# Impact of Unconventional Gas Prices on GCC Economy; Petrochemical Industry

Meshal Al-SAMHAN, Petroleum Research Centre
Kuwait Institute for Scientific Research
+96524956991
msamhan@kisr.edu.kw
Jamal Al-Fadhli Petroleum Research Centre
Kuwait Institute for Scientific Research
+96524956990
jfadhli@kisr.edu.kw,
Meshal Al-Ghanim, Kuwait Gulf oil company
+965-2398-3639 Ext. 2529
NEUW@chiveron.com

# **Abstract**

#### Overview

Successful economies are those who can steer their strategies through the turbulent marketing environment, and time it perfectly. The expanding petrochemical sector in the Middle East and specifically in the Gulf Cooperation Council (GCC), was essential to answer a long term surge by Oil-producing countries in this region to establish industry diversity and strengthen their national economies. Rising unconventional gas production in certain regions will pressure the petrochemical industry expansion in the GCC and affect its economic value. On average more than 50% of non-oil exports come from petrochemicals and chemicals for the GCC region. Each job in the chemical sector is expected to generate a further 4.8 jobs in other sectors. At a time of shortage in job creation, this has become a crucial factor. In the last 5 years in the GCC, the average petrochemical industry direct contribution to the GDP accounted for 3% and non direct contribution is accounted for 2.7%.

#### Method

The development in the unconventional gas production certainly will reduce the competitive advantage of GCC low price feedstock, and consequently will shrink future expected expansion. The prices of gas will also impact the motivation of international technology providers to invest and partner in the region causing another limitation for future expansion. Based on these two assumptions, the collected data of the GCC employment rate and GDP growth rate were analysed, then correlated with the energy market (shale gas) price scenarios. The rising of the shale gas production capacity also compared to the number of petrochemical plants (expansion) in close by regions. Direct employment and indirect employment numbers in this study are presented as FTE, where bivariate analysis was used to estimate jobs created in the PC's private sector and non-oil export growth.

### **Results**

Unconventional gas availability will affect the unemployment rate in the GCC. The Middle Eastern regional projections of the unemployment rate is estimated around 10.8% by 2016. While developed countries like Japan and the US value 4% and, 6.8 respectively. As for Kuwait, it needs to create by 2017 more than 100,000 new jobs, that equals 20% of total employments. Moreover, the growth in the non-oil sector in the GCC was averaged above 5% in 2013. In KSA the real non-oil GDP rise in 2012 was around 7.2%, which is higher than the 10 year average of 4.7% as a result of the stunning performance of the non-oil producing private sector. In Kuwait non-oil growth is projected to increase from 4% (2013) to 4.5% in 2014.

# **Conclusion**

In this paper, prices and the rising capacity of unconventional gas's effect on GCC economy are discussed with regards to job creation, non oil exports and GDP growth limitation. With the continued rising of unconventional gas production, Kuwait and KSA's job creation rate will decline in the next 3 years. The number of the international joint venture opportunities expected over the next 5 years will be reduced. Non-oil exporting growth will slow down due to decrease in the PC sector expansion. Low gas prices will indirectly reduce the non-oil sector contribution to GDP in GCC.

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