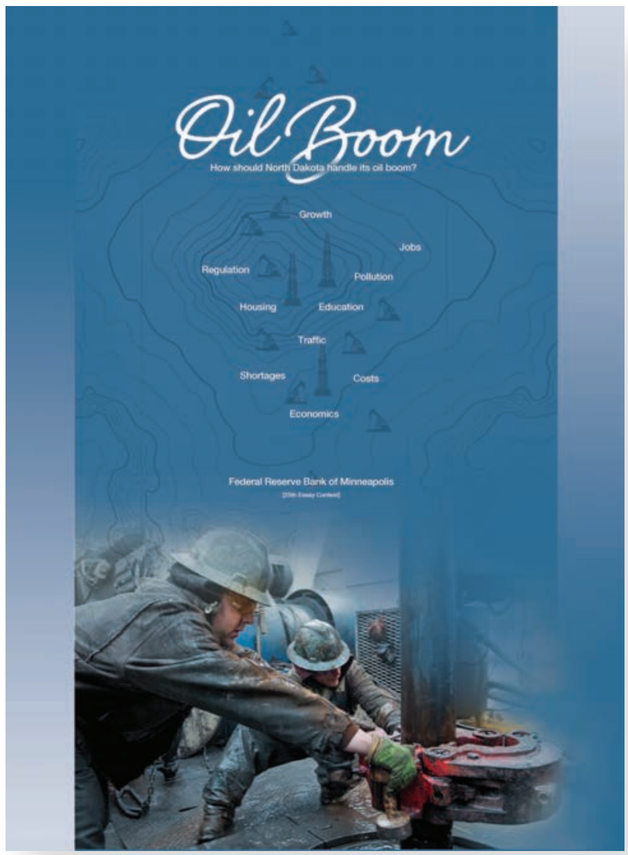
2012–2013 Student Essay Contest
North Dakota Oil Boom



Essay Question

How should North Dakota handle its oil boom?

This spring the Minneapolis Fed held its 25th Annual Student Essay Contest, which is open to all high school students in the Ninth Federal Reserve District. The contest drew 291 essays from schools throughout the district. The winning essay is published here. Other top essays can be found at minneapolisfed.org under the Student Resources section of the Community & Education tab.

Thirty finalists each received $100. The third-place winner received an additional $200, and the second-place winner an additional $300. The first-place winner, William Thomas of Roseville Area High School in Roseville, Minn., received an additional $400 and a paid summer internship at the Minneapolis Fed.

Over the past few years, oil drilling and extraction have turned North Dakota into the nation's second-largest oil-producing state, and the one with the lowest unemployment. While this boom has been good for many, it has also raised a number of economic questions about the consequences of rapid growth and about the long-run health of the state's economy. Entrants in this year's essay contest were asked to use sound economic logic to evaluate economic issues surrounding the oil boom.

Student Essay Contest Winner

Turning the North Dakota Oil Boom into Long-Term Economic Growth

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North Dakota's current oil boom is not its first and probably will not be its last. The most recent previous boom happened in the 1980s. For a few years, oil brought marvelous wealth to the region's economy. Then oil prices declined, production stopped and oil workers departed, leaving behind ghost towns and plummeting wages (Brown 2013). Similarly, the current oil boom in western North Dakota cannot last forever. Oil prices are notoriously volatile (Karl 2007), and a significant decline in oil prices could easily remove producers' incentive to extract oil in the region because such extraction requires the process of hydraulic fracturing, or fracking, which is quite expensive compared with other methods of crude oil production (Mahon 2005). Even if oil prices continue to increase for several decades, North Dakota's oil reserves are finite: Although definitive estimates of the amount of oil in the Bakken reserves do not exist, the oil there must run out eventually. Therefore, North Dakota's oil boom must be viewed as a foundation for future growth in the region, not a permanent source of income. In order to make North Dakota's new economic growth sustainable in the long term, it is imperative that policymakers do two things with oil tax revenues: save funds so that they can be used to stimulate the economy when the boom ends, and spend money in ways that encourage economic diversification.

The greatest risk to North Dakota's long-term economic health as a result of the oil boom is a phenomenon known as "Dutch disease"—the situation that results when a natural resource industry absorbs so much labor and capital that other industries become less competitive. Then, when oil production eventually declines, those other industries are unable to create enough growth to make up for the loss of the natural resource industry. This tragedy occurred in the Netherlands (hence, the name "Dutch disease") in the 1960s: The country experienced extraordinary growth as a result of its discovery of natural gas deposits in the North Sea, but its other industries suffered, its economy became dependent on natural gas exports and its government faced enormous budget deficits when the gas deposits ran out (Ebrahimzadeh 2012). Symptoms of Dutch disease can already be seen in the communities of western North Dakota. The increase in oil production has created an astronomical amount of demand for skilled labor, and the increase in supply as people migrate to the region has not kept up. As a result, wages have skyrocketed to levels that local businesses cannot afford to pay, and many have lost employees who sought higher-paying jobs in the oilfields (Davies 2012). Thus, the oil industry's absorption of labor is harming other sectors of North Dakota's economy. When the oil boom ends, North Dakota's economy will be crippled if there are no strong industries to replace the oil industry.

One way to begin to deal with Dutch disease is to create a fund for oil tax revenues that will not be spent until oil production declines. Chile has such a system in place for its substantial copper revenues: When copper prices are high, the government saves the resulting revenue in sovereign wealth funds; when copper prices are low, the government uses the funds to finance deficit spending that stimulates the Chilean economy in order to compensate for the loss of income from the copper industry ("Chile" 2013). North Dakota's state government should implement a similar system for revenue from taxes on oil companies. It could save these revenues in a fund, and then, when oil production declines, it could spend the money to stimulate the state's economy, helping other industries to thrive and continuing the growth that the oil boom initiated. In fact, voters have already approved a constitutional amendment that will place 30 percent of oil tax revenues in a fund called the Legacy Fund, which cannot be spent until 2017 ("North Dakota Legacy Fund" 2013). However, the conditions under which this money can be expended should be stricter; rather than setting a definite date on which the savings can be spent, the Legislature should decide not to utilize the fund until oil production declines by a specified amount. This will ensure that funds will be available to temporarily support North Dakota's economy when the oil boom eventually ends.

The state government of North Dakota should also direct spending and tax cuts toward programs that will contribute to the health of the entire state economy so that the state does not become dependent on the oil industry. Infrastructure is one such program. North Dakota's infrastructure is badly in need of improvement due to the increased traffic that has resulted from population growth and oil trucks (Manning 2013). Better infrastructure will make the area much more attractive to all types of businesses. Indeed, the Federal Reserve Bank of San Francisco has estimated that every dollar of federal highway grants that a state receives increases a state's gross product by two dollars (Madrick 2013). The state could also use some of its new oil tax revenues to provide tax relief to manufacturing companies and small businesses to help them deal with the high wages that the oil industry has brought to the state. When the oil industry leaves, it will leave a skilled workforce behind; these policies will ensure that North Dakota can continue to profit from that workforce for many years into the future. Otherwise, if those workers are unable to find employment without the oil industry, they will leave the state.

The seemingly miraculous economic growth that fracking has recently brought to North Dakota will be ephemeral if other industries are not able to replace the oil producers when the oil boom ends. By saving money for the future and promoting the health of all sectors of the state economy, North Dakota can use its new wealth responsibly and avoid falling victim to Dutch disease. If this does not happen, the current oil boom, like the state's previous oil booms, will end without creating permanent prosperity. R

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