

Post 29th August, 2015

Some of the news items for this week are as follows:

1. The recent devaluation of the Chinese currency (yuan) and the slowdown of their economy as well as stock market have led to concerns about the demand for oil in an already over-saturated oil market. Fearing additions to the oil glut in the market, the price of the barrel fell below \$40, the first time since February 2009. It did rebound to \$42.56 on Friday, i.e. yesterday.
2. The collapsing stock market in China rippled through the European and US markets. Many top stocks including the prominent energy brands depreciated in value, creating turbulence in the market.
3. In the wake of the dropping oil prices, the recent initiative by Algeria to coordinate discussion within OPEC has not met with any response from Saudi Arabia. As mentioned in my earlier posts, some of the other cash-strapped OPEC members (Venezuela, Libya, Nigeria) urgently need the prices to be reversed.
4. As sanctions on Iran get lifted in the coming months (whenever), the OPEC members will have to make room for Iran's oil exports. This will reduce the individual quota for of the OPEC members, further adding to their woes.
5. Within Saudi Arabia, the low oil prices have resulted in a squeezed revenue inflow, which accounts for 90% of the country's budget. The country's spending has not reduced and with the expensive conflict with Yemen, finances are taking a hit. The foreign exchange reserves are shrinking, and borrowing from capital markets is being sought (\$4billion in July). Apparently, the situation seems to be getting tight for them. It may force them to take some difficult decisions entailing domestic subsidies and expenditure in the near term.
6. As it usually happens in a downturn, we hear about mergers and acquisitions. On Wednesday this week Schlumberger and Cameron announced their \$14.8 billion merger, a deal that will hopefully be closed in the first quarter of 2016. We had heard of another similar merger between Halliburton and Baker Hughes in November 2014. While it may be good from the business standpoint, we could see more layoffs, as the companies prepare to become more efficient and put a check on their costs.

On another note, some time back, in one of my posts I had mentioned about professional certification for practicing geoscientists or engineers in Canada. I would like to elaborate on that for your information, and is as follows (a bit longer than what I would have liked, but should be informative enough).

The practice of geoscience and engineering in Canada requires provincial licensing (except in Prince Edward Island and Yukon). It is the responsibility of each Canadian province and territory to register and regulate the practice of professionals offering such services. What this means is

that an individual is legally not a geoscientist or an engineer until he/she has a university degree in engineering or geoscience and has practiced under the supervision of a licenced Professional Engineer or Geoscientist for at least four years of progressively more responsible experience in the particular province/territory he/she is working in or plans to work in. Requirements for the Province of Alberta can be found here: <http://www.apega.ca/>. Hotlinks to other jurisdictions can also be found at the APEGA website.

Different Canadian provinces have professional associations that regulate the practices of professional geoscientists and engineers in the interest of public safety and protection of the environment, through licensure. For the Geosciences, a common set of requirements are generally adhered to known as the Geoscience Knowledge and Experience Requirements for Professional Registration in Canada (http://geoscientistscanada.ca/wp-content/uploads/2013/11/GKE-2012-Reprint_Web-E.pdf). Engineering faculties at Canadian universities are governed by the Canadian Engineering Accreditation Board that guarantees that undergraduate degrees issued by all institutions meet a common set of minimum standards.

Individuals are expected to seek registration by the provincial agencies by becoming their members. Membership is given when the home provincial association has ensured that the individual has met the minimum formal education and experience requirements and demonstrated that he/she possesses the minimum knowledge and expertise in the relevant field. The idea behind doing this is to ensure that the professionals completing any geoscience or engineering work meet the highest standards in the areas of competency. The professional membership or certification follows a process. After obtaining a degree from an accredited program in engineering or geoscience, the individual registers as an engineer or a geoscientist-in-training with the provincial or territorial licensing body. Once the individual has gained the minimum internship experience in the province or territory (which varies from two years in Quebec to four years in all other jurisdictions), the individual is expected to write the National Professional Practice and Ethics exam, which is the same in all English speaking jurisdictions or substantially the same in French in Quebec and New Brunswick. Quebec's exam includes a portion on the Quebec Civil Code of law and New Brunswick offers the exam in both English and French, as preferred by the candidate. On completion of these steps the individual receives a license to practice and a seal to stamp his/her completed work.

While licensure is desirable, companies can hire unlicensed engineering or geoscience graduates. Once employed, the work carried out by such individuals has to be done under the supervision of a registered professional, who can take responsibility of the work. In this sense an engineering or geoscience graduate is not legally an engineer or a geoscience professional until the required documentation of qualifications is received. The professional then can add the P. Eng. (Professional Engineer) or P. Geo. (Professional Geoscientist) designations against their names. Such professional qualification can be obtained at any time during employment. However, it becomes mandatory to receive such professional accreditation for individuals serving as independent consultants in different companies.

In the province of Alberta, the licensing agency is the Association of Professional Engineers and Geoscientists of Alberta (APEGA). Oil and gas, as well as service companies operating in Alberta are expected to obtain a license, known as a Permit to practice the geoscience or engineering disciplines, which also entails that they abide by the regulations put forth by APEGA. As an example, one of the stipulations in place is that a geophysicist working in the company will not be able to use that designation with his/her name. Another not-so-professional but relevant designation, such as a 'senior processor' or 'data analyst' could be used instead.

An interesting aspect of professional registration is that the regulatory agencies monitor the professional development of the practicing professionals. Each year while renewing their membership, the members are expected to send in a record of the professional development hours that were put in by way of attending courses, workshops, conventions, publishing papers, etc. This way the professional credentials of the members are continuously updated.

In addition to obtaining the right-to-title through registration from provincial engineering and geoscience associations, some government regulatory bodies also certify qualifying professionals to perform certain kinds of professional work that is required by their legislation. An example is securities legislation governing the public disclosure of information of a technical nature by Professional Engineers and Geoscientists as Qualified Persons (mining-related information) or Qualified Petroleum Evaluators or Qualified Petroleum Auditors.

Finally, the more important benefit of this whole process of registration/certification/accreditation is that the individuals can derive satisfaction in that they have been granted recognition of competence and can confidently discharge the relevant duties and obligations, responsibly and ethically.

Such accreditation is offered in the US also where some states issue licenses through state boards of geology. Some professional societies have started offering it as well. As for example the one that I know for sure is the American Association of Petroleum Geologists (AAPG), which has started offering certification to its members as petroleum geologists and petroleum geophysicists.

Hope this is informative.

Till next week, enjoy life and stay happy!