From Oil Boom to Sustainable Economic Growth

By Jim Lee

Connecting the long road to sustainable growth from the current economic boom are physical and human capital accumulations, among other things. Workforce development appears to be the weakest link in South Texas, contributing to historical income and skills gaps with the rest of the nation. To bridge such gaps, local higher education institutions and workforce training facilities could accelerate their student enrollments and graduation rates by multiple folds. Yet a more effective alternative is to focus on academic programs of professional degrees, such as engineering and medicine, which generate higher "wage premiums."

Historically, Corpus Christi’s economic fortunes have followed closely the recurring boom and bust of the world oil market. The oil and gas industry has been a key economic engine of the metro area. While the nation as a whole is a net oil consumer, Corpus Christi and the state of Texas as a whole are net oil producers, which have recently been benefitting from rising oil prices.

**Oil Price and Corpus Christi Economy**

*Sources: Bureau of Economic Analysis, and Freelunch.com.*
Oil Boom and Bust

Global energy crises during the early and late 1970s sent the U.S. into severe recessions. Yet soaring oil prices in the 1970s through their peaks exceeding $37 a barrel in 1980 elevated both household income and employment growth in Corpus Christi. As the nation struggled through the adverse economic effects of energy price shocks, annual income growth in Corpus Christi topped 10 percent during those periods.

With a weak global economy, oil prices subsided during the first half of the 1980s, ending with a sudden collapse to below $15 per barrel in 1986. That global oil bust reversed the economic fortunes of Corpus Christi, which remained stagnated during the following two decades as oil prices in constant dollars stayed flat. In 2008, oil prices skyrocketed to $90 as a result of rising demand from emerging markets overseas, notably China and other Asian countries. Despite the global recession in 2009 in the aftermath of the U.S. financial crisis, advances in shale oil drilling technology and the prospect of returning to the pre-recession price levels both contributed to another round of oil boom.

The current economic boom in Corpus Christi is unprecedented at least in the context of the scope of the impact. For the first time, Corpus Christi is affected by oil and gas drilling activity in its backyard. In addition to providing supporting services for oil and gas exploration and drilling, a substantial portion of the oil and gas supplies in the Eagle Ford Shale region is processed through the facilities in Corpus Christi or shipped through its port. Industries in the Corpus Christi Port District, including oil and gas refineries and petrochemical plants, are flourishing.

Growth Magic

An oil boom by its very nature cannot last forever. The intimate relationship between the local economy and the world oil market implies that the current economic boom in South Texas will not sustain without continued improvements in the fundamental factors for long-term economic growth.

The magic of economic growth is no magic at all. Instead of natural resource endowments, long-term economic growth results from technological advances and accumulations in human capital and physical capital, all of which also enhance labor productivity. The local economic boom during the 1970s did not result in a permanent lift in Corpus Christi’s overall standard of living because those ingredients for long-term growth were largely absence.

Annual Average Wages, Constant Dollars

Employees’ productivity is typically reflected in their wages. Despite currently record job growth and income growth, wage earnings among local residents today remain more than 10 percent behind the national average as in the past. This wage gap widened over time from the early 1980s through the most recent national recession ending in 2009. The persistently subpar local wages are attributable to relatively low education attainment and skill levels of the local workforce. In other words, human capital was the weakest link between the area’s economic boom and its long-term growth path.

Source: Bureau of Economic Analysis.
Closing the Wage Gap

Despite an increase in the local population with a college degree by 2 percent over the past decade due in part to increased enrollments at the area’s institutions of higher education, the share of college graduates in Corpus Christi today remains appreciably below the national average. The metro area has 6 percent fewer bachelor’s degree holders than the rest of nation does. One in five local residents at least 25 years old have not finished high school, compared to 12 percent for the U.S.

<table>
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<th>Education Level:</th>
<th>Corpus Christi</th>
<th>U.S.</th>
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<td>2012</td>
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<td>9th - 12th Grade</td>
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Education as the Weakest Link

One way to bolster a region’s labor productivity and thus wage earnings is workforce development through education or skills training. According to the data of Economic Modeling Specialists International (EMSI) Analyst, the so-called “wage premium” for college degree holders working in Corpus Christi is about $14,000 for Del Mar College graduates, and $21,000 for Texas A&M University-Corpus Christi graduates. About 60 percent of graduates from the university and nearly all Del Mar graduates have found employment within South Texas. Given these data and a number of simplifying assumptions, some back-of-the-envelope calculations suggest that, other things being equal, the current wage gap would be eliminated if the area’s community college enrollment expands by four times, while the university enrollment expands by 16 times.

While expanding college enrollments by multiple times seems a formidable goal, those two local institutions are already heading in that direction. In particular, Texas A&M University-Corpus Christi has adopted a strategic plan, called Momentum 2020, which includes a goal to attract 15,000 students within the next five years. This implies that the university’s enrollment could double by 2025. Should its student body expand twice as fast as its current projection, the deficit in local education attainment would diminish by 2035.

High-Paying Jobs

Enlarging the overall size of college enrollment is, of course, one of myriad ways to close the local income gap. A more effective alternative to boosting wage earnings is to focus on high-paying occupations and their skills. The “wage premiums” among workers with professional degrees, such as accounting in business and engineering in sciences, are substantially higher than those for non-professional degrees like history. For instance, the hourly wages for mechanical engineering graduates in the Coastal Bend currently average at just below $40, which is more than twice as much as the average local wage rate. As such, if the local university were to expand its academic programs solely in professional degrees or fields that would help graduates land high-paying jobs, then the community’s wage gap would also be closed within the next 20 years—the same amount of time the university must take by doubling the rate of its planned enrollment growth with its existing academic programs.

Plan CC

The City of Corpus Christi is in the process of developing a community-wide strategic plan for the next 20 years, dubbed Plan CC. One priority of this plan should be to enhance the community’s standard of living. With hindsight, this goal cannot be realized without raising its labor productivity and regional competitiveness to meet the workforce demand of the 21st century marketplace. To this end, additional investment in workforce development should be part of the community’s long-term action plan. Building a skilled workforce also fosters the region’s occupational diversity, which in turn makes the Coastal Bend economy less vulnerable to a downturn should its local oil and gas industry suffer an eventual downfall.
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