

Notice of Report Changes

Starting with the January 2015 report, ISM-Houston changed the calculation method used to develop the Houston Purchasing Managers Index™ (H-PMI™). This change was made to improve the accuracy of the H-PMI™ as a forecast tool for predicting moves in the Houston area economy on a three to four month forecast horizon. While the legacy model had a high forecast accuracy, the new model provides a significant improvement. The correlation between the forecast model and the Houston economy, as compared to the Dallas Federal Reserve's Houston-Sugar Land-Baytown Business-Cycle Index, has been increased from a coefficient of determination (r^2) of 0.51 to 0.63 with this change. Additionally, the Mean Absolute Scaled Error (MASE) relative to a Naïve Forecast has improved from 0.72 to 0.64.

An extensive analysis of historical H-PMI™ data showed that seasonally adjusting the underlying indicators and updating the weights applied to these indicators when producing the high level index improved the forecast accuracy. The new model is now being used to calculate the H-PMI™. The report format has also been lengthened to allow the inclusion of more information that is readily available from the analysis. In addition to the difference between the positive and negative responses to the queries regarding the underlying indicators, the calculated values for these responses are now included. The reporting of the underlying indicators now includes the seasonally adjusted diffusion index for these indicators to more closely align ISM-Houston's reporting activities with those of the Institute for Supply Management.

Additional information regarding this model revision can be obtained by contacting the report's author.

Oil Sector Continues to Weaken; Others Show Strength

Utilities, Health Care and Some Non-Durable Goods Continue to Expand

Analysis and report by Ross Harvison,
chair of the ISM-Houston Business Survey Committee

ross.harvison@intuitivum.com 713-702-1088

The Houston affiliate of the Institute for Supply Management's survey of area supply chain professionals indicates that our economy showed an increasing potential for contraction near term. As with last month, six of the eight underlying indicators are predicting potential contraction, while the remaining two are showing support for economic expansion.

The Houston Purchasing Managers Index (H-PMI) fell from 49.3% to 44.5% in March. Readings below 50% generally indicate contraction near term. The seasonally adjusted Finished Goods Inventory and Prices Paid Indices continued to point to expansion. All other indicators (Sales/New Orders, Production, Employment, Purchases, Lead Times, and Purchased Inventory) are indicating possible contraction, with the Lead Times index making a significant move down again this month.

Continuing the trend of the last few months, not all respondents are saying that they are being negatively impacted by the fall in crude oil prices. While much of the current predicted downturn has been driven by weakness in the Oil and Gas Exploration area along with its supporting industries, several industries are showing strength. Utilities, Health Care, and Durable Goods Manufacturing unrelated to the energy sector reported good results this month. Sales/New Orders and Purchases were up for these industries and relatively flat for others, including Non-Durable Goods Manufacturing, Construction, and Financial Services.

INDICES AT A GLANCE

| Index | Mar | Feb | Change | Track | Rate | Trend* (Mos) |
|--------------------------|------|------|--------|-------------|--------|-----------------|
| Houston PMI | 44.5 | 49.3 | -4.8 | Contracting | Faster | 3 |
| Sales/New Orders | 43.9 | 43.4 | 0.5 | Falling | Slower | 3 |
| Production | 48.4 | 41.2 | 7.2 | Falling | Slower | 3 |
| Employment | 35.8 | 37.1 | -1.3 | Falling | Faster | 2 |
| Purchases | 41.5 | 42.2 | -0.7 | Falling | Faster | 3 |
| Prices Paid | 32.9 | 32.2 | 0.7 | Falling | Slower | 3 |
| Lead Times | 32.2 | 44.1 | -11.9 | Falling | Faster | 2 |
| Purchased Inventory | 41.0 | 40.9 | 0.1 | Falling | Slower | 4 |
| Finished Goods Inventory | 45.6 | 43.2 | 2.4 | Falling | Slower | 3 |

* Months on current track



Commodities Reported Up in Price: Pharmaceuticals and construction labor

Commodities Reported Down in Price: Telecommunications equipment, computers and computer components

Commodities Reported in Short Supply: Custom pharmaceuticals

WHAT OUR RESPONDENTS ARE SAYING ...

Oil and Gas Exploration, and Key Support Services:

- US and Texas rig counts are way off of last year's numbers
- This is the quickest crash in the oil industry there's ever been; just hope it doesn't turn into the deepest, or longest
- We still have a few major projects working

Manufacturing - Durable Goods:

- As the rig count continues to drop, manufacturing for the oil and gas industry is in decline. We have reduced production employment by 15% and are considering salary reductions
- Continuing to move at a steady pace
- We are not seeing any supply shortages and prices have leveled out

Manufacturing - Non-Durable Goods:

- Our business is about in line with last month

Construction:

- We are running at a similar pace to last month, but both materials prices and lead times continue to fall

Health Care:

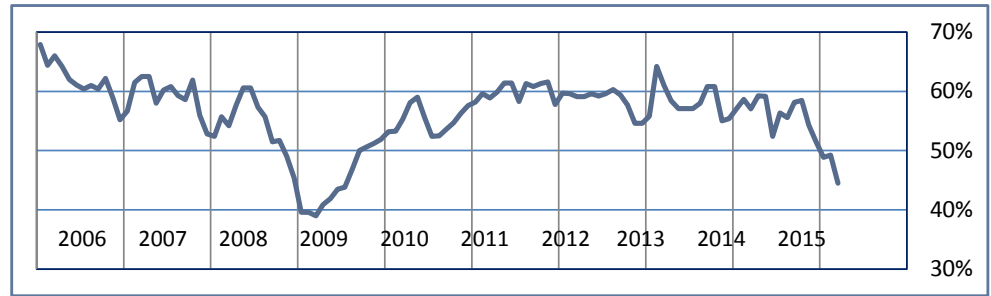
- Massive expansion is going on in our Medical facility

Financial Services:

- Activity has remained flat with last month

Houston PMI Trend

The Houston PMI indicates likely shifts in production three or four months in advance. Readings over 50 percent generally indicate production expansion over the near term; readings below 50 percent show coming contraction.



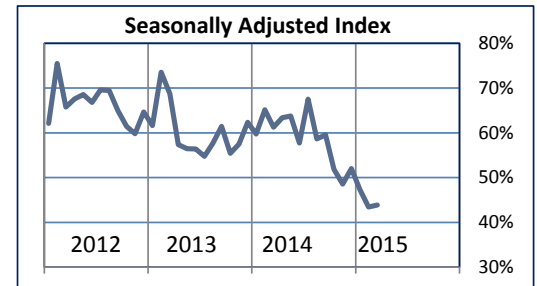
Trend of Underlying Indicators

The Houston PMI is based on diffusion indices for eight underlying indicators as shown below. The net value of each of these indicators is simply the percentage of respondents who cite a positive shift from the previous month minus the percentage who cite a negative shift. The diffusion index is calculated based on the percent of respondents reporting higher results plus one-half of those responding the same with a seasonal adjustment based on an X12 ARIMA forecast using the previous 12 years data. Seasonally adjusted values above 50 percent for the Sales/New Orders, Production, Employment, Purchases, Lead Times and Purchased Inventory indicators point towards expansion and values below 50 percent signal contraction. The Prices Paid and Finished Goods Inventory indicators are inversely correlated to economic activity, meaning that values below 50 percent point to expansion and values above point to contraction.

Sales/New Orders

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 29 | 45 | 26 | 3 | 51.9 |
| Nov-14 | 27 | 40 | 33 | -7 | 48.5 |
| Dec-14 | 25 | 48 | 27 | -3 | 52.0 |
| Jan-15 | 30 | 34 | 36 | -6 | 47.2 |
| Feb-15 | 31 | 28 | 41 | -10 | 43.4 |
| Mar-15 | 28 | 31 | 41 | -13 | 43.9 |

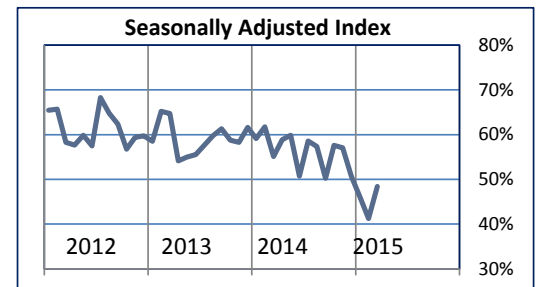
The seasonally adjusted New Orders Index moved marginally higher to 43.9% this month.



Production

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 26 | 62 | 12 | 15 | 57.6 |
| Nov-14 | 27 | 60 | 13 | 13 | 57.0 |
| Dec-14 | 18 | 60 | 22 | -4 | 50.7 |
| Jan-15 | 21 | 53 | 26 | -6 | 46.0 |
| Feb-15 | 15 | 57 | 28 | -13 | 41.2 |
| Mar-15 | 15 | 64 | 21 | -5 | 48.4 |

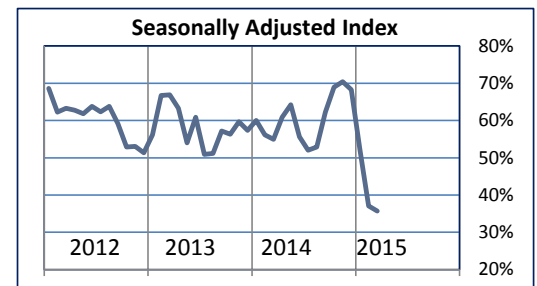
The Houston Production Index rose to 48.4% this month; its third month below neutral.



Employment

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 47 | 44 | 9 | 38 | 68.9 |
| Nov-14 | 43 | 50 | 7 | 37 | 70.4 |
| Dec-14 | 38 | 52 | 10 | 29 | 68.2 |
| Jan-15 | 21 | 56 | 23 | -2 | 52.1 |
| Feb-15 | 10 | 54 | 36 | -26 | 37.1 |
| Mar-15 | 10 | 54 | 36 | -26 | 35.8 |

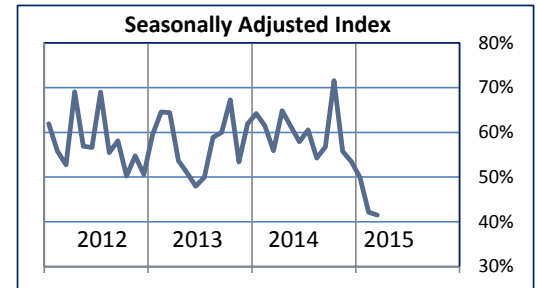
The seasonally adjusted Houston Employment Index moved down again this month, reaching 35.8%.



Purchases

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 44 | 50 | 6 | 38 | 71.6 |
| Nov-14 | 33 | 44 | 23 | 10 | 55.8 |
| Dec-14 | 32 | 34 | 34 | -3 | 53.4 |
| Jan-15 | 38 | 28 | 34 | 4 | 49.9 |
| Feb-15 | 28 | 31 | 41 | -13 | 42.2 |
| Mar-15 | 21 | 41 | 38 | -18 | 41.5 |

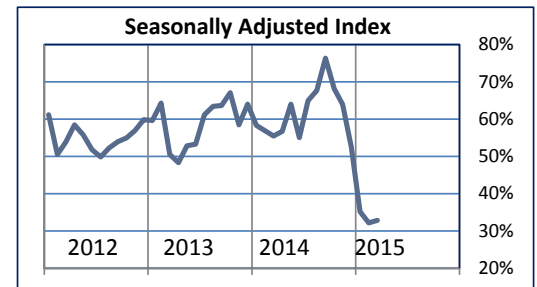
The seasonally adjusted Houston Purchases Index fell marginally to 41.5%, also its third month below neutral.



Prices Paid

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 38 | 59 | 3 | 35 | 68.2 |
| Nov-14 | 30 | 67 | 3 | 27 | 63.9 |
| Dec-14 | 15 | 69 | 16 | -1 | 52.5 |
| Jan-15 | 4 | 66 | 30 | -26 | 35.2 |
| Feb-15 | 3 | 59 | 38 | -36 | 32.2 |
| Mar-15 | 5 | 57 | 38 | -33 | 32.9 |

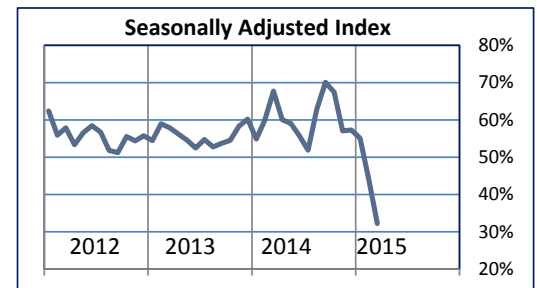
The Prices Paid Index rose modestly to 32.9%. As this index is a reverse indicator of economic activity, this low level buoyed the overall index again this month.



Lead Times

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 35 | 62 | 3 | 32 | 67.5 |
| Nov-14 | 17 | 80 | 3 | 13 | 57.1 |
| Dec-14 | 19 | 73 | 8 | 11 | 57.3 |
| Jan-15 | 19 | 70 | 11 | 8 | 55.1 |
| Feb-15 | 15 | 59 | 26 | -10 | 44.1 |
| Mar-15 | 8 | 51 | 41 | -33 | 32.2 |

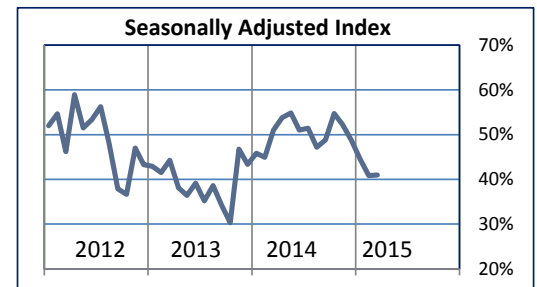
The Houston Lead Times Index fell about 12 points this month to 32.2%, indicating that suppliers are having fewer issues meeting delivery schedules.



Purchased Inventory

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 15 | 73 | 12 | 3 | 54.7 |
| Nov-14 | 20 | 60 | 20 | 0 | 52.2 |
| Dec-14 | 11 | 67 | 22 | -11 | 48.7 |
| Jan-15 | 11 | 74 | 15 | -4 | 44.5 |
| Feb-15 | 10 | 67 | 23 | -13 | 40.9 |
| Mar-15 | 10 | 64 | 26 | -15 | 41.0 |

The seasonally adjusted Houston Purchased Inventory Index was relatively flat this month posting 41.0%.



Finished Goods Inventory

| | % Higher | % Same | % Lower | Net | Index |
|--------|-------------|-----------|------------|-----|-------|
| Oct-14 | 24 | 58 | 18 | 6 | 57.4 |
| Nov-14 | 27 | 63 | 10 | 17 | 57.6 |
| Dec-14 | 27 | 59 | 14 | 14 | 56.9 |
| Jan-15 | 21 | 51 | 28 | -8 | 41.7 |
| Feb-15 | 21 | 48 | 31 | -10 | 43.2 |
| Mar-15 | 18 | 56 | 26 | -8 | 45.6 |

The Houston Finished Goods Inventory Index was rose modestly this month to 45.6%, while producers continue to reduce working capital.

