Corpus Christi and Coastal Bend
Economic Pulse
Texas A&M University-Corpus Christi
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Inside This Issue

2005 in Review 1
Are Businesses Worth Your Money? ... 2
Crime and Unemployment 2
Ecotourism and Development 3

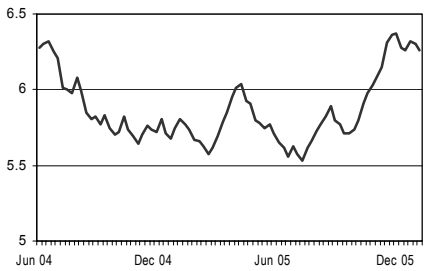
Articles in Future Issues

- Do we have too much Government?
- How diverse is the Coastal Bend's economic base?

News Briefs

A **Corpus Christi Economic Summit** will be held in January 2006. The Corpus Christi Regional Economic Development Corporation will host and facilitate the event in cooperation with city officials, including Mayor Henry Garrett. Other major partners in this event will include the local Chamber of Commerce, the Convention and Visitors Bureau, and the Hispanic Chamber of Commerce. This summit will focus on the challenges and opportunities relating to job creation in the Coastal Bend.

Chart 1
30-Year Mortgage Rate, %



2005: Year in Review

The year of 2005 was especially eventful. But the economy was resilient, shaking off just about every obstacle to growth. The 4.3% annualized output growth in the third quarter surprised even the most optimistic forecasters.

Disasters

Hurricanes Katrina and Rita wrought extensive damage to the energy infrastructure along the Texas and Louisiana Gulf coasts, from offshore oil extraction platforms to petrochemical plants in the Port Arthur-Lake Charles area. Oil prices topped $70 per barrel by late September, driving retail gasoline prices over $3 per gallon.

Elevated energy costs have not led to a recession as was likely in the past. Today's economy appears to be more resistant to such shocks. While hurricanes Katrina and Rita became the costliest disasters in U.S. history, their impacts on the national economy as a whole were only temporary and relatively modest.

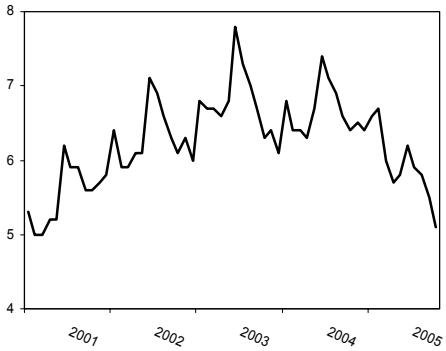
Boom Ending

A growing economy typically adds inflationary pressures. Being concerned about inflation, the Federal Reserve continued its tight monetary policy stance throughout 2005 by raising the overnight bank lending rates at every scheduled meeting. Yet market interest rates showed little upward movement until the second half of the year (see Chart 1 below). By year end, the average 30-year conventional mortgage rate returned to its mid-2004 level and home sales across the country began to show signs of slowing down.

Historically low interest rates have reduced borrowing costs and encouraged families to purchase new or existing homes. Strong housing demand led to a record year in real estate appreciation. The typical home in Corpus Christi now costs 12% more than it was a year ago.

Strong construction activity was responsible for many of the 1,600 additional jobs created locally in 2005. Residential, commercial and infrastructure construction could be seen almost everywhere in the city. By December, the local unemployment rate fell to a five-year low of 5.1% (Chart 2).

Chart 2
Corpus Christi MSA Unemployment Rate, %



BRAC Impact

For South Texas, the biggest blow of the year did not come from hurricanes, but from news about the future of its military bases. Following the Base Realignment and Closure commission's recommendations, the Naval Station in Ingleside will soon close, and the other two military bases in Corpus Christi will realign or downsize. These changes will potentially lead to a total loss of over 7,000 jobs, or 3.5% of the regional workforce. The job losses include military personnel and contractors, who are employed directly by the military bases, as well as jobs that are indirectly related to the military operations, ranging from those in local restaurants to retail shops.

The federal government also agreed that the land for Naval Station Ingleside will revert to the Port of Corpus Christi. Identifying redevelopment projects for that piece of land is now a critical issue for economic developers.

Related Information:

Congressional Budget office, Effects of Hurricanes Katrina and Rita, on the Internet at http://www.cbo.gov/publications/collections/hurricanes.cfm

Caller Times, "2005: Goodbye Navy base, hello development," January 1, 2006; on the Internet at http://www.caller.com/ccct/business/ article/0,2537,CCCT_873_4356200,00.html

CNN Money, "A Perfect GDP Report", November 30, 2005; on the Internet at http://money.cnn.com/2005/11/30/news/economy/gdp/

Are New Businesses Worth Your Money?

Like many cities across the country, the local government has lured industry to Corpus Christi by offering tax breaks, subsidies, infrastructure and other incentives. Are those new businesses worth taxpayers' money?

To address the above question, most studies offer estimates of the impact of the new businesses on regional income and jobs. These studies may ignore potential spillover benefits associated with these businesses and thus underestimate the true economic impact. Those spillover benefits to the community include benefits to other local businesses, including restaurants and gas stations, as a result of the opening of a new plant.

Competiting for a Million Dollar Plant

To provide more reliable results, two economists took a different approach in a recent study. Michael Greenstone of MIT and Enrico Moretti of UC-Berkeley compared cities that won competitions for plant openings with those that lost out in the final stage of the selection process. When a large company decides to open a plant, it typically starts with a large number of cities and eventually narrows the list to a few locations. The company must consider many factors in this process, and these factors differ across industries. Since the runner-up cities rank high on the company's list, Greenstone and Moretti argued that these cities offer the closest comparison for those eventually selected.

The two economists looked at the corporate real estate journal, Site Selection, and found 82 companies that announced plant openings between 1982 and 1993. They then compared the economic performance in the counties of the winning cities with that in the runner-up cities, including what happened before and after the plant location announcements.

Their study shows that in the 8 years before the winning counties were selected, the eventual winning and runner-up counties had similar growth in jobs and income. In the six years after the plant started, the winning counties experienced faster job and income growth than did the losing counties. For instance, total payroll raised by an average of $100 million more in the winning counties. These findings imply that the improved performance was indeed a result of the plants instead of some continuing trend.

Spillover Effects

Some critics of using public funds to attract businesses argued that this policy reduces the funding of other public programs, such as education. However, the two researchers found that public spending for other programs in fact increased rather than decreased in the winning counties.

These economists also found significant spillover benefits to other local businesses and workers from attracting an industry leader. For example, many local businesses of that particular industry grew as well.

Property Values

Finally, the researchers found that the average property value in the winning counties increased relative to the runner-up counties, while there was no difference before the plant openings. Higher property values in these counties are attributable to such desirable factors as more future job opportunities and public amenities. The increase in property value also implies that the economic benefits of the businesses exceeded the costs the cities incurred to attract them.

* The study described in this article is "Bidding for Industrial Plants: Does Winning a 'Million Dollar Plant' Increase Welfare?" by Michael Greenstone and Enrico Moretti, MIT Department of Economics Working Paper No. 04-39.

Crime and Unemployment

The number of crimes in the city of Corpus Christi dropped from 2004 to 2005. While the police force deserves much of the credit for this improvement, it seems desirable to consider other possible explanations as well.

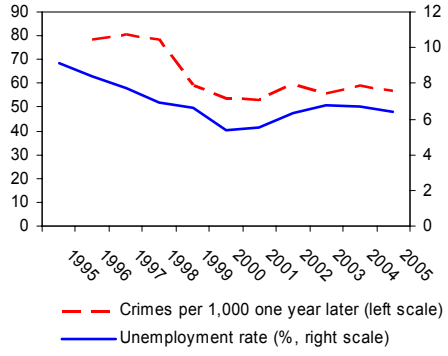
Chart 3 below shows the historical patterns of the unemployment rate for Corpus Christi and its crime rate one year later, expressed as the number of crimes per 1,000 residents. Clearly, the crime rate closely followed the ups and downs of the key measure of the overall economic condition.

Rich vs. Poor Neighborhoods

The relationship between economics and crime is also discernible across various neighborhoods within the city. Chart 4 below shows a scatter plot between a community's crime rate in 2004 and its average household income in that year. There are 15 Corpus Christi communities identified by zip code. The dash line is a straight line that best fits the 15 data points. That line suggests that the crime rate tends to be lower for a more well-to-do neighborhood.

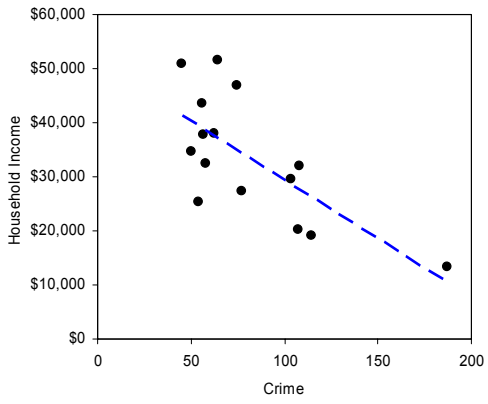
Household income explains about 50% of the variation in local crime rates. The most prosperous neighborhood (zip code 78413), which had the highest average household income of over $50,000 in 2004, also had the fewest crimes--45 per 1,000 residents. The poorest neighborhood (zip code 78410), which had an average household income of slightly more than $13,000, had to endure highest crime rate of 187.

Chart 3
Crimes and Unemployment Rate



Another interesting fact is that the relationships between the crime rate and different measures of economic well-being hold not only for economic crimes, such as robbery, burglary and motor vehicle theft, but also for other types of criminal activity, such as forcible rape, aggravated assault and homicide. These findings bear implications for a community that makes fighting crime a top priority.

Chart 4
Crime and Income



Ecotourism as a Strategy for Sustainable Development in the Coastal Bend

By Carole L. Peterson, Director of Workforce Development, Office of Community Outreach Programs, A&M-CC

Ecotourism has been widely promoted as a strategy for balancing a community's economic, environmental and social needs. Kenya, Costa Rica, and the Galapagos Islands are among the numerous destinations that have used ecotourism to attract foreign currency. Closer to home, nine communities in the Lower Rio Grande Valley have partnered with the Texas Parks and Wildlife Department, The Parks and Wildlife Foundation, and the US Fish and Wildlife Service to create a $20 million World Birding Center as a means of attracting new tourism dollars and protecting the natural environment.

What is ecotourism?

In recent years, controversy has arisen whether ecotourism is truly a viable strategy for sustainable development. Part of the conflict stems from how ecotourism is defined. Tourism promoters often view ecotourism simply as a niche market of nature-based tourism, while environmentalists define the term more narrowly. The International Ecotourism Society defines ecotourism as "responsible travel to natural areas which conserves the environment and improves the welfare of local people." Most agree that, at minimum, ecotourism should:

- Attract tourists to natural environments
- Educate tourists on environmental conservation
- Increase local environmental conservation efforts
- Provide employment and entrepreneurial opportunities for local people

Ecotourism as economic development

Reports on the economic value of ecotourism vary as widely as its definitions. In studies that equate ecotourism with nature-based tourism, it is estimated that "ecotourism" represents as much as 30% of the global leisure tourism market. When defined as non-consumptive, ecologically sustainable, nature-based travel, ecotourism's market share drops to less than 5%. In this report, the focus will be on the narrower definition of ecotourism and its contribution to local economies.

Birding, dolphin watching, nature photography, wildflower tours, and star gazing are examples of non-consumptive, nature-based recreational activities. In the 2001 U.S. Fish and Wildlife Service National Survey of Fishing, Hunting, and Wildlife-Associated Recreation, it was estimated that 66.1 million people in the U.S. spent $38.4 billion on wildlife watching activities. Of the total, 21.8 million said they took trips away from home for the purpose of wildlife watching and spent $8.2 billion on trip-related expenses. In the same study, U.S. Fish and Wildlife Service (USFWS) reported 3.2 million U.S. residents participated in wildlife watching in Texas with an estimated 1 million traveling away from home to view wildlife.

Wildlife watchers spent $1.3 billion on wildlife watching activities in Texas in 2001, 18% of which was spent on trip-related expenses such as food, lodging and travel. Equipment and other expenditures including binoculars, cameras, camping equipment, land leases, feed, and magazines comprised a total of 82%. The high percentage spent on equipment raises a question as to whether dollars spent on wildlife watching significantly impact the economies of destinations visited, since these expenses mostly likely are incurred prior to the trip.

Despite this concern, several studies indicate that nature-related tourism does generate higher economic impacts per visitor due to higher expenditures and longer stays. The State of Texas tourism office estimates that leisure travelers who include nature-related activities as part of their trip stay an average of 3.24 days compared to 2.28 days for all Texas leisure travelers, and spent $91.28 per day compared to $87.92. This translates to nearly $100 more per person per trip for nature-related travelers compared to average Texas leisure travelers.

Of all wildlife-watching activities, bird watching attracts the largest following. According to USFWS, more than 85% of the 18.5 million persons estimated to have traveled away from home for the purpose of wildlife-watching in the U.S., did so to observe, feed or photograph birds.

Studies conducted in 1998 by Fermata, Inc. for the Texas Parks and Wildlife Department revealed travelers along the Great Texas Coastal Birding Trail devote an average of 31.23 days per year to birding on the trail and spend an average of $78.52 per person per day. Attendees of the Rio Grande Birding Festival averaged 11.5 days per year birding in the Rio Grande Valley and spent an average of $117.64 per person per day.

Ecotourism potential for Coastal Bend

In 2004, an estimated 6.7 million visitors spent a total of $727.2 million in the Corpus Christi area, generating a total economic impact of $1.1 billion. Beaches, birding and fishing were primary draws for leisure travelers.

The Coastal Bend is considered one of the most biologically rich and diverse regions in the world with more than 87 rare, threatened or endangered species inhabiting the area, and numerous nationally significant natural sites and events:

- America's Birdiest Region - Corpus Christi was named "America's Birdiest City" for the third consecutive year with 237 species identified within the city limits in 2005. More than 500 species have been identified in the Coastal Bend region.
- Aransas National Wildlife Refuge – winter home of the endangered whooping crane
- Corpus Christi Hawk Watch - the largest concentration of migrating raptors in the United States
- Gulf of Mexico – one of the world's most highly productive natural systems. Corpus Christi is home to the tri-national Harte Research Institute for Gulf of Mexico Studies.
- King Ranch – oldest and largest cattle ranch featuring large tracts of pristine wildlife habitat; home to several endangered species including ocelots, jaguarundi, pygmy owls, and black-lace cactus
- Padre Island National Seashore – longest barrier island in the world and nesting site of endangered Kemp's ridley and loggerhead sea turtles as well as other rare species
- Texas Laguna Madre – one of only five hypersaline lagoons in the world. Its high biodiversity includes numerous rare, threatened and endangered species.

Currently little has been done to promote the region's abundant natural attractions to ecotourists, or to insure that nature-based tourist activities are ecologically sustainable.

Ecologically sustainable tourism

In theory, ecotourism results in minimal disturbance to pristine nature environments. In practice, there are far too many examples of activities promoted as "ecotourism" that are ecologically unsustainable due to unplanned, uncontrolled activity in fragile ecosystems that are not fully understood. The keys to sustainable ecotourism are summarized by Deng and Bauer (2002):

> "No type of tourism can be sustainable in the absence of appropriate planning, monitoring, evaluation and management; and sustainable nature-based tourism or ecotourism development can only be achieved when the behavior of the destination managers, stakeholders, and tourists is ecologically, economically, and ethically responsible."

Continued … Ecotourism, page 4

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Ecotourism

from page 3

Ecotourism as sustainable development

Under its broader definition as nature-based tourism, it is questionable whether ecotourism is environmentally sustainable. Under its narrowest definition, it is questionable whether ecotourism is economically sustainable. There are success stories, however, where communities have developed nature-based tourism activities that successfully balance economic, environmental and social needs.

Lessons learned

The lessons learned from these communities area:

- Start with proactive, knowledge-based planning that includes all stakeholders
- Educate the community and visitors about conservation and the ecology early on
- Diversify economic development efforts with other forms of sustainable development
- Develop appropriate infrastructure to serve visitors and protect resources
- Confine large groups to specific zones that are less sensitive to ecological disturbances
- Educated and link local businesses to the economic opportunities generated by ecotourism
- Monitor, evaluate and rate ecotourism sites based on both visitor satisfaction and adherence to sound ecotourism practices

Given the Coastal Bend's rich natural resources, the region has a strong foundation for creating quality ecotourism products and activities as part of a broader sustainable development strategy; however, much work needs to be done to better educate local communities, link entrepreneurs to business opportunities, and to ensure that environmental quality is maintained.

Sources cited:

Deng, J., King, B. & Bauer, T. 2002. Evaluating natural attractions for tourism. Annals of Tourism Research, 29, 2: 422-438.

USFWS National Survey of Fishing, Hunting, and Wildlife-Associated Recreation: 2001, http://federalaid.fws.gov/surveys/surveys.html