for exports indexes where basically unchanged. In contrast, the employment index edged up from 23 to 26 and the supplier delivery time index jumped from 16 to 30, both at their highest levels in survey history. The raw materials inventory index increased from 8 to 11, and the finished goods inventory index also rose modestly.

Most year-over-year factory indexes were slightly lower in March. The composite index was basically unchanged at 37, while the production, shipments, new orders, and order backlog indexes decreased moderately. The employment index inched lower from 39 to 37, and the capital expenditures index also fell. The raw materials inventory index increased from 23 to 30, while the finished goods inventory index was generally stable.

Future factory activity expectations moderated slightly but were still solid overall. The future composite index slipped from 38 to 33, and the future production, shipments, new orders, and order backlog indexes also moderated slightly. The future employment index decreased from 41 to 36, while the future capital expenditures index was basically unchanged. The future raw materials inventory index edged down from 23 to 21, while the future finished goods inventory index increased modestly.

Most price indexes were little changed in March but remained at high levels. The month-over-month finished goods price index slipped from 26 to 24, while the raw materials price index increased slightly. The year-over-year finished goods price index inched lower from 51 to 49, while the year-over-year raw materials price index moved modestly higher. The future finished goods price index eased from 53 to 48, while the future raw materials price index was basically unchanged.

SELECTED COMMENTS

"Challenging year due to increasing material prices and resistance from customers when we pass those increases along. Not a year to be timid. The tax cuts were a boost to our plans to invest in new equipment as well as employee bonuses."

"Great start to the year with the feeling of a lot of confidence in our industry. Many opportunities for co-manufacturing are showing up like we have never seen before. Looking forward to a great year."

"Had a slow December and January we hadn't seen for a while. Activity is increasing."

"We expect dramatic increase in cost of steel because the U.S. does not have the steel manufacturing capacity to handle an increase in demand. If steel industry knows there is a 25% tariff on import, then we expect U.S. steel producers to raise their price to a level just under the import price. We have contracts in place that we are not able to pass along price increases, so we will likely try to cancel and have them rebid. We have competitors that have factories in Mexico and China. If tariffs are for raw only, we will lose big because our costs go up, whereas, imported finish products may not go up, which will give the foreign factory an unfair advantage."

"Our production for orders is continuing to increase but some suppliers are having difficulty meeting demand."

"We anticipate approximately a 1% of sales increase in costs. We are in the process of watching our market overall to determine an appropriate response."

"We and our customers are metal consumers, so if tariffs are implemented, the cost of input will have to either be absorbed or passed along to the customer."

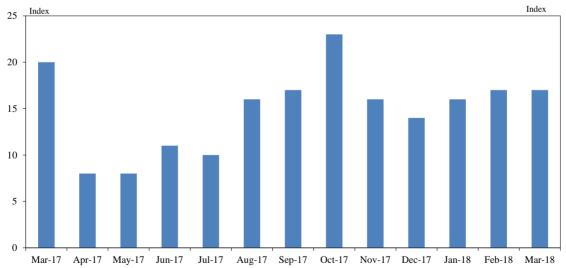
Table 1 Summary of Tenth District Manufacturing Conditions, March 2018

		ch vs. Febr (percent)*	March vs. Year Ago (percent)*				Expected in Six Months (percent)*							
		No		Diff	SA		No		Diff		No	•	Diff	SA
Plant Level Indicators	Increase	Change	Decrease	Index^	Index*^	Increase	Change	Decrease	Index^	Increase	Change	Decrease	Index^	Index*^
Composite Index				22	17				37				31	33
Production	44	40	16	27	20	60	24	16	45	57	27	16	41	42
Volume of shipments	40	37	23	18	12	55	25	19	36	57	28	16	41	42
Volume of new orders	39	36	25	14	-1	59	26	15	44	57	28	15	42	42
Backlog of orders	37	43	20	17	14	50	31	19	31	43	43	14	29	30
Number of employees	33	58	8	25	26	56	24	20	37	47	41	12	35	36
Average employee workweek	25	64	12	13	15	33	57	10	23	30	56	13	17	17
Prices received for finished product	32	62	6	26	24	58	34	8	49	51	45	5	46	48
Prices paid for raw materials	59	37	4	55	55	80	14	6	74	74	22	4	70	72
Capital expenditures						38	43	19	19	42	47	11	30	37
New orders for exports	10	81	9	1	1	19	73	8	12	19	74	6	13	14
Supplier delivery time	30	66	4	27	30	38	55	8	30	29	63	8	22	23
Inventories: Materials	31	53	16	16	11	48	35	18	30	35	47	19	16	21
Inventories: Finished goods	32	51	18	14	9	38	42	19	19	33	46	22	11	15

^{*}Percentage may not add to 100 due to rounding

Note: The March survey included 85 responses from plants in Colorado, Kansas, Nebraska, Oklahoma, Wyoming, northern New Mexico, and western Missouri.

Chart 1. Composite Index vs. a Month Ago



[^]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-12.

Table2 Historical Manufacturing Survey Indexes

	Mar'17	Apr'17	May'17	Jun'17	Jul'17	Aug'17	Sept'17	Oct'17	Nov'17	Dec'17	Jan'18	Feb'18	Mar'18
Versus a Month Ago													
(seasonally adjusted)													
Composite Index	18	10	9	12	12	16	18	22	15	13	16	17	17
Production	33	15	1	22	10	22	21	18	15	16	16	21	20
Volume of shipments	34	14	3	22	0	23	24	20	19	10	14	24	12
Volume of new orders	23	11	11	8	13	24	15	24	19	11	14	16	-1
Backlog of orders	19	8	12	-5	1	13	9	22	13	8	20	13	14
Number of employees	13	11	12	15	16	14	18	19	16	16	18	23	26
Average employee workweek	11	-3	4	8	4	9	7	10	6	10	2	11	15
Prices received for finished product	8	6	8	-1	6	8	12	11	11	11	21	26	24
Prices paid for raw materials	28	33	19	19	20	23	25	22	24	15	34	50	55
Capital expenditures	n/a	n/a	n/a	n/a	n/a	n/a	n/a						
New orders for exports	2	3	4	3	-2	4	6	6	-1	4	6	2	1
Supplier delivery time	4	7	13	9	10	10	22	19	8	13	18	16	30
Inventories: Materials	14	4	5	4	11	10	13	28	16	7	15	8	11
Inventories: Finished goods	12	7	2	-1	5	2	-6	18	3	-8	3	4	9
Versus a Year Ago													
(not seasonally adjusted)													
Composite Index	14	13	18	28	24	23	35	34	37	30	35	38	37
Production	17	19	20	43	28	27	56	41	51	36	40	51	45
Volume of shipments	14	17	16	39	33	29	49	42	49	39	39	54	36
Volume of new orders	30	16	28	35	38	27	47	45	41	38	37	55	44
Backlog of orders	16	20	27	20	22	18	37	34	42	20	42	47	31
Number of employees	17	15	19	24	23	22	30	30	32	35	31	39	37
Average employee workweek	6	0	13	11	15	20	31	26	35	28	30	28	23
Prices received for finished product	26	30	16	15	20	29	38	33	35	37	49	51	49
Prices paid for raw materials	37	50	45	48	45	48	56	61	64	55	65	71	74
Capital expenditures	12	5	16	13	15	21	26	21	19	39	34	37	19
New orders for exports	4	11	5	7	0	9	10	9	9	8	15	18	12
Supplier delivery time	7	14	15	15	19	23	27	26	18	25	27	20	30
Inventories: Materials	1	4	8	22	10	18	16	30	45	15	38	23	30
Inventories: Finished goods	4	-3	17	11	7	6	2	15	28	8	15	18	19
Expected in Six Months													
(seasonally adjusted)													
Composite Index	31	19	30	25	21	24	26	30	26	23	29	38	33
Production	50	29	48	42	31	39	40	45	42	29	37	56	42
Volume of shipments	51	32	44	39	36	39	39	42	38	28	32	49	42
Volume of new orders	41	18	43	38	28	39	29	47	32	24	36	49	42
Backlog of orders	28	14	31	14	13	20	21	31	26	13	30	32	30
Number of employees	43	29	28	32	28	27	28	33	30	36	33	41	36
Average employee workweek	11	8	17	11	17	2	9	27	14	10	23	25	17
Prices received for finished product	27	27	26	23	13	30	29	31	38	31	44	53	48
Prices paid for raw materials	56	47	36	49	40	41	42	44	59	49	58	73	72
Capital expenditures	33	11	23	17	18	19	15	21	19	22	38	36	37
New orders for exports	9	11	16	12	0	5	9	15	8	9	19	16	14
Supplier delivery time	13	14	22	12	14	13	16	10	14	18	25	18	23
Inventories: Materials	9	6	10	3	6	-1	14	16	12	7	15	23	21
Inventories: Finished goods	7	13	14	8	15	-5	10	14	9	12	19	11	15