THE OXFORD INSTITUTE FOR ENERGY STUDIES
A RECOGNIZED INDEPENDENT CENTRE OF THE UNIVERSITY OF OXFORD
UNIVERSITY OF OXFORD

March 2017

The IPO of Saudi Aramco: Some Fundamental Questions

1. Introduction

In the last few months, there has been a flurry of articles about the Initial Public Offering (IPO) of Saudi Aramco. As the Financial Times has recently noted, 'this is no ordinary IPO … the listing is different to every other in terms of scale, the nature of the offering, the uncertainties around it, the timeline, the process. Nothing about it is comparable'.[1] To this list, one can also add that unlike any other IPO, the partial sale of Saudi Aramco is so closely intertwined with developments in the domestic economy that the two should not be treated in isolation: the current economic reforms and adjustment measures will have a direct impact on the valuation of the company, the timeline and the process of the IPO, and in turn the IPO of Saudi Aramco will determine the pace of economic adjustment, the process and nature of reforms, and above all whether Vision 2030 will succeed in achieving its ultimate goal of economic diversification and creating jobs for the thousands of young Saudis entering the labour market each year.

The wide media attention that the IPO of Saudi Aramco has recently received should, then, come as no surprise, with writers commenting on numerous critical issues. For instance, there have been much scepticism about the $2 trillion valuation initially put forward by Deputy Crown Prince Mohammed bin Salman, with a recent Bloomberg article arguing that 'Aramco's market size may struggle to equal two Apples and a Google in rankings of the world's biggest companies'.[2] The size of the company's hydrocarbon reserves 'could be an important part of any valuation' and could also be a hurdle for flotation, as Saudi Aramco will be compelled by normal listing rules to make information about the size of its reserves and the method used in their calculation publicly available (and, hence, subject to critical scrutiny).[3]

Likely changes to the company's business model and governance should also have an impact on valuation. Some writers have discussed how the IPO of Saudi Aramco will impact Saudi's oil output policy. While the Kingdom has historically played a pivotal role within OPEC, actively using its policy of maintaining spare capacity, some argue that once the company is listed on foreign exchanges, Aramco could not engage in activities that influence world oil prices.[4] Another change to the business model that is likely to be required is for Saudi Aramco to divest itself of its non-core activities (with effects presently difficult to value) and to disentangle its finances from that of the government.[5] More traditional issues of corporate governance concern the protection of minority shareholders' interests in the post

[1] Anjli Raval, 'Saudi Aramco gets ready for 'no ordinary IPO'', Financial Times, January 8, 2017.
[2] Javier Blas and Wael Mehdi, 'Saudi Arabia's Oil Wealth Is About to Get a Reality Check', Bloomberg, 24 February 2017.
[3] John Kemp, 'Saudi Arabia's oil reserves: how big are they really?' Reuters, July 11, 2016.
[4] Robert Boslego, 'Why the Aramco IPO Is Doubtful', Seeking Alpha, February 20, 2017.
[5] Anjli Raval, 'Saudi Aramco gets ready for 'no ordinary IPO'', Financial Times, January 8, 2017.

Energy Insight: 9
Bassam Fattouh, OIES
Laurence Harris, SOAS & OIES

IPO structure where the government will continue to make 'decisions on production and capacity'.[6] Although minority shareholders don't have enough 'power to dictate terms, they may still mount legal challenges' for instance against 'Aramco's role in OPEC or 'over the suppression of trade in the United States'.[7] Also the size of the IPO means that the Saudi Stock Exchange, Tadawul, can't host on its own the listing of Saudi Aramco, and New York, Tokyo, London, Toronto, Singapore, Hong Kong have been suggested as potential places to host the listing.[8] Listing on exchanges such as the New York Stock Exchange (NYSE) is attractive as these exchanges offer deep liquidity and a very well developed regulatory framework, but these benefits come with high scrutiny and extensive disclosure, plus Saudi Aramco has to be subjected to the full array of U.S. securities laws applicable to foreign companies, increasing the legal risk it faces.

In a rare article, Reuters tries to capture the mood of ordinary Saudi citizens regarding the IPO.[9] The article reveals that there are some 'misgivings among substantial parts of the public and the business community about the sale' because of fears that the government 'is relinquishing its crown jewels to foreigners cheaply at a time of low oil prices'. It is argued that such misgivings will affect the IPO process, as 'the government will be under pressure to demonstrate that Saudi citizens are benefiting most from it'. Some have suggested that this may push the Saudi government to consider reserving a portion of the offer for individual Saudi investors at a discount to market prices. [10]

The extensive media coverage of the IPO and the diverse issues raised reflect the evolution of Saudi policymakers' own thinking about the IPO rather than representing only external opinion. At an early stage, there were suggestions that Saudi Aramco could choose a more cautious route of 'listing of a bundle' of refining subsidiaries and other downstream assets.[11] But over time, the signals became stronger in favor of an initial public offering of a minority stake (initially 5 per cent) in the entire company, including upstream.

The main drivers behind the IPO have also evolved. In the early stages, the objective of the IPO was focused on the corporation 'to showcase Saudi Aramco and make it part of the global capital markets, unleash the company's capabilities, allow it to expand internationally' and 'to remove this notion that Saudi Aramco is not transparent'.[12] That aim is similar to the objectives in international listing of other countries' state owned enterprises and other corporations.[13] The aim, while still important for Saudi Aramco, is seen by some as having become secondary compared to the wider government objective of national transformation under a developmental state; using the IPO to increase the size of the Public Investment Fund and turn Saudi Arabia into a financial powerhouse, as the key to achieving Vision 2030[14].

While all these recent articles offer a fresh perspective on the complexities involved in the IPO of Saudi Aramco, key issues are still missing in the debate. This short paper tries to fill some of these gaps. First, it emphasizes that the IPO can't be isolated from the range of recent reforms and adjustments taking place in Saudi Arabia and the pace of these reforms will be key in determining the valuation of Saudi Aramco. At the same time, the IPO will determine the pace and success of these reforms. So a bet on

---

[6] Anjli Raval, 'Saudi Aramco to 'retain sovereignty' post-IPO', June 2, 2016.

[7] Pi Praveen and Paul Ruiz, 'Saudi Aramco IPO Encounters Resistance from Domestic Critics' The Fuse, March 3, 2017.

[8] Filipe Pacheco and Samuel Potter, 'These Are All the Ways a Saudi Aramco IPO Could Impact Markets', Bloomberg, 26 February 2017.

[9] Reem Shamseddine and Andrew Torchia, 'As Saudis prepare to sell shares in oil giant, some have misgivings', Reuters, February 24, 2017.

[10] Reem Shamseddine and Andrew Torchia, 'As Saudis prepare to sell shares in oil giant, some have misgivings', Reuters, 24 February.

[11] Javier Blas and Wael Mehdi, 'In Saudi Aramco IPO, global refining empire may become the prize', Bloomberg January 11, 2016.

[12] Anjli Raval, 'Saudi Aramco to 'retain sovereignty' post-IPO', June 2, 2016.

[13] Karolyi, G. Andrew. "Corporate governance, agency problems and international cross-listings: A defense of the bonding hypothesis." *Emerging Markets Review* 13.4 (2012): 516-547

[14] Matthew Martin, Glen Carey, and Dinesh Nair, 'Help Wanted in Saudi Arabia: Savvy Investors, Bloomberg March 2, 2017.

Saudi Aramco is a bet on how successfully one thinks that Saudi Arabia, in an era of lower oil prices and uncertainty about long-term oil demand, will adjust its economy and diversify its economic base.

Second, it raises the question as to the main underlying motivation behind the IPO. The answer to that question is often taken for granted: an effort 'to wean the kingdom off oil through Vision 2030 which aims to diversify the Saudi economy and create jobs'. But as argued below, the IPO is mainly about income diversification and boosting the resources of the Public Investment Fund. This is fundamentally different from 'real' economic diversification, which is often associated with expanding the economic base and job creation. As the experience of neighboring countries has shown, sovereign wealth funds predominantly diversify their assets by investing in foreign markets rather than in diversification of the domestic economy into employment creating sectors.

Finally, this comment attempts to clarify some confusion regarding the IPO, particularly in relation to the ownership of the reserve base with some arguing that 'there are reasons to be cautious about expecting much more transparency' because 'it is far from clear that any share sale would include ownership of the reserves in the ground'.[15] As argued in the next section, this issue of ownership of reserves is not that relevant as Saudi Aramco, in which investors will have an ownership stake, has and will continue to have an exclusive concession to exploit the underground reserves including the right to monetize any potential growth in these reserves. While the size of the reserves is less important for valuation purposes, it ensures that Saudi Aramco has a sustained cash flow for many years and is an important factor in shaping the debate within the Kingdom.

2. The Concession and the Reserve Base

Two of the key issues that have attracted much media attention are the ownership of and the size of the reserve base. Regarding the ownership issue, there has been much confusion as to whether the underground reserves will continue to be owned by the State following the IPO. This debate is rather redundant, as what matters is the type of agreement between the State and the operator, which, in the case of Saudi Arabia, is based on a concession agreement. Like any other concession, the holder is given the right to exploit and monetize the underground reserves in return for payment of taxes and royalties to the government.

A short historical account would be useful at this stage. In May 1933, the government of Saudi Arabia and Standard Oil Company of California (Socal) signed a concession agreement for 60 years, which was transferred to a wholly owned subsidiary named the California-Arabian Standard Oil Co. (Casoc). In 1936, the Texas Company purchased a 50-percent stake in the concession and the company name was changed in 1944 to the Arabian American Oil Company (Aramco). In 1948, new investors were brought in: Standard Oil of New Jersey (which purchased 30 percent of the company), and Socony Vacuum (which purchased 10 percent). Starting from 1973, the Saudi government started acquiring a share in Aramco's concession and by 1980 all of Aramco's assets were transferred to the government. Since then Aramco operated the assets on behalf of and for the benefit of the government. In 1988, the Saudi Arabian Oil Company was created by Royal Decree, and the company formally changed its name to Saudi Aramco. According to Article XXIV of the newly established company, Saudi Aramco 'shall enjoy all the privileges and rights provided for under the Arabian Oil Company's Concession Agreement of 29 May 1933 and its all supplementary documents and agreements'. In the absence of any new agreement (the concession agreement would have expired by 1999)[16], Saudi Aramco in effect holds an evergreen concession to exploit the reserves of the Kingdom in return for a stream of income in the form of taxes, royalties and dividends. Hence, the issue that the state will continue to own the reserves after the IPO is not relevant.

Thus, Saudi Aramco, through its IPO, will offer investors an ownership stake in the concession.[17] As recently noted by the CEO of Saudi Aramco, Mr Amin Nasser, the IPO will include the concession,

[15] John Kemp, 'Saudi Arabia's oil reserves: how big are they really?' Reuters, July 11, 2016.

[16] During World War II, the concession was extended for additional six years.

[17] Mr Falih, the Saudi Energy Minister, makes this point very clear arguing that "the intent is definitely to have the reserves as

emphasizing that 'the listing is based on Saudi Aramco maintaining the concession'. This means 'if you have the concession, you have the physical oil'.[18] There was much skepticism as to whether the government will allow external auditors to audit the size of the reserve base and many considered this as one of the key obstacles to the IPO. But against most expectations, Saudi Aramco, in exercising its right as the concession holder, selected two reserve audit companies to review its deposits and confirmed Saudi Aramco's official figure.[19]

The concession agreement does not only apply to the current reserve base, but also to any potential reserve growth. In 1989, Saudi Arabia increased its official estimates from 170 billion barrels in 1987 to 260 billion. According to the BP statistical review, for the period between 1990 and 2015, Saudi Arabia's annual liquid production averaged around 9.8 million b/d or close to 3.6 billion barrels a year. Despite the cumulative production of around 94 billion barrels during this 26-year period, official estimates of the reserves have remained constant at 260-265 billion barrels, mainly achieved through reserve growth from existing fields as a result of advances in technology and less so from new big discoveries. So in the last 25 years, the concession allowed Saudi Aramco to maintain its reserves base constant by capturing the growth in reserves. This privilege will be transferred to the new investors in the company under the current arrangements.

3. Valuation and Saudi Arabia's fiscal outlook

While the size of the reserve base has attracted much media attention, any valuation will not be based on the value of the reserve base. As recently put by Total's CEO, the value of an oil company is 'not a multiplicator of the reserves of the company'.[20] Instead, the company should be valued on the basis of models that discount future cash flows, which depend primarily on the profit per barrel and the quantity of oil produced[21]. The profit per barrel in turn is highly sensitive to the level of taxes and royalties that the government imposes on Saudi Aramco; if the taxes and royalties are high, then the valuation will be low and vice versa. Based on the old system of a royalty of 20% and taxes of 85%, many have shown that the valuation will be far less than the $2 trillion number put forward by Deputy Crown Prince Mohammed bin Salman.[22] For instance, based on a price of $70/b, production of 10 mb/d, a production cost of $8/barrel, 20% royalty payment, an 85% tax rate, and a 70-year production period, Boslego (2017) calculates the net present value of the company only at $251 billion at a 10% discount rate. To achieve a higher valuation, the government has recently cut the tax rate to 50%.[23] But even at a lower tax rate of 50%, Boslego finds that the NPV would increase only to $419 billion. [24] Bloomberg reports that Wood Mackenzie's rough valuation of Aramco's core business is not far from this number at about $400 billion.[25] [26]

Since valuation depends on the tax rate applied to future production it will be affected by the credibility of the tax regime. The newly adopted tax rate of 50 per cent will impose great stress on Saudi Arabia's public finances, which are already strained by current international oil prices. But taxes and royalties are not the only contributions to the Kingdom's finances from Saudi Aramco. The reduction in tax rate

part of the offering, so the reserves monetization will be a right within the concession of Aramco. The state will give Aramco, through the concession, the exclusive right to monetize those reserves and the Aramco IPO will offer investors an ownership in that right". MEES, 'Saudi Aramco IPO Plans Progressing But Key Challenges Lie Ahead, 24 Feb 2017, Vol. 60 Issue 8

[18] John Micklethwait and Javier Blas 'Aramco CEO Says Oil Tax Will Be Cut to Lure Investors to IPO', 17 January 2017.

[19] Rania El Gamal, Reem Shamseddine and Alex Lawler, 'Saudi Aramco's oil reserves confirmed by external audit: sources', Reuters, January 27, 2017.

[20] Javier Blas and Wael Mehdi, 'Saudi Arabia's Oil Wealth Is About to Get a Reality Check', Bloomberg, 24 February 2017.

[21] Osmundsen, P., Asche, F., Misund, B. and Mohn, K., 2006. Valuation of international oil companies. *The Energy Journal*, pp.49-64.

[22] Javier Blas and Wael Mehdi, 'Saudi Arabia's Oil Wealth Is About to Get a Reality Check', Bloomberg, 24 February 2017.

[23] Reuters, 'Saudi Arabia sweetens huge Aramco IPO with tax cut', March 27, 2017.

[24] Boslego (2017), 'Why the Aramco IPO Is Doubtful', Seeking Alpha, February 20, 2017.

[25] Javier Blas and Wael Mehdi, 'Saudi Arabia's Oil Wealth Is About to Get a Reality Check', Bloomberg, 24 February 2017.

[26] Bernstein estimates the net profit per barrel of oil equivalent (boe) from the upstream (including gas sales), refining and petrochemicals segments after payment of taxes (85%) and royalties (20%) at $6.4/boe assuming an oil price of $70/barrel. This falls to $4.3/boe under the assumption of an oil price of $50/barrel. See David Keohane, 'Saudi Aramco, a race to the bottom?' FT Alphaville, June 6, 2016.

designed to support the IPO valuation could be partially offset by, for example, the state, as majority shareholder, calling for maximum dividend payments on a more frequent basis. While this is good news for investors seeking large dividends, it undermines Saudi Aramco's ability to retain funds inside the company and would disrupt the government's existing stable cash flow streams based on royalties and taxes in favour of uncertain streams of income. To start with, the tax revenue reductions cannot be fully replaced by dividend payments and whether 'the cut in the tax paid by national oil firm Saudi Aramco to the government will not hurt state finances'[27] as claimed by the Saudi finance minister would depend on whether the funds generated from the partial sale of Aramco could be directed towards investments that generate high enough profits to compensate for the loss in revenue due to lower taxes.[28] Also the regularity of the alternative income streams matter. Saudi Arabia is not in a position to ensure a smooth flow of dividends from its global investments, which will affect the reliability of the revenue streams accruing to the government, imposing further stress on public finances.

As the Kingdom changes from an era of buoyant revenues to one where social and developmental expenditure is subject to tight budget constraints, a tax rate of 50 per cent or lower may not be sustainable. Therefore, the government by reducing the tax to lower levels in support of the IPO may not necessarily achieve the desired higher valuation, as investors, recognising the unsustainability of a lower tax regime, will reduce the shares' valuation by applying a higher discount rate to the stream of cash flows.

The government could enter into legally binding contracts to fix tax/royalty rates to show its firm commitment to low taxation, but these commitments are not credible in the long-term, will expose the company (and the country) to unnecessary legal risks, and most importantly will undermine the sovereignty of the State by giving up on a fundamental power to adjust taxes.

The above discussion highlights a key fact: the IPO of Saudi Aramco can't be isolated from transformations in the rest of the economy and that there are key trade-offs that the Saudi decision makers can't ignore. For instance, reducing the tax and royalty rates on Saudi Aramco would increase the company's valuation, but would squeeze substantially government finances, which still rely heavily on oil revenues. Therefore, the economy has to adjust to lower oil revenues, by boosting non-oil revenues, cutting current and capital spending, borrowing from local and international markets, and above all diversify the economic base, which according to the current leadership can only be achieved through a successful IPO of Saudi Aramco (discussed in the next section). This reflects clear circularity in approaching the fiscal sustainability issue.

But the IPO is also linked to other elements of the reform agenda. Hitherto significant volumes of Saudi Aramco's liquid output are sold in the domestic market at low prices, so reforming domestic prices would improve the valuation of the company, thus putting pressure on the government to implement its energy pricing reform agenda as quickly as possible. But this would come at a cost, which need to be offset by designing appropriate and costly mitigation strategies. The rise in energy prices will negatively impact households' incomes both directly, as energy is part of the consumer's basket and indirectly as prices of other commodities that use energy for production and transportation will also increase. The compensation scheme currently envisioned by the government will not compensate fully for these declines in real income. There is also a high risk of second-round inflation effects, especially if the increase in energy prices results in both Saudis and non-Saudis renegotiating their contracts for higher wages, and raising inflationary expectations. Loss of purchasing power due to first and second round effects plus all the other austerity measures being implemented, such as introducing VAT and increasing administrative fees, will lower economic growth and squeeze household incomes. Concerns about social discontent resulting from such unpopular policies would increase the political risk discount factor applied by investors.

The importance for the IPO valuation of reform of Saudi Aramco's output pricing has implications for the Kingdom's industrial strategy as well as the level and distribution of household real income.

[27] Reuters, 'Saudi finance minister says cut in Aramco tax won't hurt state finances', March 27, 2017.
[28] In effect this means that the government should achieve a better rate of return on its investments than those investors who bought Aramco shares.

Currently the company's entire gas output is sold to the domestic market at low prices, but at higher gas prices the country's whole industrial strategy based on cheap energy and on the extension of the value chain by building refineries, petrochemicals, industrial parks needs to be substantially revised, as few of the existing industries will be able to survive a big gas price shock. High feedstock prices will also reduce the attractiveness of Saudi Arabia as a destination for foreign investment in energy intensive industries. If the Saudi government is to keep gas prices low, then it has to compensate Saudi Aramco for selling gas below its opportunity cost, putting additional pressure on government finances.

Pricing and tax/royalty issues illustrate the centrality that the strategy and policies of the Saudi government have in influencing the valuation of a successful IPO. But these are not the only sources of political risk that investors need to take into account. Saudi Arabia is a key player in international oil markets; historically it has assumed a key role in shaping OPEC policy and is the only country with an official policy to hold spare capacity. Changes in oil policy, which are sovereign decisions, can have a direct impact on the company's valuation through its impact on production levels and prices. While one could assume that the government will take decisions for the benefit of the company (for instance by cutting output to increase prices), Saudi oil policy has come under criticism in recent years, reflecting the divergence of views regarding the effectiveness of Saudi oil policy in face of a structural shock. For instance some have argued that OPEC's current decision to cut output following the supply shock of US tight oil development is wrong and destroys value.[29]

At a more fundamental level, the IPO of Saudi Aramco raises a more general question about the role of the energy sector in the future of the Kingdom. The main motivation behind the IPO is a strong desire to diversify away from oil. Yet, the fact remains that the Saudi economy, including the non-oil private sector, still relies heavily on government spending that is fuelled by oil revenues. Also, the Kingdom's industrial and diversification strategy so far has primarily been based on building energy intensive industries and adding value by extending the value chain to refining, petrochemicals and industrial parks. The new leadership however may be less convinced that the energy sector will play a key role in diversification and act as a bridge to the new vibrant economy. Some have gone further arguing that there may be a belief among the new Saudi policymakers that oil underground is a depreciating asset as they 'realize that demand is likely to run out before supply and it makes more sense to deplete their own reserves ahead of others'[30]. This type of thinking implies that oil is simply another asset, which should be monetized, perhaps at a higher pace, especially if there is a belief that this is a depreciating asset. So the current listing of the 5% may be just the beginning, especially if Saudi Aramco does not achieve high valuation. But this sends bearish signals about the future role of the energy sector within the Kingdom and about the long-term demand for oil and hence the long-term oil price, affecting negatively the valuation of the company.

4. Financial Diversification versus Diversifying the Economic Base

Apart from the issue of the valuation, there is also some confusion regarding the motivation behind the partial sale of Saudi Aramco. One of the reasons mentioned for the IPO is that it will push Saudi Aramco to become more transparent and more accountable by overhauling its corporate governance and financial reporting systems and exposing Saudi Aramco to closer scrutiny from financial markets. In an interview to the Economist, Deputy Crown Prince Mohammed bin Salman argued that the IPO of Saudi Aramco 'is for the interest of more transparency, and to counter corruption, if any, that may be circling around Aramco'.[31] In an interview to Al-Arabiya, he stated that 'People…. were unpleased with the fact that Aramco's file and data are undeclared, unclear, and non-transparent… If Aramco were to be listed in the market…. everything must be announced as well, and it will be under the supervision of all the

[29] Yasmin Helal (2017), 'OPEC's strategy to lift prices is wrong: Experts', arabianoilandgas.com, February 28, 2017.

[30] David Keohane, 'Saudi Aramco, a race to the bottom?' FT Alphaville, June 6, 2016.

[31] The Economist, 'Transcript: Interview with Muhammad bin Salman', January 6, 2016.
http://www.economist.com/saudi_interview

Saudi banks, analysts, and thinkers…Today, Aramco is being dealt with as if it were a limited commercial facilities company, and this is very dangerous'.[32]

While it is true that listing on the stock exchange implies that Saudi Aramco would be forced to open its books, uphold its governance structure, and become more transparent, there is nothing to prevent the current owner (i.e. the State), even under the current structure, from issuing a directive that orders Saudi Aramco, based on best international practices, to increase the transparency of its operations for instance by publishing annual accounts according to international standards, auditing its reserves on a periodic basis and making all the information available to the public and analysts. So increased transparency can't be the main reason behind the IPO. If the issue is about poor governance, lack of accountability and inefficiency as suggested by some in the local media[33], the listing of the company will not necessarily resolve these issues as the case of Petrobras vividly demonstrates.

Another motivation behind the IPO is that 'a successful flotation is essential … to wean the kingdom off oil… which aims to diversify the Saudi economy and create jobs'.[34] But what the IPO will help achieve is diversification of the sources of income (referred here to as financial diversification), which is fundamentally different from 'economic' diversification. The proceeds of the IPO of Saudi Aramco will most likely be deposited in the Public Investment Fund (PIF) to be invested in non-oil industries such as technology, industry and services. The Public Investment Fund has already received a 100 billion-riyal ($27 billion) transfer from official reserves [35] and has recently changed its investment strategy to acquire stakes in high-tech international companies Uber and Softbank[36]. There have also been suggestions that the government's shares of Aramco could be transferred to the PIF, but this seems unlikely as such transfer will increase the legal risk facing the country, as Sovereign Wealth Funds (SWFs) do not benefit from the immunity that states enjoy and in some jurisdiction like in the US could be subject to lawsuits.[37] The transfer of Saudi Aramco shares to the PIF can also potentially have a fundamental impact on the governance structure of the company, the decision-making process and the main bodies that set the investment strategy and the future direction of the sector. An alternative would be for the government to allocate a certain percentage of Saudi Aramco's income directly to the PIF, which is not currently being considered.

The idea of establishing sovereign wealth funds to diversify sources of income is not new in the region. Other GCC economies such as Kuwait, Qatar and the UAE have quite large and active sovereign wealth funds. But as the experience of other neighboring countries has shown (Kuwait and Qatar are vivid examples), diversifying sources of income through SWFs does not necessarily help diversify the economic base and does not create the much-needed jobs especially if the funds are allocated to foreign investments, as the domestic economy may not be deep enough to be able to absorb large investments without affecting its quality and/or as domestic industries face many bottlenecks such as the lack of necessary skills and human capital to absorb large inflow of capital. The recent deal between Soft Bank and the PIF to launch one of the largest tech investment funds in the world could be an indication that most of the investments will be allocated towards tech sectors outside the Kingdom, with limited impact on the real economic structure of the economy. According to a recent report, the PIF has already channeled about $50 billion into investments abroad, the bulk of it into technology with some

[32] Al-Arabiya, 'Full Transcript of Prince Mohammed bin Salman's Al Arabiya interview', 25 April 2016. http://english.alarabiya.net/en/media/inside-the-newsroom/2016/04/25/Full-Transcript-of-Prince-Mohammed-bin-Salman-s-Al-Arabiya-interview.html

[33] See for instance, Abdullah Naser Fawzan, 'Aramco Laysat Bakara Muqadassa', Jareedat Al-Riyad, 27 February 2017, http://www.alriyadh.com/1574063.

[34] Anjli Raval, 'Saudi Aramco gets ready for 'no ordinary IPO'', Financial Times, January 8, 2017.

[35] Matthew Martin and Deema Almashabi, 'Saudi Arabia Boosts Wealth Fund With $27 Billion Injection', Bloomberg 30 November 2016

[36] Simon Kerr 'Sleepy Saudi sovereign wealth fund stirs and shakes global finance' FT, 27 January 2017 (downloaded 9 March 2017 from https://www.ft.com/content/bd3d7c34-b877-11e6-961e-a1acd97f622d)

[37] For instance, the U.S. Court of Appeals has recently ruled that SWFs are not automatically immune from securities fraud claims, even if the underlying alleged misstatements were made outside the United States to non- U.S. investors. See Jonathan Stempel, 'U.S. Court Says Foreign Wealth Funds Not Always Immune from U.S. Fraud Claims', Reuters, February 8, 2016

warning that there is ‘a risk that PIF are chasing the bright lights’, and instead ‘they need to pay attention to valuations’. The plan is for the PIF to use half the assets not tied up in Saudi Aramco to invest abroad by 2020, up from 5 percent.[38]

Also the record of Middle East SWFs to engage in the governance of their portfolio investments has been poor, which may expose them to serious financial and reputational risks. As recently noted, ‘the only way SWFs can safeguard wealth for future generations – fulfilling the purpose for which they were established – is to participate meaningfully in corporate governance’.[39]

Another key objective of many SWFs in the region is to earn the government a higher rate of return than on foreign exchange reserves since their investment mandate emphasizes high risk-return profile. But the rate of return on foreign exchange reserves should not be the benchmark for comparison. The topic of the merits of the IPO as a source of finance for Vision 2030 is beyond the scope of this short paper, but it is possible to make the following observation. It would be legitimate to consider financing Vision 2030 from borrowing on global markets, and use a risk adjusted sovereign rate as the cost of financing and thus a useful comparison would then be the likely valuation discount rate in the IPO (a measure of the opportunity cost of those funds) against the cost of sovereign borrowing for Vision 2030. The recent experience of Saudi Arabia in accessing the bond market has been very encouraging. Last year, Saudi Arabia managed to raise $17.5 billion in the biggest ever bond sale from an emerging-market (the offer was oversubscribed) with very attractive rates with five year- bonds yielding 135 basis points more than similar-maturity US Treasuries, 10-year notes at a spread of 165 basis points and 30-year securities at 210 basis points.[40]

Another alternative would be for the government to raise funds by selling part of the concession currently owned by Saudi Aramco directly to other oil companies. The experience of Abu Dhabi is quite interesting in this respect where the government successfully renewed its onshore concession and sold 40 percent of the ADCO concession to a large array of companies including Total, BP, CNPC, and other Asian investors, while keeping 60% in the hands of ADNOC, the national oil company.[41]

Another important criterion is whether the PIF investments can achieve better social returns through accelerating the diversification of the Saudi economy. Only time will tell. But given that most of the proceeds will be channeled through the PIF, the success of the IPO should not be assessed separately from issues such as the performance of the PIF, its governance structure, the transparency in the decision making process, the quality of its investment portfolio, the competence of the fund managers, and the accountability of the management team. For instance, the PIF has recently invested $3.5 billion in car-booking app Uber, which according to the Financial Times reflects ‘two core mandates of its sovereign wealth fund: generate growth and aid sectors that can help the oil-dependent economy to diversify’.[42] Whether such an investment will succeed in meeting these two objectives should be straightforward to assess.

While the IPO of Saudi Aramco is meant to underpin the creation of a large SWF, Vision 2030, centred on diversifying the economic base and creating jobs, is rather broad. For instance, Vision 2030 is centred on increasing the role of the private sector and the role of small & medium enterprises (SMEs), which are key to generate jobs outside the public sector. But little support has been provided so far for these sectors. Instead, the private sector continues to be squeezed and the non-oil sector has recently been contracting, with some key sectors such as construction particularly hit hard as a result of reduced activity and delayed payments. The government has also slashed its capital spending which led to the cancelation of many big infrastructure projects. In 2016, gross fixed capital formation contracted by a massive 17.3% compared to a growth of more than 8% back in 2012.[43] Sharp contractions in

[38] Matthew Martin, Glen Carey, and Dinesh Nair, ‘Help Wanted in Saudi Arabia: Savvy Investors, Bloomberg March 2, 2017.
[39] Alissa Amico, ‘The Promise of Middle East Sovereign Wealth Funds’ Project Syndicate, February 25, 2017.
[40] Arif Sharif, ‘Saudi Arabia issues record £17.5bn of government debt to raise money after oil price slump’, The Independent, 20 October 2016.
[41] MEES, ‘Abu Dhabi Finalizes Onshore Concession With Chinese Partnership’, 24 Feb, Vol. 60 Issue 08
[42] Simeon Kerr, ‘Saudi Arabia’s Uber investment is a bet on economic diversification’, Financial Times, June 5, 2016.
[43] General Authority for Statistics, 2016 National Account Indicators, Table 8.

infrastructure investment will undermine the objectives of Vision 2030, as these projects are essential for diversifying the economy and supporting private sector growth.

5. Conclusions

The above discussion shows that the IPO of Saudi Aramco is closely tied to the current reforms and adjustments in the domestic economy and any setbacks in the reforms will have a big impact on the timing of the IPO and on valuation. It also shows though that while there has been massive effort by the government to remove the technical barriers to the IPO, some fundamental questions remain unanswered. Will the IPO of Saudi Aramco contribute to economic diversification that is needed to generate the much-needed jobs? The jury is still out there. Given that the partial sale of Aramco will most likely provide the bulk of funds to the PIF, it is quite surprising that PIF investments and the attractiveness of potential alternative sources of funding have not come under closer scrutiny.

But the IPO of Saudi Aramco reflects a more fundamental question about the future role of the Saudi energy sector. As recently emphasised by Deputy Crown Prince Mohammed bin Salman, 'oil should be treated as an investment, nothing more, nothing less. It is an investment. [Saudi Aramco] is a company that has a value…You must own it as an investment. It should not be owned as a primary commodity or a major source of income…The income of the kingdom of Saudi Arabia will be generated from investment instead of oil. Technically on paper, our income will be provided by investment'.[44] This view represents departure from past thinking where the oil sector has been seen as a major source of income, the bedrock of the economic and political stability of the country, and a key sector to promote diversification and industrialization and add value to the economy. But this new way of thinking also implies that the ultimate success of the IPO of Saudi Aramco will be linked to the quality of the investment decisions and whether the investment of the proceeds of the partial sale of Aramco will be used to transform the Saudi economy. Thus, it is no surprise that the IPO of Saudi Aramco is creating much uncertainty and ease among substantial parts of the public and the business community, perhaps within the energy sector itself. Few questions must be in most Saudis' minds: What if these investments don't pay off? What if Saudi Arabia ends up selling its 'crown jewels', but fails to diversify its economy yet again? It is such type of questions that are currently missing in the debate.

Thus, in approaching the IPO, Saudi decision makers should not be distracted from the fundamental issues:

- The IPO of Saudi Aramco is linked to the rest of the transformations and reforms that are taking place in the economy and that the two should not be treated separately;
- The IPO of Saudi Aramco involves investment in the concession and hence the right to monetize underground reserves and without changing the current concession agreement, it gives investors the right to the current proven reserve base and any potential growth in reserves;
- The valuation should be realistic and reflect the fact that investors consider Saudi Aramco to have substantial political risk, which will affect its valuation. No foreign investor will value Saudi Aramco more than Saudis themselves;
- A trade-off exists between government's plan to reduce taxes and royalties paid by Saudi Aramco and the value of the firm. Investors, recognising the unsustainability of a low tax regime, will reduce the shares' valuation accordingly by applying a higher discount rate to the stream of cash flows. Hence, lowering the tax rate will not result in proportionate increase in the value of the firm, especially if the government decides to sell larger stake in the company in the future;
- The merits of the IPO as a source of finance for Vision 2030 should be critically assessed against other alternatives for instance such as raising debt in international markets or selling part of the concession directly to international oil companies and other investors;

[44] Al-Arabiya, 'Full Transcript of Prince Mohammed bin Salman's Al Arabiya interview', 25 April 2016. http://english.alarabiya.net/en/media/inside-the-newsroom/2016/04/25/Full-Transcript-of-Prince-Mohammed-bin-Salman-s-Al-Arabiya-interview.html

- The success of the IPO should not only be determined by how much capital does the partial sale of the company generates, but by how this capital is employed. This requires that the PIF rise to the challenge and adopt a more sophisticated investment strategy which generates higher return, develop appropriate benchmarks against which its performance could be measured, increase transparency and put in place a governance structure which makes it accountable;
- The energy sector will continue to play a key role in the future of the country at least for the foreseeable future and therefore a serious rethinking of the role of the energy sector in the current diversification efforts is needed;
- Finally, Saudi policymakers should not forget that the main objective of the IPO is to help accelerate diversify the economy that is needed to create the much needed jobs. Approaching the IPO as a tool for financial diversification and creating a financial powerhouse is bound to bring much disappointment and discontent and would constitute yet another lost opportunity, but this time perhaps for good.

Acknowledgements

We would like to thank Ali Aissaoui, Giacomo Luciani, and Steffen Hertog for their valuable comments. A first draft of the paper was presented at the 2nd Annual Workshop: GCC Countries in the New Oil World, organized by the Center on Global Energy Policy at Columbia University. Bassam Fattouh would like to thank the participants in the workshop for their valuable thoughts. All remaining errors are ours.