Higher demand creates an incentive for companies to supply helium in the market

While the United States has maintained a steady rate of consumption of helium, there is growing demand from the global market. There has been an increase in global consumption, most notably, a 10% rise in demand from Europe and the Middle East, and a 17% increase from Asia (Anderson 2017). Additionally, the helium market is experiencing a significant shift in who is consuming helium. For instance, there is a widespread demand for helium in superconductor technologies because of its unique characteristics like its cryogenic properties. These consumers account for about 30% of global helium consumption today and are expected to rise (USGS 2018). Due to helium’s special practical applications, it has an “inelastic” price elasticity of demand. In other words, even as prices rise, consumers will continue to demand helium. With the number of consumers growing, both in demographics and in new industries discovering additional uses for helium, it is expected that private resource extraction companies will capitalize on a growing market and the opportunity for profit.

A decrease in supply contributes to extraction companies investing in new projects

The helium market is simultaneously experiencing diminishing supplies that cannot keep up with the demand. A prominent explanation for the decrease in supply originated from the Helium Privatization Act of 1996, which mandates that the Bureau of Labor Management must sell its stocked reserves by 2015. Without a helium reserve, the helium market severely feels the shock of supply disruptions. This quickly becomes a national security crisis when the US, who uses helium for military capabilities, is forced to rely on global suppliers like Russia and Qatar. This fear was realized by an embargo of Qatar in 2017 that temporarily cut off significant supplies. The US was unable to replace enough helium to match domestic consumption (Anderson 2017). The shortage raised concern for consumers and caused helium companies to realize a market gap they can address by producing more helium. The Qatar crisis led to swift action by the Federal government through the Helium Extract Act 2017 to protect national security interests. It encouraged helium projects by private companies on federal lands by issuing oil and gas leases. Helium companies like AirProducts publicly stated this act contributed to their decision to make helium-focused investments on federal land (Wagaman 2017).

High prices are expected long term because of the complex market structure

While current high prices for helium are due to high demand and limited supply, helium prices were initially cultivated by government actions structuring the private market. The Federal Reserve indirectly sets artificially high prices in the private market through their auction of Bureau of Land Management (BLM) reserves. Private companies use these prices as a baseline when the BLM sets prices, not based on free market equilibrium, but at a price high enough to recover their initial helium infrastructure debt (National Academies 2010). Prices are likely to continue to rise because of the concentrated structure of the helium market.
market. Few companies exist throughout the supply chain because helium extraction is expensive. Helium sources are typically derived as a byproduct from a more economically profitable natural gas extraction. Once extracted, crude helium must be refined from natural gas, creating barriers to entry within the refining stages. In fact, there are only eight facilities in the US that refine the entire supply of helium (National Academies 2010). Additionally, refining of the federal reserve must take place at a location that is connected to its helium pipeline infrastructure, limiting the number of companies to four that can actually process federally-sold crude helium. In result, the concentration funnels the supply of helium to a point that limits supply.

The present economic landscape for helium is favorable to privatization trends

Most likely, this environment will prompt private companies who already produce helium to explore future helium extraction as potential for a profitable good. This is already evident in recent federal land leases conducted by the BLM in September, 2018. In Utah, 69 parcels of land were auctioned for a grand total of almost $2.8 million (BLM 2018), with North American Helium as the highest bidder. In Arizona, 37,000 acres were leased in the Holbrook Basin for helium extraction (McCrory 2018). The land auctions provide evidence of the privatization of the helium market which can be explained by the amalgamation of high demand, limited supply, and concentrated market structure.


