

Business Turnover in the Texas Charter Fishing Industry, 1975-85

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Introduction

In a previous study of turnover in the Texas charter boat fishing industry between 1975 and 1980, Ditton and Loomis (1985) found a high turnover rate relative to other types of small business. The charter business climate was characterized by high levels of competition and low profit margins. It was reasoned that entrepreneurs entering the charter business were not oriented to the harsh business climate that existed. Due to the high turnover rate, Ditton and Loomis (1985) determined the Texas charter fishing industry consisted mostly of inexperienced operators. Sixty-five percent of the charter businesses they inventoried were in operation for ≥ 5 years.

Data on exit and entry rates (turnover) have practical as well as theoretical uti-

lity. They help identify causes of charter boat business failures and can be used as economic indicators for the charter fishing industry (Cochran, 1981). This paper provides information useful to understanding regional turnover rates in the Texas charter fishing industry. Starr (1979) acknowledged that there is a paucity of reliable information on the number, size, and growth trends in the small business sector. Cochran (1981) felt such information was valuable to accurately evaluate regulatory impacts to prevent mortalities among small businesses.

This paper extends the temporal analysis of business turnover in the Texas charter fishing industry during 1975-80 (Ditton and Loomis, 1985) with data from a second 5-year study period, 1980-85, to document any further turnover or instability.

Methods

An inventory of charter boat fishing businesses operating along the Texas coast in 1985 was compiled with the same methods used in the 1975 inventory (Ditton et al.¹) and the 1980 inventory (Matheusik²). The criteria used to define a charter fishing boat business are:

- 1) The charter business operates a

vessel that is U.S. Coast Guard certified if it is >5 gross tons. If the vessel is <5 gross tons, the operator is only required to have a Coast Guard motorboat operator's license.

- 2) The business provides the services of a boat and/or services of a U.S. Coast Guard licensed captain to take ≤ 6 people fishing (either bay and/or Gulf) for monetary remuneration.

- 3) The business utilizes a formal advertising method such as the classified section of telephone directories, radio, television, newspapers, magazines, brochures, or an established chartering service.

Using these criteria, the 1975 and 1980 inventories identified 88 and 122 charter boat fishing businesses, respectively. The 1985 inventory identified 117 charter boat businesses operating along the Texas coast. In each inventory the businesses were grouped into five regions: Freeport, Port O'Connor, Rockport, Port Aransas, and South Padre Island.

To examine the extent of change and/or stability in the Texas charter fishing industry, the 1975, 1980, and 1985 populations of charter boat businesses were categorized into subpopulations as appropriate (new, steadfast, new steadfast, continuing steadfast, and dropout businesses).

New businesses are those which entered the market after the 1975 and 1980 inventories were compiled, respectively. The steadfast subpopulation includes

ABSTRACT—This is a continuation of a previous study of Texas charter boat industry turnover and stability by Ditton and Loomis published in 1985 in the Marine Fisheries Review, 47(1):43-47. This paper follows the guidelines used in the previous study and continues the temporal analysis of the charter fishing industry using a third inventory to analyze turnover and stability between 1975 and 1985. Comparing the study findings from 1980 to 1985 with those from 1975 to 1980, shows that the Texas charter fishing industry continues to have high turnover rates and overall instability. Of the original 1975 population of charter boat operators, only 25 percent were in operation during 1985. In addition to a more complete understanding of the Texas charter fishing industry, this paper presents an approach which can be used elsewhere to understand charter industry trends.

¹Ditton, R. B., R. N. Jarman, T. J. Mertens, N. P. Schwartz, and S. A. Woods. 1977. Charter fishing on the Texas coast. Unpubl. rep. submitted to Tex. A&M Univ. Sea Grant Coll. Program, Coll. Sta., 186 p.

²Matheusik, R. E. 1980. An exploratory analysis of the extent of stability and the characteristics of change in the charterboat industry on the Texas Gulf coast. Unpubl. rep., Dep. Rec. Parks, Tex. A&M Univ., Coll. Sta., 42 p.

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Table 1.—Turnover in the Texas charter fishing industry by region, 1975-85.

Region	1975 Population (a) ⁴	Drop- outs (b)	Stead- fast (c)	New population (d)	1980 Population (e) ^{5,6}	Drop- outs (f)	New ⁸ steadfast (g)	Continuing ³ steadfast (h)	New population (i)	1985 Population (j) ⁷	Net change ¹		
											1980 — 1975	1985 — 1980	1985 — 1975
Freeport	27	17	10	19 ²	29 ²	20	6	3	12	21	+ 2 ²	- 8	- 6
Port O'Connor	8	1	7	3	10	4	3	3	13	19	+ 2	+ 9	+ 11
Rockport	13	4	9	7	16	4	6	6	4	16	+ 3	0	+ 3
Port Aransas	30	21	9	31	40	21	14	5	10	29	+ 10	- 11	- 1
South Padre	10	3	7	20	27	12	10	5	17	32	+ 17	+ 5	+ 22
Total	88	46	42	80	122	61	39	22	56	117	+ 34	- 5	+ 29

¹Net change = Businesses operating in 1980 minus businesses operating in 1975, 1985 minus 1980, and 1985 minus 1975.

²Column g includes those businesses from column d which were still in operation 1985.

³Column h includes those businesses from column c which were still in operation 1985.

⁴a = b + c.

⁵e = c + d.

⁶e = f + g + h.

⁷j = g + h + i.

⁸Denotes correction of data previously reported by Ditton and Loomis (1985).

Table 2.—Turnover in the Texas charter fishing industry along the Texas Gulf coast.

Year	Total businesses	Dropouts (1975-80)	Steadfast (1975-80)
1975	88	46 (52%)	42 (48%)

		New businesses (1975-80)	Steadfast (1975-80)
		80 (66%)	42 (34%)

Year	Total businesses	Dropouts (1980-85)	Steadfast (1980-85)
1980	122	61 (50%)	61 (50%)

Year	Total businesses	New businesses (1980-85)	Steadfast (1980-85)
1985	117	56 (48%)	61 (52%)

Table 3.—Percent change in charter business subpopulations by regions.

Region	New steadfast businesses		Continuing steadfast businesses		Dropout businesses (Percent of 1980 pop.)	New businesses (Percent of 1985 pop.)
	Percent of 1980 pop.	Percent of 1985 pop.	Percent of 1975 pop.	Percent of 1985 pop.		
Freeport	21	29	11	14	69	57
Port O'Connor	30	16	38	16	40	68
Rockport	38	38	46	38	25	25
Port Aransas	35	48	17	17	53	34
South Padre	37	31	5	16	44	53

those operators identified in 1975 who were still in business during the 1980 inventory. The new steadfast subpopulation consisted of those charter boat businesses identified as new businesses in the 1980 inventory and still operating in 1985. Continuing steadfast businesses included those identified in 1975, reported as steadfast in 1980, and still in operation during the 1985 inventory. The dropout subpopulation is composed of those charter operators that exited the industry after the 1975 and 1980 inventories were completed. Cross-sectional comparisons of the regional subpopulations inventoried in 1975, 1980, and 1985 indicate the rate of turnover, or the relative temporal instability of the Texas charter boat fishing industry. In this paper we examine the

extent of stability in the industry between 1980 and 1985, and overall between 1975 and 1985.

Results

The size and distribution of the charter fleet along the Texas coast has changed between 1975 and 1985 (Table 1). In contrast with the growth in number of businesses between 1975 and 1980, five fewer businesses were operating in 1985 than in 1980. Net change in the number of charter businesses between 1980 and 1985 varied by region. Nevertheless, 29 more businesses were operating in 1985 than in 1975, a 33 percent increase.

Table 1 shows that of the charter fishing businesses operating in 1980, 61 (50 percent) dropped out of (exited) business by 1985. This rate is similar to that for the previous 5-year period (52 percent). Fifty-six (48 percent) of the 117 businesses operating in 1985 were new (en-

tered) since 1980. This is lower than in the previous 5-year period when 80 new businesses entered the market. Sixty-one (50 percent) of the businesses (new steadfast and continuing steadfast subpopulation combined) operating in 1980 were still operating in 1985. This is about the same percentage of steadfast businesses in the previous 5-year period (48 percent). Of the original 1975 population of charter fishing businesses, only 22 remained (continuing steadfast) in business in 1985 (25 percent) (Tables 1, 2).

The percentage of new steadfast, continuing steadfast, dropout, and new subpopulations differed by region (Table 3). The regions with the two highest dropout rates were Freeport and Port Aransas, respectively. These results are similar to those from the previous 5-year period. The dropout rate for Port Aransas between 1980 and 1985 (53 percent) was less than during 1975-80 (70 percent).

Whereas the number of new entrants exceeded dropouts between 1975 and 1980 in Freeport and Port Aransas, this pattern was reversed between 1980 and 1985.

As with the previous 5-year period there were three regions where new entrants accounted for a majority of the 1985 population. In Port Aransas and Freeport this was due to a high dropout rate. The South Padre Island region continued to have a low dropout rate and a high entry rate. Port O'Connor experienced steady growth in both 5-year study periods. Rockport stands out for its stability with a low percentage of dropouts and new businesses. Six of the nine businesses operating in 1975 were still operating in 1985. Of the seven new businesses between 1975 and 1980, six were still in business in 1985. Although the Rockport region had the highest percentage of steadfast businesses between 1980 and 1985 and the highest percentage of continuing steadfast businesses (taken as a percentage of the 1985 population) (Table 3), the number of continuing steadfast businesses were fairly evenly distributed over the five regions (Table 1).

Discussion

According to Small Business Administration figures SBA (1985), the nation's small businesses have experienced strong economic growth recently. This is not true for the Texas charter boat fishing industry. This paper shows that the Texas charter fishing business continues to be a high-turnover industry.

Two explanations are offered for the high turnover: 1) Increased operating costs for fuel and insurance, and 2) regulatory effects of fisheries management. Operating costs include variable expenses (fuel, wages, bait, ice, tackle) and fixed expenses (insurance, depreciation, dock fees, repairs). Fixed operating costs for charter boat operators do not vary with the extent of charter business. Over two-thirds (70.4 percent) of a Texas charter operator's total business expenses are for variable operating costs (Ditton et al., 1978). Fuel costs for the Texas charter boat fleet have been about 22 percent of total operating expenses (Ditton et al., 1978). Elsewhere, fuel costs have ranged between 17 and 32 percent of total oper-

ating expenses, (Browder et al., 1981; Marshall and Lucy, 1981; and Thursland et al., 1982).

The cost of fuel on the coast has varied greatly over the 10-year study period (Table 4). Between 1975 and 1979 the price of both gasoline and diesel fuel remained fairly constant. This may partially account for the positive growth in charter operators in every region for the first 5-year period. Between 1979 and 1981 both diesel and regular fuel prices increased sharply. Between 1979 and 1981, there was a 66 and 66.7 percent increase, respectively, in the standardized price of diesel fuel and regular gasoline. The high price of regular gasoline and diesel fuel may have acted as a deterrent to prospective charter operators and also may have forced several operators to exit the industry.

In 1975 insurance was 8 percent of a charter operator's total operating costs in Texas (Ditton et al., 1978). Likewise, charter insurance costs have ranged between 4 percent and 10 percent elsewhere, (Thursland et al., 1982; Marshall and Lucy, 1981; Browder et al., 1981). Recently, insurance underwriting and availability has become a major concern in the maritime industry, especially for charter boats (Anonymous, 1985).

During the last 4 years there has been a trend toward "uninsurability" for charter boat operators nationwide (Habicht³). The charter business is considered a high-risk operation due to the relative inexperience of its customers and the environment in which it operates. With the size of liability awards for bodily injury rising dramatically and the number of claims increasing, marine insurance companies are wary of underwriting charter fishing operators. For example, no gas powered boat over 10 years old and valued at less than \$50,000 will be underwritten. For a diesel-powered plastic hull vessel less than 10 years old, insurance would be a minimum of 3 percent of the boat value for \$100,000 of basic hull coverage (Habicht³). The uninsurability of charter boats can act as a barrier to prospective charter operators entering the business as

³Habicht, M. 1986. Telephone interview with the President of Maritime Insurance Group, Inc., 2500 Hollywood Blvd., Suite 414, Hollywood, FL 33020, 28 April 1986.

Table 4.—Annual coastal fuel prices for regular gasoline and diesel, 1975-85 in cents. Data source: Joyce Poole, American Automobile Association, Houston, Tex., March 1986.

Year	Regular gasoline		Diesel	
	Price (¢)	Price standardized to 1975 ¹	Price (¢)	Price standardized to 1975 ¹
1975	54.8	54.8	NA	NA
1976	53.6	50.7	53.3	50.4
1977	60.5	53.7	57.4	51.0
1978	54.7	45.1	53.7	44.3
1979	65.2	48.3	63.6	47.2
1980	99.8	65.2	105.1	68.7
1981	122.3	72.4	120.8	71.5
1982	118.3	66.0	130.3	72.7
1983	106.6	57.6	121.5	65.6
1984	106.9	55.4	115.6	60.0
1985	99.1	49.6	116.2	58.1

$${}^1\text{CPI (75)} = \frac{\text{CPI (1975, 1976... to 1985)}}{\text{CPI (1975)}} \times 100.$$

$$\text{Standardization} = \frac{\text{Gas price (1975, 1976... to 1985)}}{\text{CPI (75)}} \times 100.$$

well as a major reason current operators exit the market.

Fishery regulations and management plans stemming from the Magnuson Fishery Conservation and Management Act of 1976 (16 USC 1801-1882) may also play a role in the turnover of charter operators on the Texas coast. For example, regulations are currently in effect for the mackerel fishery in the Gulf of Mexico. The Fisheries Management Plan (FMP) for Coastal Migratory Pelagic Resources of the Gulf of Mexico and South Atlantic (50 CFR 642) establishes catch limitations for king mackerel. Following public hearings and procedures pursuant to the Magnuson Act, the catch limitations became effective on 22 December, 1985. Bag limits of two fish per passenger or three fish per passenger excluding the captain and crew were established for charter operators in Federal and state jurisdictions in the Gulf of Mexico (50 CFR 642). Furthermore, as of January 1986 all charter boat operators that target coastal pelagic species are required to report catch and effort data on each trip using log books to be returned to the National Marine Fisheries Service. Currently, it is proposed that all charter boats which target coastal pelagic species must have a permit from the National Marine Fisheries Service⁴.

Although most of these regulations were enacted only recently, they may nevertheless have had an effect on

turnover observed in the Texas charter fishing industry. The Fisheries Management Plan and resultant regulations were discussed as early as 1979. The regulations as proposed could have acted as a disincentive for prospective operators. Also, operators might have anticipated the future effects of the regulations and the management plan on their already stressed businesses and exited the industry.

Future Research Needs

Up to this point, entries and exits to the Texas charter fishing industry have been evaluated every 5 years. There are problems with this in that an operator remaining in business for $4\frac{1}{2}$ years and one re-

⁴Draft. Amendment number 2 and environmental assessment and supplemental regulatory impact review and initial regulatory flexibility analysis to the Fishery Management Plan for the coastal migratory pelagic resources. 1986. Gulf of Mexico Fishery Management Council, Lincoln Center, Suite 881, 5401 West Kennedy Blvd., Tampa, FL 33609, and South Atlantic Fishery Management Council, Southpark Building, Suite 306, 1 Southpark Circle, Charleston, SC 29407.

maining in business for $4\frac{1}{2}$ months can both be categorized as dropouts. To evaluate business turnover in the charter fleet effectively, it will be necessary to do so on an annual basis. This is now possible in the southeastern United States where the National Marine Fisheries Service's Southeast Fisheries Center conducts an annual census of commercial passenger carrying vessels. The categories of vessels included are: 1) Charter fishing boats, 2) head (or party) boats, 3) guide boats, and 4) charter dive boats.

Furthermore, there is a need to conduct follow-up open-ended interviews with new entrants and dropouts regarding their detailed reasons for entering and exiting the industry, respectively. With this information, marine advisory personnel can educate against unrealistic business expectations. Likewise, interviews can help us to understand the extent to which the hypothesized reasons are responsible for the turnover trends observed over the 1975-85 study period.

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