

A New Perspective on Crude Prices

West Texas Intermediate flirted with \$60 a barrel in June, but the commodity is unlikely to return to that neighborhood anytime soon. The world has just too much of the black stuff. The International Energy Agency puts the global surplus at 3.0 million barrels per day, which exceeds the combined daily output from the Eagle Ford (1.5 million barrels) and the Bakken (1.2 million barrels) oil basins. With slower growth expected in China, Iranian crude soon to hit global markets and OPEC's refusal to cut production, crude will likely remain below \$60 for some time.

Analysts hoped for a brief downturn. They pointed to the plunging rig count in the spring, forecasted a decline in output by summer, and expected a rebound in prices by fall. In April, a month after WTI averaged \$47 on the spot market, the U.S. Energy Information Administration (EIA) forecast crude to hit \$55 this month and \$70 by February.

But the drop in U.S. production never materialized. Production is still 600,000 barrels above June 2014, the month in which WTI peaked at \$108 per barrel. WTI now trades in the mid-\$40s and the EIA doesn't expect crude to reach \$55 until the middle of next year. The futures market supports the EIA outlook. WTI contracted for December 2015 delivery now trades at \$47 on the New York Mercantile Exchange. Crude for delivery in December 2016 trades at \$52.

Weak oil prices have chewed up corporate balance sheets. Exploration firms have seen share prices fall 33 to 67 percent from their peaks; service firms have seen revenues slip 13 to 41 percent compared to the same quarter last year. The phrase "lower for longer" now permeates conversations about oil prices; the industry is restructuring to operate in that environment. So far, the U.S. energy sector has shed 7,400 oil extraction jobs (i.e., office/white collar) and 50,800 service jobs (i.e., oil field/blue collar). That's about one-third the global losses reported by the media. Locally, energy employment (extraction and field services) is down 5,200 jobs. Fabricated metal and equipment manufacturing, sectors closely tied to energy, have cut another 6,200. Losses are likely to continue as Chevron, ConocoPhillips, Halliburton, Schlumberger and Shell announced additional layoffs during their Q2 earnings reports.

The turmoil has generated four significant mergers to date:

- Shell's \$70-billion acquisition of BG Group, boosting Shell's reserves by 25 percent,
- Halliburton's \$34-billion merger with Baker Hughes, bringing synergies and cost savings to the combined operations,
- Schlumberger's \$14 billion deal for Cameron, creating a one-stop shop for oil well services, and
- Noble Energy's \$1.2 billion acquisition of Rosetta Resources, providing Noble with significant acreage in the Eagle Ford and Permian Basin.

The first big waves of cutbacks came from oil field services companies that provide the producers with equipment and expertise. Now the exploration and production companies themselves, including ConocoPhillips and Chevron, are making more moves to reduce corporate office jobs and capital expenditures. Oil companies are cutting another 700 jobs in Texas in the coming months as low crude prices continue to hammer the industry. Oil field equipment manufacturer Cameron International, which last month agreed to sell itself to Schlumberger for \$12.8 billion, told the TWC it is cutting 150 staff members over the next four months at its Brittmoore facility in Houston due to the current declining business conditions. Cameron said the mass layoff will begin November 2nd and occur again on December 7th. ConocoPhillips told the regulators it will cut more than 500 positions in the Houston area, at 10 separate facilities around the city, as part of a 10 percent overall workforce reduction it announced earlier this month. London-based offshore drilling services company Ensco said it would cut 14 percent of its workforce as it works to save money amid a global crude slump. Oil field services companies have cut 97,100 employees since late last year. Contractors that lease drilling rigs to oil companies that are the next-largest group with 36,800 job cuts, followed by oil and gas producers with 29,100 and large-equipment makers and other suppliers with about 26,500. Refineries and pipeline operators together account for just 6,400 of the cuts. Chevron announced it will cut 950 Houston jobs in October. The cuts will be from its downtown Houston offices of 8,000 employees and Bellaire and Briarpark locations of another 1,000 employees.

Additional mergers and asset sales are to be expected. Many firms hedge their production, i.e., contract to sell their crude at a specific price on a future date. These hedges locked in higher returns than are now available on the spot market. However, most of those hedges roll off this fall and when they do, cash flow will suffer. Banks have also begun their semi-annual review of loans and lines of credit collateralized with reserves. Those assets are worth much less now than they were a year ago. Many firms are about to find their borrowing capacity greatly reduced. The impending credit crunch and reductions in cash flow will spur more mergers, asset sales and job losses in the industry.

This may also cost Houston some bragging rights. Twenty-six companies on the 2015 Fortune 500 list are headquartered here, ranking Houston third among U.S. metros. But two of the firms on that list, Baker Hughes and Cameron International, will fall off once their acquisitions have been completed. Of the remaining two dozen, 21 are energy-related, their revenues tied to oil prices. Some may no longer generate enough sales to qualify for the list. A few others may also be acquired. Houston won't know until next spring whether it has retained the #3 spot on the list or has fallen below our sister city to the north in the Fortune 500 rankings.

The last major wave of consolidations occurred in the late 1990s when Exxon acquired Mobil, Chevron acquired Texaco, and BP acquired Amoco and Atlantic Richfield. Future consolidations aren't likely to result in an exodus of oil firms from Houston. Exxon, Chevron and BP have a greater presence here now than they did in the 1990s.

Houston Area Lost Jobs in July

The Houston-The Woodlands-Sugarland metro area lost 4,900 jobs in July, according to the Texas Workforce Commission (TWC). That was well below expectations of local economists. Houston typically reports job losses in July as educators on 10- and 11-month contracts not working in the summer impact the employment numbers. Over the last ten years, the July loss in education has averaged 13,100 jobs. This year's loss of 14,700 education jobs falls in line with that average.

Gains in the private sector, even in strong years like 2014, are never enough to offset public sector losses. Over the past 10 years, the July loss for total employment has averaged 13,600 jobs. That's why this year's July loss of 4,900 jobs is a pleasant surprise. The goods producing sector—mining, manufacturing, construction—having reported job losses in May and June, reported a gain of 3,400 jobs in July. The gain was unusual given historic trends. In 15 of the past 25 years, the sector has reported job losses in July. In five of the last 25 years, the gains have been 1,000 jobs or less. This year's growth is actually the third best July for goods producing jobs dating back to 1990. The robust growth was unexpected given the recent media reports of layoffs in the energy and manufacturing industries. The goods producing sector is still 17,400 jobs below its previous peak reached in December 2014.

The service sector, apart from public education, created 5,500 jobs in July, with health care adding 3,200 jobs, retail 3,000 jobs, and professional and business services 2,600 jobs. Losses in leisure and hospitality (2,300 jobs) and finance (1,000 jobs) offset these gains. In spite of the recent jobs report, total employment for the region remains 6,400 jobs below its December 2014 peak of 2,992,600.

Houston's unemployment rate crept up to 4.7 percent in July. The rate typically rises 0.2 to 0.5 percentage points in the summer months and ratchets down in the fall. The July rate remains well below the U.S. rate of 5.6 percent.

U.S. Job Openings Soared

U.S. companies are advertising a lot more jobs. But when it comes to filling them, many remain cautious. Job openings soared 8 percent to 5.75 million in July, the most since records began in 2000, the Labor Department said. Meanwhile, total hiring slipped to just below 5 million, from nearly 5.2 million in June. The figure suggests that many businesses are having trouble finding people with the skills they need. How quickly businesses fill their open jobs can have a big impact on hiring and wages. If companies decide to offer higher pay to attract more applicants, that would provide a much-needed boost to wages. If instead they simply take more time sifting through applications to find an ideal candidate, that would slow overall job gains. Some economists say that a mismatch between the skills of many of the unemployed and the skills needed by expanding companies is a big reason that openings are rising more quickly than actual hiring. Openings are up 22 percent in the past year, while hiring has declined. For example, construction workers who lost jobs in the housing bust may not have transitioned to fields where jobs are plentiful, such as health care. The data now signals unambiguously that the labor market is unable to supply the people companies

need, per Ian Shepherdson, chief economist at Pantheon Macroeconomics. Employers added 173,000 jobs in August, the fewest in five months, though job gains in June and July were revised higher.

Americans are still struggling to find work that pays adequately but there are signs that wages are finally beginning to rise. In the past 12 months, average hourly pay has increased just 2.2 percent, up from a 2 percent pace in July. But that is below the 3.5 to 4 percent that is typical in a healthy economy.

Despite disappointing job growth last month, the unemployment rate nationwide fell to its lowest level since early 2008, sharpening the debate within the Federal Reserve over whether to raise interest rates when policymakers meet in a week. The jobless rate dipped from 5.3 percent in July to 5.1 percent in August. At this level, joblessness is nearing the level that economists and the Fed consider close to full employment. Inflation foes worry that allowing the unemployment rate to fall significantly below 5 percent runs the risk of leading to an overheated economy.

Chemical Boom is in Full Swing

The petrochemical boom began over the past decade, as natural gas prices fell when new technology boosted production from dense shale formations. Projects are continuing even though falling oil prices, related to the shale boom, are putting a drag on the Gulf Coast economy. Natural gas is both raw material and fuel for petrochemical production, and the industry's expansions have made the Houston area the birthplace of many products exported to China and the rest of the developing world. "Those of us who have been in this business for 30 years would never have imagined Texas and Houston to be the big export hub for petrochemicals," ExxonMobil Chemical President Neil Chapman said, noting that there had been little petrochemical growth in the region for at least 15 years. The American Chemistry Council counts 243 announced projects with a cumulative investment of \$147 billion from 2010 to 2023. More than 60 percent comes from foreign investment, as a small majority of projects remain in the planning stage. Global chemical demand is expected to double from 2000 to 2040, but stay flat in the U.S.

Texas alone accounts for 99 of the projects with a total value of \$48.2 billion, and most of those are in southern parts of Texas, including Houston, Corpus Christi and Beaumont. That means 15,800 direct new jobs in Texas – not counting construction jobs – and 67,000 nationwide, the council projects. All this growth is possible because the bountiful and cheap natural gas in the U.S. means companies pay less for ethane and other gas byproducts used as feedstocks to make the chemicals and plastics. Most of the world uses a feedstock called naphtha drawn from expensive crude oil so it is more affordable to manufacture the chemicals and plastics in the U.S., where natural gas is abundant, and then export them. Natural gas feedstock prices are still advantaged even with the U.S. oil prices hovering just above \$40 a barrel, although that price might not have unleashed the petrochemical construction the area is experiencing, said Bill Gilmer, who directs the Bauer Institute for Regional Forecasting at the University of Houston. ExxonMobil Chemical is investing close to \$6 billion to increase the production of ethylene and polyethylene – the world's most common plastic – at its Baytown and

Mont Belvieu plants. The project represents ExxonMobil's first major U.S. chemical expansion in more than 15 years, with completion slated for 2017. Companies including Chevron Phillips Chemical Co, Dow Chemical Co, and BASF also are investing billions in the Houston region. "You're taking shale gas, you convert it into chemicals, and you're shipping those chemicals to this growing middle class in the developing work," Exxon Mobil Chemicals' Chapman said. As those people acquire greater wealth, they buy more plastic and rubber products, including automobiles, which contain increasing amounts of these materials. About two dozen cranes are visible towering above the Baytown plant expansion, putting the new infrastructure in place. The additions include a steam cracker that will add 1.5 million tons per year of ethylene capacity to the 1.2 million tons in place now. ExxonMobil also is adding 1.3 million tons in annual polyethylene capacity in Mont Belvieu, about 30 miles east of Houston. The petrochemical surge is serving as a temporary, partial offset to the job losses in exploration and production companies. Houston offers the knowledge base, the cheap natural gas, the historical infrastructure and the Houston Ship Channel access. The Houston region will add nearly 20,000 jobs this year, with much of that growth from temporary construction jobs on these projects. Last year the area added about 104,000 jobs. Even with cheap oil prices now, the petrochemical projects make sense because the natural gas abundance should last for decades in the U.S., said Bobby Tudor, CEO of Tudor Pickering Holt & Co., energy investment banking firm in Houston.

Despite the Oil Price Decline, Campus Recruiting not Stopping

Many of Houston's largest energy companies are courting new college graduates, even as the oil and gas industry sheds workers by the thousands. Rice University expects that its career fair in mid-September will draw almost 150 energy companies, including ExxonMobil Corp, Enterprise Products, Halliburton and Schlumberger. Demand is so intense, organizers say that about 20 booths will have to be set up in a hallway. Several energy companies keep coming back to campus despite oil's downturn because they need to maintain a talent pipeline, especially for hard-to-fill positions. Further, they want to nurture their collegiate ties so they will have first dibs on the best and brightest once the economy improves. "They don't want to make the same mistake they made in the 1980s," said Nicole Van den Heuvel, Rice's director of the Center for Career Development. During that epic bust, many large energy companies eliminated on-campus recruiting efforts, losing a generation of potential talent that pursued other careers. But many senior-level executives now recognize that such shortsighted decisions contributed to the talent shortages in specialty areas that they're still grappling with today, said Angie Gildea who leads the talent management group for energy at KPMG in Houston. So far, University of Houston's C.T. Bauer College of Business has confirmed 130 employers – including Chevron, BP and ConocoPhillips – and has room for 15 more.

Sources: Greater Houston Partnership; Houston Chronicle; Houston Business Journal