ACCESS NUMBER: 30951-85252

STUDY TITLE: Accounting for Economic Change in the Gulf of Mexico: Developing a Comparative Context for Regional Economic Analysis and History

REPORT TITLE: Accounting for Socioeconomic Change from Offshore Oil and Gas: Cumulative Effects on Louisiana's Coastal Parishes, 1969-2000

CONTRACT NUMBER: 1435-01-99-CA-30951-85252

SPONSORING OCS REGION: Gulf of Mexico

APPLICABLE PLANNING AREAS: Western, Central, Eastern

FISCAL YEARS OF PROJECT FUNDING: 2003, 2004, 2005, 2006

COMPLETION DATE OF REPORT: July 2006

COSTS: FY 2003: \$103.52; FY 2004: \$24,278.12; FY 2005: \$75,186.00; FY 2006:

\$39,959.36; CUMULATIVE PROJECT COST: \$139,527

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KEY WORDS: Gulf of Mexico; offshore; Louisiana; oil; natural gas; socioeconomics

BACKGROUND: The vicissitudes of the oil and gas industry usually are seen as the driving if not dominating force in the evolution and performance of the economy spread along the Gulf of Mexico (GOM)—especially in Louisiana and Texas. Some give oil and gas much of the credit for these states' economic successes, for others the cumulative effect of the industry's activity has been to create not only environmental but also economic and social problems.

As exploration and production in the region have shifted to the petroleum resources located offshore on the outer continental shelf (OCS) under federal rather than state jurisdiction, the socioeconomic effects of OCS development on coastal economies and communities have become a relevant incarnation of this controversy.

To understand the magnitude and duration of the effects that OCS development may have had on the Gulf Coast economy, other changes in the national and regional economy affecting the region need to be accounted for and made comparable. Without a comprehensive perspective that accounts for changes in the wider regional and

national economy, the relationship between changes in the offshore energy sector and changes in the economies of coastal states and communities can be distorted. A narrow, two-sided comparison of trends and events on the OCS and trends and events in coastal states and communities can result in an illusion of causality inconsistent with either economics, history, or, occasionally, common sense.

OBJECTIVES: The goal is to understand the effects of the development of the reserves of oil and gas located on the outer continental shelf under federal jurisdiction on the economies of the communities located in the adjacent coastal parishes of Louisiana.

DESCRIPTION: Growth in per capita personal income in 19 coastal parishes in Louisiana is compared with 45 non-coastal parishes over the 1969 to 2000 time period. The time period is divided into the 1969 to 1980 domestic "energy boom," the 1980 to 1985 "price erosion and collapse," the 1986 to 1990 "recovery" and 1991 to 2000 "energy lull." Per capita personal income is decomposed into the components accounting for its rate of growth; improvements in industry mix, changes in relative wages, participation in the labor force, receipt of transfer payments, and property income; for each of the four phases of the 1969 to 2000 period. The decomposition is a way to compare systematically the economic experience of the residents of coastal parishes with the experience of those further removed but still affected by the same changes in the regional and national economies. Comparisons using this same format are also made of the five states bordering on the Gulf of Mexico and of Louisiana's eight metropolitan areas.

SIGNIFICANT CONCLUSIONS: Offshore production mitigated or had an opposing (positive) effect compared to onshore production. It was a source of stability and growth for coastal communities. It gave them partial relief from the economic consequences of nose-diving onshore production. Our analysis does not attempt to separate the mitigating or positive effects of offshore production from the negative effects of the onshore collapse.

STUDY RESULTS: The analysis of changes in per capita personal income among the 19 coastal Louisiana Parishes and 45 non-coastal Louisiana Parishes, the five Gulf States, and eight Louisiana MSAs, shows a consistent pattern. The economic effects of energy producing states and state jurisdictions in coastal parishes are limited to the 1974 to 1980 energy price explosion and the 1981 to 1985 energy price erosion and collapse.

The analysis of the components of change during these two episodes shows that the effects were greater than the rate of change in per capita personal income considered alone would indicate. In the 1970 to 1980 boom, increases in relative wages and labor force participation accounted for more of the relative increase in energy producing jurisdictions, while increases in income from transfer payments made a much more substantial contribution in non-energy producing jurisdictions. As the cycle reversed and energy prices fell, transfer payments increased in energy producing jurisdictions

and labor force participation and relative wages declined. The major longer-term driver accounting for changes in per capita personal income was the rate of improvement in industry mix. It mirrored the coastal/non-coastal dichotomy but at a much more modest level, increasing marginally during the boom in energy producing jurisdictions and decreasing modestly during the bust. But it was not nearly as much of an explanation as were changes in labor force participation and transfer payments.

These effects seem limited, however, to these two periods. During the "recovery" of 1986 to 1990 and what we term the "energy lull" from 1991 to 2000, there are no apparent differences between oil and gas producing jurisdictions and non-oil and gas producing jurisdictions. Changes observable among the Gulf States seem to be attributable to factors unrelated to their energy intensity or industrial composition. This also appears to be the case for Louisiana's parishes and MSAs.

The application or implication for the Gulf Coast economy is that the repercussions of the energy boom and collapse of the 1970s and 1980s should not be confused with the cumulative economic effects of the exploration and production of oil and gas from the federal OCS. Louisiana is the nation's most energy intensive state and although it may still be closer to the oil than to the electric age, twenty years later the coastal parishes of Louisiana don't seem to be any worse off or any better off than the rest of the state now that the energy adjustments have been made.

STUDY PRODUCTS: Pulsipher, A. G. 2006. Accounting for socioeconomic change from offshore oil and gas: cumulative effects on Louisiana's coastal parishes, 1969-2000. U.S. Dept. of the Interior, Minerals Management Service, Gulf of Mexico OCS Region, New Orleans, LA. OCS Study MMS 2006-030. 99 pp.