Saudi Arabia’s Energy Pricing Reform in a Changing Domestic and Global Context

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Introduction
Economic Reform in a Rentier Context

• Often implied that economic adjustments and structural reforms difficult in context of rentier economies as reforms undermine the ruling bargain giving rising to social and political unrest

• Yet experience shows that in response to sharp decline in oil price and uncertainties in oil markets, GCC countries have been able to introduce some limited reforms/adjustment measures with relative ease and without much public opposition so far
  – Some indirect taxes, VAT, administrative fees, cut public sector wage benefits
  – Privatization efforts (including selling a stake in Aramco)
  – Perhaps most visible is recent energy price increases in most GCC countries

• Low energy prices associated with wide distortions, inefficiencies and inequities
  – Inefficient use of the natural resource (rising domestic energy demand, sub-optimal energy mix)
  – Inequitable (most of the benefits tend to accrue to high income groups)

• But increasing domestic energy prices without introducing compensation measures has both direct and indirect adverse impacts on households’ welfare

• Low energy prices have been central to these states’ industrialization strategy based on the competitiveness of energy intensive industries such as petrochemicals, aluminum, steel
Key Questions

• Recent energy pricing reforms may suggest there is scope for reform wider than originally thought and extending beyond what’s implied by Rentier State Theory

• Four key questions:

  ▪ How deep have these recent energy pricing reforms been?

  ▪ Can these reforms be accelerated without the government facing serious public opposition? What are some of the policies that governments can pursue to increase the acceptability of these reforms?

  ▪ Would energy pricing reform reverse the long-term industrialization strategy based on developing energy intensive industries?

  ▪ Can pricing reforms (and more generally economic reforms) be implemented without greater accountability and openness?
The International Context: Short-term and long-term challenges
Short-term Challenge: Adjustment in a Low Price Environment

- Government’s adjustment to a lower price environment
  - Draw down on foreign reserves
  - Increase domestic borrowing
  - Tap international debt markets
  - Reduce capital spending
  - Reduce current spending
  - Boost non-oil revenues (indirect taxes, VAT, fees)
  - Increase domestic energy prices
  - Devaluation (An options not yet exercised)

- Measures have not been enough to address fiscal challenge
  - Massive increase in expenditure during boom years which is difficult to reverse + some unexpected expenditure (the Yemen war, support of regional regimes)

Source: Jadwa
Adjustments Already Hitting Economy and Private Sector

Growth in the private and non-oil sector has stalled after years of very rapid growth.

Gross fixed capital formation witnessed a very sharp decline in 2016 as spending on capital projects fell.

Source: Saudi Government
Longer Term Challenge: Prospects of Oil Demand Becoming Increasingly Uncertain

**Long-Term Demand Growth**

*Uncertain outlook for oil demand: three scenarios*

- Million barrels per day

- With no change to existing government energy policies
  - Initial growth followed by decline

- With policy pledges fully implemented
  - Steady growth

- With a coordinated strategy to limit the global temperature rise to 2 degrees C
  - Steady decline

Source: International Energy Agency

**Oil Demand in U.S. Light-Duty Vehicle**

*U.S. light-duty vehicle oil-demand forecast*

- After reaching a ‘global’ peak, some predict a sharp fall in oil demand due to disruptions in the transport sector

Source: IEA, RethinkX, Financial Times

Oil demand growth expected to slowdown as a result of climate change policies and technological developments in transport with many predicting that oil demand will peak in middle of next decade.
Oil demand projections are highly sensitive to assumptions (GDP, population, efficiency, carbon tax), but in no scenario in the chart will oil demand fall sharply; Also investment would be needed to offset the decline rates in existing fields.

Source: Spencer and Fattouh, 2018
Thanks to a period of high oil price and technological advances, US reversed years of decline in oil production and constituted a major supply shock.

US exports to Asia Pacific/Europe have been on the rise and oil now trade flows from West to East rather than only from East to West.

Source: EIA, Energy Aspects
Shifts in Perception from Scarcity to Abundance and from Peak Supply to Peak Demand

• Stranded assets

• Challenge of financing long-term capital intensive energy projects in high cost areas

• Change in oil/gas companies’ strategies
  – Increasing gas/renewable assets in portfolios
  – Directing capital towards shorter-investment cycles
  – Chasing low cost barrels

• Change in producers’ behavior
  – Diversify income and economic base with increased sense of urgency

Summary of Vision 2030 goals

<table>
<thead>
<tr>
<th>Theme</th>
<th>Current</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private sector contribution (% of GDP)</td>
<td>40</td>
<td>65</td>
</tr>
<tr>
<td>Logistics Performance Index (Rank)</td>
<td>49</td>
<td>25</td>
</tr>
<tr>
<td>Non-oil exports (% of non-oil GDP)</td>
<td>16</td>
<td>50</td>
</tr>
<tr>
<td>Public Investment Fund assets (SR bn)</td>
<td>600</td>
<td>7,000</td>
</tr>
<tr>
<td>Global Competitiveness Index (Rank)</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>Annual FDI inflows (% of GDP)</td>
<td>3.8</td>
<td>5.7</td>
</tr>
<tr>
<td>Domestic output of oil and gas sector (% of total)</td>
<td>40</td>
<td>75</td>
</tr>
<tr>
<td>Kingdom’s GDP size (Rank)</td>
<td>19th</td>
<td>Top 15</td>
</tr>
<tr>
<td>Saudi unemployment rate (% of Saudi labour force)</td>
<td>11.6</td>
<td>7.0</td>
</tr>
<tr>
<td>Female participation rate (% of working age females)</td>
<td>22</td>
<td>30</td>
</tr>
<tr>
<td>SME output (% of total GDP)</td>
<td>20</td>
<td>35</td>
</tr>
</tbody>
</table>

Source: Saudi Government
The Domestic Context: Consolidation of Power and Dismantling of the decades-old system of consensus rule
Changes in the Domestic Scene:
Unprecedented Consolidation of Power

• Unprecedented consolidation of power within the hands of Crown Prince Mohammed Bin Salman
• A decades-old system of consensus rule dismantled
• Absolute power with little checks and balances
• Decision making process much quicker (but the quality of decisions another matter)
• More assertive foreign policy emboldened by closer alliance with the US and perceived heightened threats from Iran
• Changed people’s expectations from ‘cradle-to grave welfare’ system to a different system where citizens/private sector expected to bear the burden of economic adjustment
• Citizens’ expectations have been revised downwards over time
  – Common belief that current status quo of is economically and financially unsustainable
  – Fear of the alternative (look around in the region)
  – Sense of external threats (particularly Iran threat)
1. How Deep Have Energy Pricing Reforms Been?

Saudi Arabia Fuel Prices, $

<table>
<thead>
<tr>
<th></th>
<th>2015 price</th>
<th>New price</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Gas ($/mmbtu)</td>
<td>0.75</td>
<td>1.25</td>
<td>67</td>
</tr>
<tr>
<td>Ethane ($/mmbtu)</td>
<td>0.75</td>
<td>1.75</td>
<td>133</td>
</tr>
<tr>
<td>Diesel for Industry ($/Barrel)</td>
<td>9.11</td>
<td>14.1</td>
<td>55</td>
</tr>
<tr>
<td>Arab Light Crude ($/Barrel)</td>
<td>4.24</td>
<td>6.35</td>
<td>50</td>
</tr>
<tr>
<td>Arab Heavy Crude ($/Barrel)</td>
<td>2.67</td>
<td>4.4</td>
<td>65</td>
</tr>
<tr>
<td>Kerosene ($/barrel)</td>
<td>23</td>
<td>25.7</td>
<td>12</td>
</tr>
<tr>
<td>Premium gasoline ($/litre)</td>
<td>0.16</td>
<td>0.24</td>
<td>50</td>
</tr>
<tr>
<td>Regular gasoline ($/litre)</td>
<td>0.12</td>
<td>0.2</td>
<td>67</td>
</tr>
</tbody>
</table>

The initial increases in energy prices in 2016 have been sharp but from a very low base and prices remained a fraction of international prices. The real challenge has always been increasing prices further from 2016 levels and fully reforming the energy pricing system.

Source: Saudi Government
Second Wave of Energy Price Increases

Gasoline Prices ($/Litre)

<table>
<thead>
<tr>
<th></th>
<th>2015 price</th>
<th>2016-2017 price</th>
<th>First Price Increase (%)</th>
<th>2018 price</th>
<th>Second Price Increase (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Premium Gasoline</td>
<td>0.16</td>
<td>0.24</td>
<td>50%</td>
<td>0.54</td>
<td>127%</td>
</tr>
<tr>
<td>Regular Gasoline</td>
<td>0.12</td>
<td>0.20</td>
<td>67%</td>
<td>0.37</td>
<td>83%</td>
</tr>
</tbody>
</table>

Electricity Prices Residential (SAR/Kwh)

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2018</th>
<th>Price Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential - 1-6,000 kWh/month</td>
<td>0.05</td>
<td>0.18</td>
<td>260%</td>
</tr>
<tr>
<td>Residential - above 6,000 kWh/month</td>
<td>0.3</td>
<td>0.3</td>
<td>0%</td>
</tr>
</tbody>
</table>

Government again increased gasoline prices sharply in January 2018; Electricity prices were increased for low consumption brackets; Other fuels such as diesel for transport and industry and natural gas remained unchanged for now.
2. Introduction of Cash Transfer Schemes

• First round of price increases implemented without introducing any compensation schemes to offset the adverse impact on households and industries

• But there was clear realization that any further price increases must be accompanied by cash transfer schemes for households in low income groups to gain some acceptability for the reforms

• Exposed the effectiveness of current institutions in implementing such schemes
  – Information gathering; coordination among the various institutions and the implementation bodies; transparency, etc…

• Sustainability of reforms directly related to the success and effectiveness of implementing such cash transfer schemes
  – Failure in implementation risks the slowdown or even reversals of the reforms
The Citizen Account

<table>
<thead>
<tr>
<th>Income Quintile</th>
<th>Average Income (SAR/Month)</th>
<th>Estimated Extra Burden (SAR/Month)</th>
<th>Average Allowance (SAR/Month)</th>
<th>Net Burden or Allowance (SAR/Month)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Quintile</td>
<td>0 - 8,699</td>
<td>(1,000)</td>
<td>1,200</td>
<td>200</td>
</tr>
<tr>
<td>2nd Quintile</td>
<td>8,700 - 11,999</td>
<td>(1,100)</td>
<td>1,200</td>
<td>100</td>
</tr>
<tr>
<td>3rd Quintile</td>
<td>12,000 - 15,299</td>
<td>(1,300)</td>
<td>1,000</td>
<td>(300)</td>
</tr>
<tr>
<td>4th Quintile</td>
<td>15,300 - 20,159</td>
<td>(1,500)</td>
<td>600</td>
<td>(900)</td>
</tr>
<tr>
<td>5th Quintile</td>
<td>20,160 +</td>
<td>(2,000)</td>
<td>0</td>
<td>(2,000)</td>
</tr>
</tbody>
</table>

The cash transfer involves a major redistribution of income from high income groups to low income groups as high income groups are not compensated.

Source: Saudi Government
Policy Adjustment through Handouts

The government had to readjust the amount of the transfer by offering handouts amounting to around 50 billion SAR in 2018 (the amount devoted to the citizen account estimated at 30 billion SAR in 2018). Handouts are meant to protect wages against inflationary pressures. It would have been more effective (and equitable) to increase the amount of cash transferred through the Citizen Account.

- Dominant political economy explanation underlines governments’ fear of popular unrest as main factor in decelerating or reversing energy pricing reform

- But industrial lobbies also play a role (state-owned energy intensive enterprises such as the large petrochemical companies)

- Better organisation, more resources, access to decision makers, formulate arguments in a coherent way (jobs, stock market valuation, foreign direct investment, competitiveness)

- GCC countries locked in industrialisation and diversification path based on access to low-priced energy

- Government is likely to take a more gradual approach in increasing natural gas prices (key feedstock for the petrochemical industry) and the increase likely to be more modest to ensure energy intensive sectors remain competitive
Energy Sector will Continue to Play a Key Role

- Despite ambitious plans to diversify economic base, integration through the full value chain by investing in refining and petrochemicals will continue to be an integral part of Gulf exporters’ strategy as this is where governments see their main source of comparative advantage.

- Pressure on the oil and gas sector to show that it can generate value, establish linkages with rest of the economy, generate jobs, and play a constructive role in diversifying the economy through further extension of the value chain.

- Local content policies will increase in importance.

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Baseline</th>
<th>2020 Target</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum production capacity</td>
<td>12.5</td>
<td>12.5</td>
<td>mb/d</td>
</tr>
<tr>
<td>Dry gas production capacity</td>
<td>12</td>
<td>17.8</td>
<td>bcfd</td>
</tr>
<tr>
<td>Refining capacity</td>
<td>2.9</td>
<td>3.3</td>
<td>mb/d</td>
</tr>
<tr>
<td>Share of pharmaceutical sector in non-oil GDP</td>
<td>0.98</td>
<td>1.97</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Efficient utilation of fuel in electricity power generation</td>
<td>33</td>
<td>40</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Number of job opportunities in the mining sector</td>
<td>65</td>
<td>90</td>
<td>Thousand jobs</td>
</tr>
<tr>
<td>Decrease in water and electricity subsidies</td>
<td>0</td>
<td>200</td>
<td>SAR Billion</td>
</tr>
<tr>
<td>Generation from renewable energy</td>
<td>0</td>
<td>3,450</td>
<td>Megawatts (MW)</td>
</tr>
<tr>
<td>Share of renewable energy in total</td>
<td>0</td>
<td>4</td>
<td>Percentage (%)</td>
</tr>
<tr>
<td>Job opportunities for citizens in atomic and renewable sectors</td>
<td>500</td>
<td>7,774</td>
<td>Jobs</td>
</tr>
<tr>
<td>Local content contribution within the renewable sector</td>
<td>25</td>
<td>35</td>
<td>Percentage (%)</td>
</tr>
</tbody>
</table>

Source: Saudi Government
4. Economic Reforms: Means and an End

- Vision 2030 key to Crown Prince Mohammed Bin Salman elevation to power
  - Belief that Saudi economy was hitting the wall (declining income per capita, young population, higher job requirements, low public sector productivity, wide economic distortions, private sector highly reliant on cheap foreign labor)
  - Positioned himself as a reformer with a vision to transform the economy in very challenging times
  - Vision 2030: Means and an end

- But any reform imposes pain and creates losers (as well as winners), what do people expect in return?
  - More accountability?
  - Eventually more political/social opening?
Old and New Alliances

- Loss of traditional alliances
  - Key branches of royal family sidelined
  - Crack down on the religious establishment
  - Private sector in recession and corruption probe creating uncertainty
- New alliance: Young Saudis
- Is social opening enough on its own?
- MBS will be judged mainly on the performance of domestic economy (success to create jobs for his ‘new’ constituency)
- But then successful delivery on the reforms is key (Competency an important source of legitimacy)
- What if economic reforms fall short of creating the structural changes necessary to create the thousands of jobs needed for the young people?
- Recipe for social and political unrest as some are predicting? Not necessarily!!!!
- Back to Rentier State Theory
  - Bumpy road to reforms (expect backtracking)
  - Muddling through and reverting back to the rentier mechanisms (patronage + repression) but with less rents to go around
Recognition that Support for Private Sector is Key

- Government announced a SR72 billion program to stimulate private sector growth, as part of a 4-year stimulus package (16 initiatives targeting a number of sectors, such as housing, exports and manufacturing)

- Considerable portion allocated to the real estate sector (SR21 billion for residential housing loans, and SR14 billion for efficient building technologies projects)

- SR10 billion for mega private sector projects, SR5 billion for an export bank, SR5 billion for an investment program and SR2.8 billion for SME venture capital projects

Source: Jadwa
Conclusions

• Realization of importance to implement structural reforms but road is still very long and bumpy

• Sustainability of energy pricing reforms highly dependent on developing effective social safety nets and transfer schemes which in turn depend on the quality of institutions in implementing these schemes

• Energy sector will continue to play a key role in the Saudi economy and energy intensive industries will play a key role in shaping the energy pricing reform agenda

• Relationship between economic and political reform complex
  – New alliances being built and old alliances being reconfigured
  – Economic reforms both means and an end
  – Whether economic reforms succeed or fail, we could end up with similar political structure (economic reform does not necessarily imply political reform and social openness does not substitute for the need for economic reforms to succeed in generating wealth/jobs for the new constituency)
  – If not successful, this would certainly entail a new reconfiguration of rentier mechanisms and different circulation of rents with important implications on the structure and long-term performance of the economy