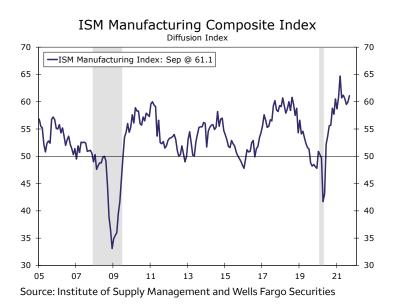


Supply Chain Dynamics at Play in Today's Rise in ISM Manufacturing

Summary

The message from today's ISM is that supply chain issues have gone from a problem to a crisis. The top drivers behind today's jump in the ISM index to 61.1 were longer wait times for supplier deliveries and sharply higher prices paid. On the upside, hiring moved back into expansion.



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Supply Chain Problems Have Gone from Bad to Worse

The ISM manufacturing index, a closely watched barometer of activity in the manufacturing sector, rose in September to 61.1, signaling its fastest pace of expansion since May. While that was certainly better than the consensus had been expecting, it is not all good news when you examine the underlying components.

The largest overall increase among subcomponents was a 3.9 point pop in the supplier delivery index. This measure rises the longer that factories have to wait for supplies. Ordinarily a modest wait is consistent with a fast-growing economy. However, today it says more about the supply chain crisis. As if to put a big exclamation point on this issue, eight out of ten respondents reflecting almost every industry type cited supply chain and sourcing problems.

As you might reasonably expect, that is impacting their ability to manufacture. The production component fell to 59.4 and although new orders held steady for the month, backlogged orders tumbled 3.4 points.

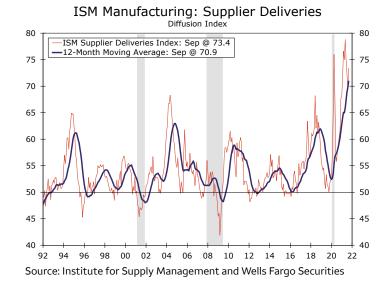
On the bright side, there are some indications that most firms are restocking, if only incrementally. The inventories component rose 1.4 points to 55.6 in September, the highest in more than a decade, though recall that this is a measure of the share of firms adding to inventories, not the extent to which they are building those stocks. Customer inventories rose 1.5 points, but that measure still remains at a level that is historically low at just 31.7.

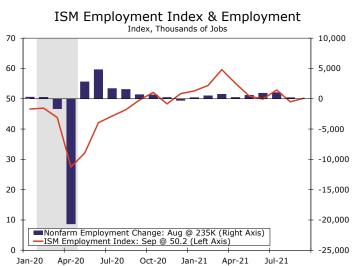
Price Pressure for Awhile Yet

It's not just the lack of physical inputs that is limiting production either. Labor is a growing concern for manufacturers who continue to struggle to fill job openings. Four industries (transportation, food & beverage, paper, machinery) specifically referenced labor challenges in their comments as a constraint on activity in September, while nearly half of the industries reporting they are hiring cited difficulty filling positions.

The employment index rose to 50.2 in September suggesting expansion, but it has hovered around the 50-breakeven point for much of the past year as businesses struggle to find the help they need. The lack of labor and inputs is causing logistic problems and limiting the pace of production. It's also leading to significantly higher costs.

The prices paid component rose to 81.2 in September with 17 of the 18 manufacturing industries reporting paying higher prices for inputs. Price pressure continues to build and businesses are increasingly passing costs on to consumers. This is perhaps best expressed by a comment from a purchasing manager in the Machinery industry; "Raw materials costs still are at record highs, and we have raised customer pricing, with additional increases in the near future due to labor costs going up." Until we see a meaningful easing in the availability of labor and inputs, supply problems will keep pressure on prices.





Source: Institute for Supply Management, U.S. Department of Labor and Wells Fargo Securities

When Will Supply Chain Issues Get Better? Don't Hold Your Breath

It is neither healthy nor sustainable when the supplier deliveries component is the primary driver of the increase in ISM. It is not uncommon for this component to spike in a supply shortage. What makes this cycle unique is the sustained duration of this component remaining elevated.

Among the questions we hear from clients, near the top of the list is when will these supply chain issues get better. This was the catalyst behind the development of our <u>Pressure Gauge</u> to better measure the various factors and unique characteristics of this cycle.

The quick answer is: before we can talk about better we need to get to the point where it at least stops getting worse, and we are not there yet. Look at the second line in the price category in our Pressure Gauge. Between June of last year and June of this year the cost of shipping a 40-foot container from Shangai to Los Angeles roughly grew almost three-fold. In the past three months it has roughly doubled again. The more than \$12,000 cost of shipping today is one of the many categories flashing red. Taken in the context of separately reported data this morning showing PCE inflation rising faster than at any point in the past 30 years, the rising costs for producers due to shortages is a wake-up call that some aspects of inflation are showing no signs of being transitory.

Pressure Gauge																					
Indicator		Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21
Time	ISM Manufacturing Supplier Deliveries	57.3	65.0	76.0	68.0	56.9	55.8	58.2	59.0	60.5	61.7	67.7	68.2	72.0	76.6	75.0	78.8	75.1	72.5	69.5	73.4
	ISM Services Supplier Deliveries	52.4	62.1	78.3	67.0	57.5	55.2	60.5	54.9	56.2	57.0	62.8	57.8	60.8	61.0	66.1	70.4	68.5	72.0	69.6	
	Ships at Anchor-LA & Long Beach (Mo. Avg.)	0.0	0.0	0.0	0.0	0.0	0.5	2.0	1.5	4.3	10.0	22.2	32.1	32.6	26.5	21.5	18.9	13.8	21.4	33.4	41.0
Volume	Taiwan Electronic Product Exports (YoY)	46.2%	18.1%	24.3%	13.2%	23.8%	15.3%	19.1%	26.1%	21.8%	19.0%	22.2%	47.5%	14.4%	24.5%	34.0%	29.6%	29.8%	33.9%	21.9%	
	Cass Freight Index (YoY)	-7.5%	-9.2%	-22.7%	-23.6%	-17.8%	-13.1%	-7.6%	-1.8%	2.4%	2.7%	6.7%	8.6%	4.1%	10.0%	27.6%	35.3%	26.8%	15.6%	12.3%	
	Unfilled Orders (3-Mo. Ann.)	7.6%	3.7%	0.9%	-2.2%	-0.3%	2.8%	4.0%	5.1%	6.2%	7.4%	6.7%	8.4%	10.8%	14.7%	15.1%	15.3%	13.2%	13.5%	12.0%	
Price	World Container Index (WCI) (USD/40ft Box)	\$1,633	\$1,520	\$1,500	\$1,549	\$1,788	\$2,009	\$2,144	\$2,541	\$2,592	\$2,806	\$3,955	\$5,263	\$5,227	\$4,991	\$4,919	\$5,898	\$7,052	\$8,879	\$9,556	\$10,237
	WCI: Shanghai-Los Angeles (USD/40ft Box)	\$1,525	\$1,433	\$1,615	\$1,718	\$2,343	\$2,923	\$3,283	\$3,934	\$4,072	\$4,047	\$4,118	\$4,186	\$4,292	\$4,234	\$4,267	\$5,453	\$6,793	\$9,797	\$10,721	\$12,020
	PPI Transp. & Ware. of Goods (3-Mo. Ann.)	0.3%	-1.9%	-7.6%	-12.2%	-8.8%	1.0%	9.0%	8.0%	6.5%	7.8%	10.2%	10.7%	13.0%	16.3%	16.5%	20.7%	16.0%	12.6%	6.5%	
	Dry Van Rate Per Mile (YoY of 4-Wk. Mov. Avg.)	-3.3%	-2.3%	4.1%	-3.6%	-4.5%	3.4%	20.2%	33.0%	41.3%	48.7%	48.1%	39.0%	36.5%	49.5%	51.4%	70.0%	69.2%	43.7%	28.6%	21.8%
Inventory	Inventory-to-Sales Ratio (All Businesses)	1.42	1.50	1.73	1.55	1.41	1.36	1.35	1.35	1.35	1.35	1.35	1.30	1.33	1.26	1.25	1.26	1.25	1.25		
	ISM Manufacturing Inventories Index	46.5	46.9	49.7	50.4	50.5	47	44.4	47.1	51.6	50.8	51	50.8	49.7	50.8	46.5	50.8	51.1	48.9	54.2	55.6
	ISM Manufacturing Consumer Inventories	41.8	43.4	48.8	46.2	44.6	41.6	38.1	37.9	36.7	36.3	37.9	33.1	32.5	29.9	28.4	28.0	30.8	25.0	30.2	31.7
	Inventory Too Low (Net % of Firms)	-3.5%	-1.5%	-6.6%	-4.5%	1.2%	1.3%	2.7%	4.8%	4.4%	4.9%	6.5%	5.3%	4.5%	2.5%	7.0%	8.0%	11.0%	12.0%	11.0%	
Labor	Production & Manuf. Posts (vs. Feb. 2020)	0.2%	1.3%	-30.0%	-31.6%	-23.7%	-13.8%	-6.1%	4.2%	12.9%	20.6%	27.4%	26.3%	38.2%	46.8%	63.5%	74.8%	76.7%	84.0%	78.0%	87.3%
	Loading & Stocking Posts (vs. Feb. 2020)	1.4%	-0.4%	-32.5%	-32.7%	-17.6%	-0.8%	4.6%	12.3%	28.2%	38.8%	39.0%	26.3%	38.9%	46.4%	61.7%	72.7%	76.6%	90.2%	72.0%	82.4%

Source: ISM, Bloomberg LP, Taiwan Ministry of Finance, U.S. Department of Labor, Drewry, U.S. Department of Commerce, NFIB, Indeed.com and Wells Fargo Securities

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