Session I: Energy Transition and the GCC Future Development Strategy

The Saudi Economy in the Era of Global Energy Transition

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Overview of Development Planning in Saudi Arabia (1970-2015)



Nine development plans (1970-2014) guided its economy through wide swings in oil prices and revenues, two booms (1973-1980) and (2003-2014) and a long recession between.

DEVELOPMENT PLANNING AND DIVERSIFICATION

- The share of private non-oil GDP increased from 11 % in 1970 to 40 % in 2014, growing by 7% annually and per capita by 9%.
- Robust oil and petrochemical industries and financial sector
- Achievements in human development indicators, infrastructure, Health and IT sectors, petrochemicals, among others

Yet despite the achievements, development planning reached an impasse and a turning point:

- Non-oil GDP (including private) correlated with oil revenues, government spending and oil GDP
- Immigration policy facilitated employment of expatriate workers in the private and household sectors impacting consumption patterns and labor market dynamics
- Fiscal challenges continued: dependence on oil revenues, inefficient spending, procyclicality, et.
- The goal of economic diversification, highlighted in all the development plans, was modest.
- Share of non-oil manufacturing in GDP 9% and services 71% in 2015

During 2007-18, The (HHI) export diversification index averaged 0.78 compared to 0.135 for OECD and 0.204 for the emerging economies. The share of high technology exports was 97 compared to 19 for OECD, 30 for China, and 21 for oil exporters Norway and Mexico.





Revenues and spending are linked to oil market cycles

DEVELOPMENT PLANNING AND THE FISCAL CHALLENGE



- Procyclical policies transmit oil price variations to business cycle fluctuations, causing overheating economies when oil prices rise and recessions when oil prices drop. It increases the unpredictability of macroeconomic policies and deteriorates business and household confidence, harming investment and consumption.
- Capital spending bearing the brunt of adjustment, due to the rigidity of the government's current spending (especially the wage bill)

- During 1995-2015, oil revenues averaged 82% of total and current spending 84% of total
- During 2000-2014 the discrepancy between budgeted revenues and expenditures and the actuals averaged 65% and 25%. Around 38% of revenue increases were absorbed by unbudgeted spending, undermining the fiscal process.
- Current spending averaged 63 % of the non-oil GDP, while Private sector salaries to Saudis and expatriates around 8% and 19 % of the non-oil GDP.



Increasing number of working-age Saudis and changing women participation rate

DEMOGRAPHIC CHALLENGES





The youth, under 30 years, make up 63%. The Kingdom will need to create three times as many jobs for nationals as it did during the 2000-14 boom

Since 2016, labor women participation rate rose from 18% in 2017 to more than 35% in 2023, exceeding the 30% Vision 2030 target



Labor market segmentations impacted productivity, diversification and incentives

LABOR MARKET CHALLENGES

- Labor market dualities into public/private, National/expatriate, and male/female recruitments
- Nationals aged 15-44 account for 75% of the total working-age. Dependency rate is 39%, and that for nationals 53%.
- Expatriates account for 67% of Saudi Arabia's total workforce, around 85% of which are in the private sector.
- Widening wage gaps between expatriates and nationals, with expatriates' wages around 37% of those of nationals. Rigid employment practices exacerbated the labor market segmentation. Restricting the mobility of foreign labor allowed employers to extract economic rents and complicated labor market reforms.
- Since 2000, average rate of employment in the public sector grew by 5% (Saudis) and in the private sector by 7% (Expatriates)
- The concentration of nationals in the public sector increased the government's wage bill, undermined productivity, impacted the system of higher education, emphasized humanities and social sciences, and attracted nationals toward white-collar employment in the public sector rather than the more blue-collar jobs in the private sector.
- <u>Saudi Arabia became testing ground</u> for GCC labor reforms: imposing fees on expatriate labor importation and the renewal of their employment, restricting their use in certain occupations, subsidizing the training of the Saudi workforce in the private sector, increasing the minimum wage level of nationals, and the quota system of *Nitaqat* and its frequent amendments.
- The concentration of expatriates in the private sector increased transfers abroad and impacted the external balance.
- During the 2000-14 boom, non-oil GDP was growing by 6.7%, while avg. unemployment rate 10.8% (27% among female)



An institutional framework for socioeconomic transformation:

VISION 2030 MAIN PRINCIPLES

- Three core themes: A vibrant society, a thriving economy, and an ambitious nation
- It addresses the roles of oil, the government, and the private sector in the economy.
- Introducing sociocultural modernization reforms included women's empowerment
- Institutional, judicial, and social reforms to improve factor productivity, innovation, entrepreneurship, and competitiveness.
 It sets the institutional framework (Nazaha) to combat corruption and improve the accountability of government.
- Reforming the patterns of wealth creation and management: designing new role for the PIF as a development arm and SWF
- Reforming the role and financial soundness of the state's Specialized Credit Institutions (SCIs) into the new NDF framework.
- Adopting sectoral strategies within the diversification process (industrial, mining, tourism, FDI, culture, local content, SMEs, etc.) and promoting new sectors with employment potentials for nationals
- Increase the share of renewables in energy consumption, launching the green initiative and the decarbonization targets
- Many objectives were ingrained in the development plans, but Vision 2030 sets up the institutional framework for their implementation and follow up



Wealth management





To manage their oil wealth, many oil and gas producers have established commodity funds for revenue stabilization or intergenerational savings



- Natural capital's share followed oil market cycles, averaging 49% when oil prices were \$17 in 1995, increased to 60% when they reached \$78 per barrel in 2010, and declined to 47% when oil prices declined to \$70 per barrel in 2018, changing the relative shares of produced capital and net foreign assets.
- Decarbonization will pose <u>critical trade-offs</u>. If oil extraction accelerates to avoid stranded assets, oil price might decline and reduce natural capital and, consequently, total wealth. Maximizing oil prices and rent in the short and medium terms by reigning in oil production might accelerate energy transition and the levels and shares of the wealth.
- In Saudi Arabia, revenue stabilization mechanism has been assigned to (SAMA) while PIF and Specialized Credit Institutions (SCIs) act as SWF and development funds.
- PIF's AUM increased from \$150 billion in 2015 to \$650 billion in 2023. Its shares in the Saudi Stock market-TADAWUL- increased to \$1.2 trillion in 2023, representing 17.2 % of the market.
- Wealth management model will be impacted by the speed and pattern of the energy transition and the Kingdom's responses. Absent diversification, it may cause deterioration in the financial assets and the shares of the wealth.



Trade-offs in the energy transition



Many countries have set net-zero emissions targets, committing to help mitigate the climate change

- The global energy transition involves the electrification of mobility, energy efficiency improvements, technological advances, changes in social preferences, and the very role of energy in the economy. It may end the geopolitics of the old energy order and create new sectors, industries, and geopolitics.
- Investments in renewables and electric vehicles and batteries have increased from \$1.1 trillion in 2017 to \$ 1.44 trillion in 2022, while investments in fossil fuels declined from \$ 886 billion in 2017 to \$680 billion in 2021
- All GCC states except Qatar have set net-zero carbon emission targets – by 2050 for the UAE and Oman; and 2060 for Saudi Arabia, Bahrain, and Kuwait.



- ✓ The investment needed to reach such ambitious targets is estimated to reach \$ 2-4 trillion per annum by 2030.
- ✓ China's green ambitions and achievements have added to the optimism about global energy transition. But heightened concerns about the concentration of reserves and processing of critical metals in China and a few other countries
- ✓ The speed, patterns, and ultimate impact of the global transition to a less decarbonized world are still uncertain.



There are multiple uncertainties as to whether the transition will be slow or fast, smooth or chaotic, and geopolitically more secure or not



- Net zero emissions (NZE) scenario projects a 76% decline in oil demand. Significant investments is needed to get on track for a 1.5°C stabilization. The ratio of clean-to-fossil investment is more than nine-to-one in 2030. Financing such investment is a challenge , especially for the developing countries.
- Range of differences of demand projections under the scenarios: 30 MBD by 2030 and 80 MBD by 2045
- > There are 73 carbon-pricing schemes worldwide, covering 23% of global emissions, up from just 7% a decade ago.
- The EU's Carbon Border Adjustment Mechanism (CBAM) under its Emissions Trading System (ETS) to levy a carbon price on EU's imports, to push suppliers around the world to go green, will impact GCC countries differently.
- > Aluminium is the most exposed CBAM product for UAE and Oman, while cement is the most exposed for the others.

Demand for critical minerals for clean energy technologies is set to rise two to fourfold by 2030



- Copper and other critical minerals experience fast rates of demand growth (silver and silicon for solar PV, rare earth elements for wind turbine motors and lithium for batteries)
- In NZE scenario, global trade in critical minerals might triple by 2050
- Concentration of reserves of such minerals in China, Russia, Australia, Brazil, Congo and South Africa.
- Increasing use and demand for critical minerals could become a bottleneck for clean energy deployment.

GCC producers face different trade-offs

- GCC command 30% of global oil and 21% of global gas reserves, lasting around 76 and 98 years, with 70% of the global spare oil production capacity. Has the lowest production costs, flaring intensity, and methane intensity, but higher emissions per capita. Their hydrocarbon reserves are not projected to be stranded and their industries need not become sunset industries.
- Perceiving a speedy energy transition framework and maximizing short-term production, reduces excess capacity and oil prices. While adopting a slow to moderate transition approach, allows the producers to stabilize oil prices, maximize rent, enact their diversification agendas, and set and execute their own renewables targets.
- Most of the transition scenarios project a role for oil and gas in the medium term, and in power, industrial, transport, and non-combustible uses, such as petrochemicals. Saudi Arabia and the GCC are poised to increase their market shares when other producers exit, due to size, characteristics, lifetime, organization, and potential of their hydrocarbon sectors.
- The petrochemical industry is diversified, some of its products are crucial components for the energy transition, especially solar panels, wind turbine blades, thermal insulation, batteries, and other electric vehicle parts. Saudi oil and petrochemical industries can be integrated into the national diversification agenda and the global energy transition process.
- ✓ Saudi Arabia's green economy goals involve investments in renewables and nuclear reactors, EVs, oil-to-gas switching in utilities sector, carbon capture and storage, gas-to-hydrogen substitution, oil to chemicals, and the circular carbon economy (CCE) framework.
- ✓ Its policies of replacement of liquid burning by gas and renewables, energy efficiency, diversification within the hydrocarbon value chain, and reforming of energy prices and incentives will increase the oil export and add value besides rent to its oil exports.

The Energy Transition and Labor market and Fiscal challenges



Labor market challenges: labor segmentations impacted productivity, diversification and incentives

VISION 2030 AND LABOR MARKET REFORMS

- Vision 2030: Labor market reforms were integrated into the overall socioeconomic and fiscal reforms. They included changes in the educational and incentive systems, the rate of hiring in the public sector, empowering women, and improving expatriate labor and job mobility. Lifting restrictions on the coed system in higher education and the comixing of genders in the workplace.
- Unemployment among nationals reduced from 12 percent in 2016 to 8.3 percent in 2023 (from 33.7 percent to 15.7 percent for females) doubling female labor participation in the labor force and increasing the employment rate of females from 66 percent to 76 percent between 2017 and 2023.
- The freeze on the hiring of nationals in the public sector contributed to increasing the rate of nationals in the private sector. The share of nationals employed in the public sector declined from 70% to 52% and those in the private sector increased from 30% to 47%.
- ✓ The impact of the energy transition on labor market reforms will depend largely on the diversification process, which depends on the quality of institutions and infrastructure, trade openness, human development, macroeconomic stability, and financial conditions
- ✓ The challenge still on the trade-off between nationalizing the workforce on the one hand and promoting the role of the private sector and its contribution to the GDP and employment on the other.



Increasing the fiscal breakeven oil prices pose risks to countries' economic stability and fiscal sustainability

VISION 2030 AND THE FISCAL CHALLENGE

In 2000, the <u>implied</u> budgetary oil breakeven price was \$25 increasing to \$84 in 2020. Realized prices \$26 & \$70



- The fiscal spending multiplier on private non-oil GDP is relatively low owing to import and expatriates' transfers leakages. Shortand long-run current spending multipliers during 1983-2018 estimated around 0.13 and 0.32, respectively, making the growth spillovers of fiscal policy relatively low.
- The high rent per capita, foreign reserves, and institutional capacity have enabled Saudi Arabia and other GCC to maintain the strong currency's peg to the dollar and gave them policy space.
- Vision 2030 Fiscal reforms: diversify sources of revenues, rationalize current and capital expenditures, enhance transparency, etc. address price distortions and the incentive systems, redesigned expatriate levies and non-oil taxes, introducing health and (VAT) Energy price reforms contributed to reducing oil and gas consumption growth from 5.4 % during 2000-15 to less than 1% since 2016.



How to transition the economy amid global energy transition



KEY TAKEAWAYS

- ✓ The Saudi economy, society and institutions are going through major transformations which will be impacted by the speed and direction of the global energy transition.
- ✓ The global energy transition will impact the ongoing economic transition. The policy responses towards it will impact the Saudi economy and the pace of the energy transition itself
- ✓ Whether the global energy transition proceed slow or fast; smooth or erratic, the Vision's objectives of reducing dependence on oil should continue to guide policymaking and society.
- ✓ The size and characteristics of Saudi Arabia's reserves, production, and carbon footprints of its oil, should maintain and enhance the role of its oil industry nationally and globally, irrespective of the speed and direction of the global energy transition.
- ✓ Saudi Arabia should be part of the global energy transition:
 - Diversifying its energy consumption through the development of renewables, nuclear, and gas, as well as energy efficiency.
 - Promote CCUS , CCE, green and blue hydrogen technologies to enhance a future role for hydrocarbons in the energy transition.
 - ✓ Diversify within the hydrocarbon value chain: compensate the potential of low rent for high value added
- ✓ The trade-offs presented by the transition will impact the Kingdom's economic transformation, including wealth management, economic diversification, fiscal reforms, and labor market reforms.



Thank you