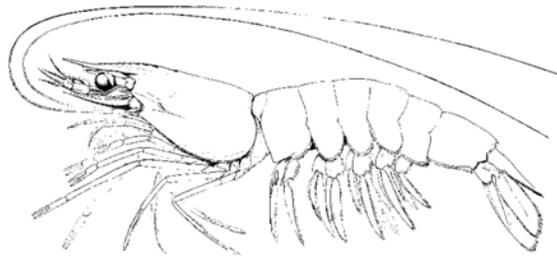


2009  
Economics of the Federal Gulf Shrimp Fishery  
Annual Report



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August 2011



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# Federal Gulf Shrimp Fishery

The commercial shrimp fishery in the Gulf of Mexico is one of the most economically important fisheries in the Southeast region. The fishery is facing a range of difficulties that together are threatening the short-term and long-term viability of the industry. High fuel and other input prices, competition from foreign, aquacultured shrimp, and existing regulations are squeezing the profit margin upon which Gulf shrimpers base their livelihood. This report presents results of the Annual Economic Survey of Federal Gulf Shrimp Permit Holders for the calendar year 2009. The report provides fishermen, fishery managers, other constituents, and the public with an overview of the financial and economic health of the federal Gulf of Mexico shrimp fishery.

## Shrimp Landings and Revenue

In 2009, total landings of shrimp for human consumption in Gulf of Mexico ports were over 157 million pounds (head-off weight) (Table 1). At an average ex-vessel price of \$2.01 per pound, total revenue was \$314 million. Approximately 4,725 vessels participated in the Gulf shrimp fishery in 2009. (Note that there is an additional bait shrimp fishery in the Gulf which is not accounted for here.)

Table 1: Total Gulf Shrimp Landings & Revenue by Vessel Permit Status

	No Federal Permit	Federal Permit	Total
Number of active vessels	3,421	1,215	4,725
Total landings (lbs, head off)	49 million	108 million	157 million
Total revenue (\$)	74 million	240 million	314 million
Average price (\$/lb)	1.50	2.23	2.01
% of total revenue	23.5%	76.5%	100%

Broadly, the Gulf's shrimp fleet consists of an inshore segment, very diverse and mostly active in state waters, and an offshore segment, largely active in federal waters and almost always using otter trawl gear. We delineate the two segments through ownership of the federal shrimp permit.

## Permits and Vessels

The commercial shrimp fleet that operates in federal waters of the Gulf is managed under the Gulf of Mexico Shrimp Fishery Management Plan, and a limited-access permit is required to harvest shrimp in federal waters. In 2009, there were approximately 1,707 vessels that held a federal Gulf shrimp SPGM permit---the "federally-permitted fleet." Only about 1,215 of these actively landed Gulf shrimp in 2009; yet they still accounted for 76.5% of total ex-vessel revenue generated by the Gulf food shrimp fishery (Table 1). The non-federally-permitted fleet, about 3,421 vessels, generated only 23.5% of total food shrimp revenue, due to their smaller vessel sizes and a higher count/lower price shrimp product. Shrimp vessels operating offshore are usually larger, full-time, and more sophisticated from a business perspective, and hence more capable of providing financial data. As a result, the economic data collection and this report are focused on the federally-permitted Gulf shrimp fleet only.

Vessels in this fleet are, on average, 67 feet long, weigh 107 gross tons, are powered by 525 hp motor(s), and are 25 years old. Nearly three-quarter of the vessels have steel hulls and just over half use a freezer for refrigeration. The owners of these vessels reside predominantly in Texas (38.6%) and Louisiana (26%), followed by Florida (16%), Mississippi (8%), and Alabama (7%). Five percent of owners reside outside the Gulf of Mexico region.

# Annual Economic Survey of Federal Gulf Shrimp Permit Holders

## Data Collection

A two-page, self-administered, mail survey (OMB Control # 0648-0591) is sent annually to 33% of the population of permit holders. The survey collects annual expenditures grouped into categories of variable costs (e.g., fuel, crew) and fixed costs (e.g., insurance, overhead). When combined with revenue from other data collections, the financial and economic status and performance of the industry can be documented. A technical memorandum (NMFS-SEFSC-601) describes in detail the data collection methodology and should be consulted for details about the survey design, data processing, and definitions. The memorandum and the survey questionnaire are available at: [www.sefsc.noaa.gov/socialscience/shrimp.htm](http://www.sefsc.noaa.gov/socialscience/shrimp.htm)

The population of interest is all vessels with an SPGM permit, including both active and inactive vessels. In 2010, 563 vessels were randomly selected from the population, stratified by state, of approximately 1,707 vessels with permits to shrimp in federal waters of the Gulf. Of the 563 surveys that were sent out, 454 surveys were completed. After adjusting for 22 vessels that were deemed ineligible because their permits were sold or terminated, a response rate of 84% was achieved. Due to problems linking cost and revenue datasets, the final number of observations used in the analyses is 427 (76% of the sample; 25% of the population).

## Results

The financial and economic analysis is based on an accounting framework of money flows and values associated with the productive activity of commercial shrimping. The results presented are vessel averages which apply to a typical or representative vessel in a given fleet. Results based on different fleet definitions provide different perspectives on the fishery. Some vessels owning federal Gulf shrimp permits are engaged in other fisheries, including the South Atlantic shrimp and non-shrimp fisheries. In this report, economic results are presented for four fleets (which are not mutually exclusive!):

- A - Total permitted fleet: Commercial fishing vessels holding a federal Gulf shrimp permit
- B - Gulf shrimp fleet: Commercial shrimp vessel inactive or active in the Gulf shrimp fishery
- C - Active Gulf shrimp fleet: Shrimp vessel reporting landings in the Gulf shrimp fishery
- D - Inactive Gulf shrimp fleet: Idle commercial shrimp vessels not fishing in 2009

Results for other fleets are reported in the Appendix. In the appendix, results are presented in a standardized table format that links vessel characteristics and operations to simple financial statements, including balance sheet, cash flow, and income statements. Compared to the total fleet, the Gulf shrimp fleet excludes 9 vessels that are only active in non-shrimp fisheries and 15 vessels that are only active in the S. Atlantic shrimp fishery. Results are reported by State for the total fleet, Gulf shrimp fleet, and active Gulf shrimp fleet, where Alabama and Mississippi are combined due to their small sample size. Results for the active Gulf shrimp fleet are also reported according to whether the vessel is operated by the owner or a hired captain and whether or not the captain is paid a separate share.

# **Economics of the Federal Gulf Shrimp Fishery**

## A. Economic Status of the Total Permitted Fleet (with SPGM permit)

In 2009, approximately 1,707 vessels had a federal Gulf shrimp permit (SPGM). The results below are based on a random sample of 427 permits from this population with complete and usable surveys. Tabulated results for this fleet can be found in the Appendix, Table 1, column 1. The sample's vessel characteristics are not materially different from the population of vessels with Gulf shrimp permits (page 1). The geographic distribution of the permit owners' residence across Florida, Alabama and Mississippi, Louisiana, Texas, and outside the Gulf region (Other) is provided in Figure A1.

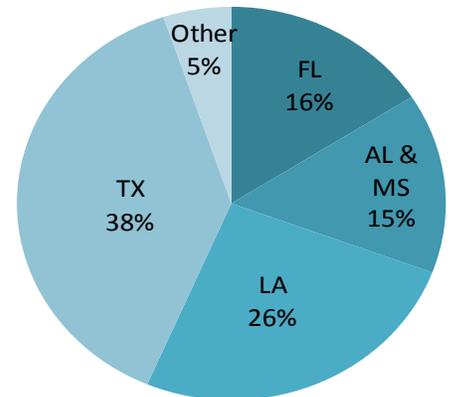


Figure A1: State of Residency of Owner

### Balance Sheet

The average market value of a vessel (incl. fishing permits) was \$209,311 in 2009, about \$47 thousand less than the original purchase price. The average vessel had \$61,221 of liabilities, and 41% of the vessels had an outstanding loan. This implies an average equity of \$148,090 for each owner and a debt to equity ratio of 41%. Only 38% of the vessels had hull insurance. However, because newer, more valuable vessels were more likely to have insurance, 47% of total asset value was insured. The average implicit value of a vessel's fishing permits was \$47,460. The high value partly reflects the ownership of the very valuable Atlantic scallop permit by a few vessels in the sample. The value of the limited-access federal Gulf shrimp permit might account for roughly half that value.

### Landings and Revenue

In 2009, 85% of the vessels with SPGM permits landed shrimp. The average vessel landed 84 thousand pounds of shrimp, and the price per pound averaged \$2.23 (Table A1).

Table A1: Shrimp Landings, Price, and Revenue and Other Revenue per Vessel

	Landings (lbs, head-off)	Price (\$ per lb)	Revenue (\$)
Shrimp	84,208	2.23	187,930
Non-shrimp	-	-	19,862
Government payments (shrimp related)	-	-	4,356

In 2009, average annual revenue from all sources was \$212,148. As a percentage of revenue, shrimp landings accounted for 89%, non-shrimp landings for 9%, and government payments for 2% (Figure A2).

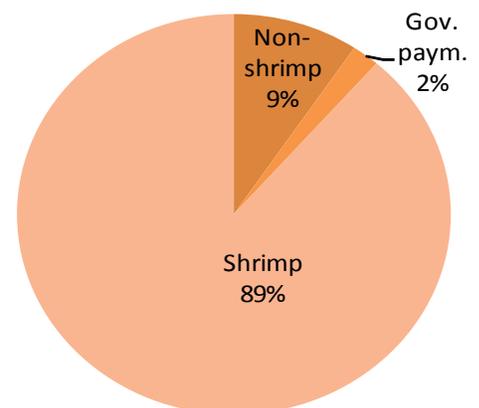


Figure A2: Revenue by Fishery

### Costs

In 2009, average annual expenses for operations were \$207,069, where operations refer to commercial fishing activities. Operating expenses include both variable costs, usually paid on a trip basis, and fixed costs, such as insurance. The average vessel used 41,240 gallons of fuel, and the average gallon of fuel was purchased for \$2.05 in 2009. Fuel accounted for 41% of operating expenses, while other supplies

accounted for 9%, leading to a total of 50% for non-labor variable costs (Figure A3). The expense for hired crew and captains was, on average, \$49,392, or 24% of expenses, which indicates the importance of the industry as a source of wage income. Of the vessels, 49% were owner operated, and we estimated that the average owner operator's contribution *as captain* was about \$14,000 per year ("opportunity cost of time"). Overall, labor accounted for 27% of operating expenses. Fixed costs accounted for the remaining 23% of operating expenses, split among maintenance (7%), major repairs (4%), estimated depreciation (5%), and overhead (7%).

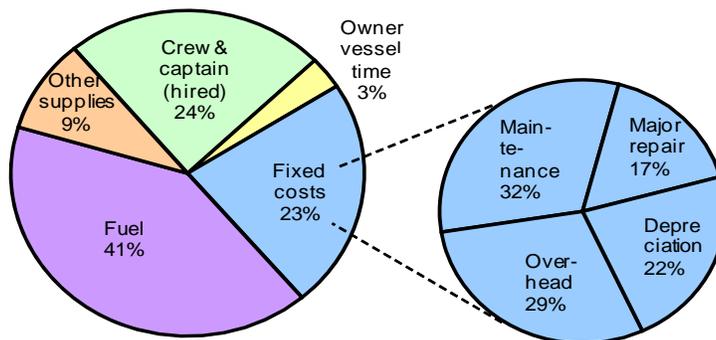


Figure A3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2009, not counted as operating expenses, included interest payments of \$3,898 (financing costs), principal payments of \$7,756 (paying down debt), and new investment of \$2,403 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 1, column 1.

### Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average \$8,269 (Figure A4). This is a measure of the industry's liquidity and should usually be positive in an established industry. Yet it does not account for owner operators' labor contribution or the vessels' depreciation. The difference between revenue from commercial fishing operations and operating expenses---net revenue from operations---is on average \$723, which accounts for all costs of production. Finally, when financing costs are subtracted and non-operational income (e.g., gov. payments) is added, the average profit for each owner is \$1,181.

Figure A4: Net Cash Flow, Net Revenue, Profit

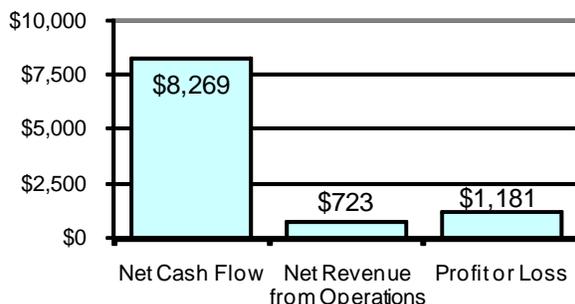
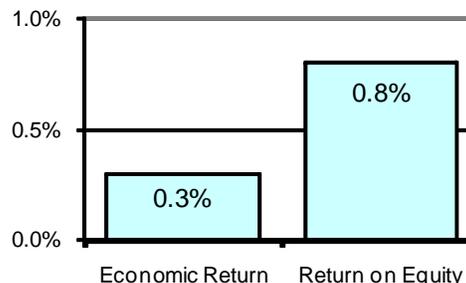


Figure A5: Financial Returns



An average economic return of 0.3% is calculated by dividing net operating revenue by the value of vessel assets (Figure A5). Economic return quantifies the productivity of a shrimp vessel's production from a societal perspective. In contrast, the return on equity is the primary concern of the individual owner. The return on equity of 0.8% is calculated by dividing the profit by the equity currently invested by the owner in the vessel. Finally, we estimate that the fleet generated fishing revenue of \$4.56 for each gallon of fuel used (measure of fuel efficiency).

Performance does vary substantially by state (Appendix, Table 2). On average, vessels from outside the Gulf region generate 72% of their revenue from non-shrimp landings and are quite profitable (10% economic returns), while vessels from Florida make unsustainable losses (negative 17% return). Vessels from Alabama and Mississippi are somewhat profitable (4%); Texas' are barely breaking even (1%); and Louisiana's are making losses (negative 6%).

## B: Economic Status of the Gulf Shrimp Fleet (with SPGM permit)

This section reports results for the *Gulf shrimp* vessels only, by excluding permitted vessels belonging to the S. Atlantic shrimp fleet and non-shrimp fleets. Of the 1,707 vessels with SPGM permits, an estimated 1,611 were active or idle *Gulf shrimp* vessels. The results below are based on a random sample of 402 permits from this population with complete and usable surveys. Tabulated results for this fleet can be found in the Appendix, Table 1, column 4. The sample's vessel characteristics are not materially different from the population of vessels with Gulf shrimp permits (page 1). The geographic distribution of the permit owners' residence across Florida, Alabama and Mississippi, Louisiana, Texas, and outside the Gulf region (Other) is provided in Figure B1.

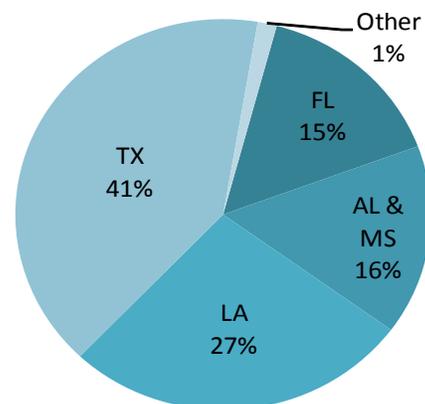


Figure B1: State of Residency of Owner

### Balance Sheet

The average market value of a vessel (incl. fishing permits) was \$179,328 in 2009, about \$175 thousand less than the original purchase price. The average vessel had \$59,198 of liabilities, and 42% of the vessels had an outstanding loan. This implies an average equity of \$120,130 for each owner and a debt to equity ratio of 49%. Only 36% of the vessels had hull insurance. However, because newer, more valuable vessels were more likely to have insurance, 51% of total asset value was insured. The implicit permit value among the Gulf shrimp fleet was \$20,429, or less than half of the value for the total fleet. Nonetheless, this estimate is probably influenced by the ownership of non-SPGM permits because SPGM permits were still being allowed to terminate by their owners throughout 2009/10. The median value of \$5,000 is closer to the anecdotally reported amount.

Table B1: Shrimp Landings, Price, and Revenue and Other Revenue per Vessel

	Landings (lbs, head-off)	Price (\$ per lb)	Revenue (\$)
Shrimp	86,925	2.23	193,762
Non-shrimp	-	-	1,390
Government payments (shrimp related)	-	-	4,603

### Landings and Revenue

In 2009, 87% of the permitted *Gulf shrimp* vessels landed shrimp. The average vessel landed 87 thousand pounds of shrimp, and the price per pound averaged \$2.23 (Table B1).

In 2009, average annual revenue from all sources was \$199,755. As a percentage of revenue, shrimp landings accounted for 97%, government payments for 2%, and non-shrimp landings were negligible (less than 1%) (Figure B2). This implies that the federally-permitted Gulf shrimp fleet is very specialized, with very few vessels catching shrimp and non-shrimp in the same year.

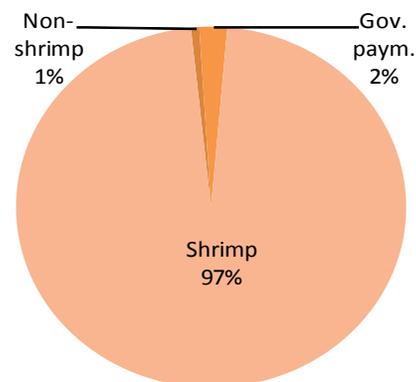


Figure B2: Revenue by Fishery

### Costs

In 2009, average annual expenses for operations were \$199,209, where operations refer to commercial fishing activities. Operating expenses include both variable costs, usually paid on a trip basis, and fixed costs, such as insurance. The average vessel used 41,646 gallons of fuel, and the average gallon of fuel was purchased for \$2.05 in 2009. Fuel accounted for 43% of operating

expenses, while other supplies accounted for 9%, leading to a total of 52% for non-labor variable costs (Figure B3). The expense for hired crew and captains were on average \$43,624, or 22% of expenses, which indicates the importance of the industry as a source of wage income. Of the vessels, 49% were owner operated, and we estimate that the average owner operator's contribution *as captain* was about \$14,000 per year ("opportunity cost of time"). Overall, labor accounted for 25% of operating expenses. Fixed costs accounted for the remaining 23% of operating expenses, split among maintenance (7%), major repairs (4%), estimated depreciation (5%), and overhead (7%).

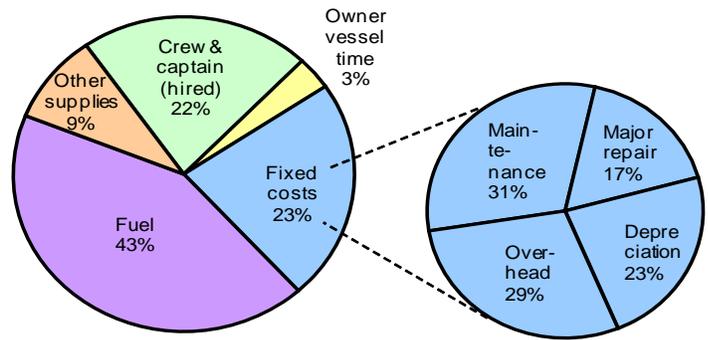


Figure B3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2009, not counted as operating expenses, included interest payments of \$3,741 (financing costs), principal payments of \$7,619 (paying down debt), and new investment of \$2,194 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 1, column 4.

### Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average \$4,108 (Figure B4). This is a measure of the industry's liquidity and should usually be positive in an established industry. Yet it does not account for owner operators' labor contribution or the vessels' depreciation. The difference between revenue from commercial fishing operations and operating expenses---net revenue from operations---is on average negative \$4,056, which accounts for all costs of production. Finally, when financing costs are subtracted and non-operational income (e.g., gov. payments) is added, the average loss for each owner is \$3,195.

Figure B4: Net Cash Flow, Net Revenue, Profit

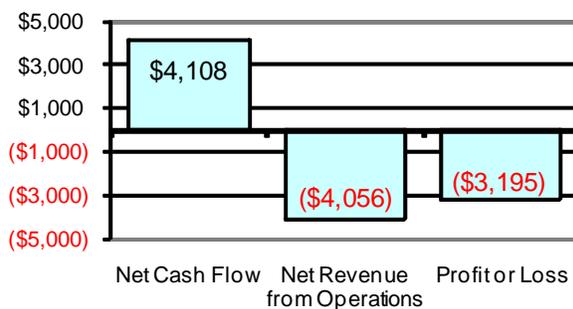
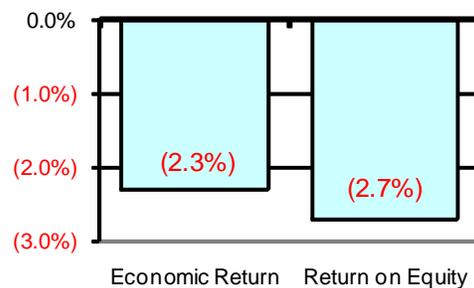


Figure B5: Financial Returns



An average economic return of negative 2.3% is calculated by dividing net operating revenue by the value of vessel assets (Figure B5). Economic return quantifies the productivity of a shrimp vessel's production from a societal perspective. In contrast, the return on equity is the primary concern of the individual owner. The return on equity of negative 2.7% is calculated by dividing the loss by the equity currently invested by the owner in the vessel. Finally, we estimate that the fleet generated fishing revenue of \$4.65 for each gallon of fuel used (measure of fuel efficiency).

Performance does vary substantially by state (Appendix, Table 3). On average, vessels from Alabama and Mississippi are somewhat profitable (4% economic returns); Texas vessels are barely breaking even (1%); Louisiana vessels are making losses (negative 6%); and Florida vessels are making unsustainable losses (negative 15% return).

## C: Economic Status of the **Active** Gulf Shrimp Fleet (with SPGM permit)

In 2009, approximately 1,215 vessels with the SPGM permit landed shrimp in Gulf ports. The results below are based on a random sample of 348 permits from this population with complete and usable surveys. Tabulated results for this fleet can be found in the Appendix, Table 4, column 1. The sample's vessel characteristics are not materially different from the population of vessels with Gulf shrimp permits (page 1). The geographic distribution of the permit owners' residence across Florida, Alabama and Mississippi, Louisiana, Texas, and outside the Gulf region (Other) is provided in Figure C1.

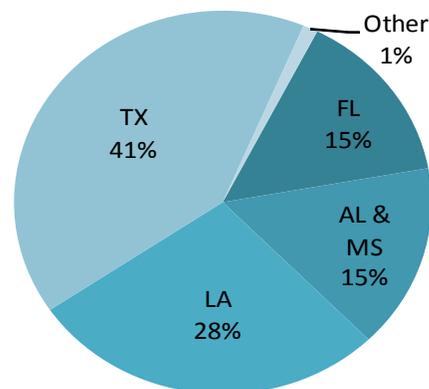


Figure C1: State of Residency of Owner

### Balance Sheet

The average market value of a vessel (incl. fishing permits) was \$194,510 in 2009, about \$83 thousand less than the original purchase price. The average vessel had \$65,808 of liabilities, and 46% of the vessels had an outstanding loan. This implies an average equity of \$128,703 for each owner and a debt to equity ratio of 51%. Only 41% of the vessels had hull insurance. However, because newer, more valuable vessels were more likely to have insurance, 54% of total asset value was insured. The implicit permit value among the active Gulf shrimp fleet was \$21,613, or less than half of the value for the total fleet. Nonetheless, this estimate is probably influenced by the ownership of non-SPGM permits because SPGM permits were still being allowed to terminate by their owners throughout 2009/10. The median value of \$5,000 is closer to the anecdotally reported amount.

Table C1: Shrimp Landings, Price, and Revenue and Other Revenue per Vessel

	Landings (lbs, head-off)	Price (\$ per lb)	Revenue (\$)
Shrimp	100,412	2.23	223,827
Non-shrimp	-	-	1,606
Government payments (shrimp related)	-	-	5,257

### Landings and Revenue

In 2009, by definition, 100% of the active permitted Gulf shrimp fleet landed shrimp. The average vessel landed 100 thousand pounds of shrimp, and the price per pound averaged \$2.23 (Table C1).

In 2009, average annual revenue from all sources was \$230,690. As a percentage of revenue, shrimp landings accounted for 97%, government payments for 2%, and non-shrimp landings were negligible (less than 1%) (Figure C2). This implies that the active federally-permitted Gulf shrimp fleet is very specialized, with very few vessels catching shrimp and non-shrimp in the same year.

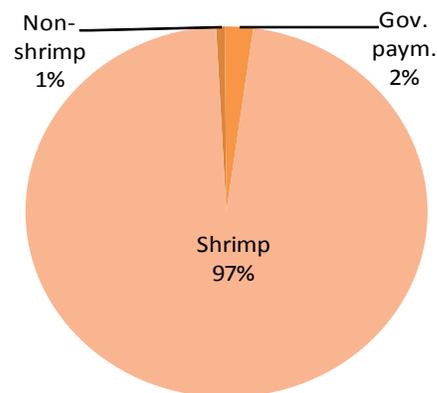


Figure C2: Revenue by Fishery

### Costs

In 2009, average annual expenses for operations were \$228,804, where operations refer to commercial fishing activities. Operating expenses include both variable costs, usually paid on a trip basis, and fixed costs, such as insurance. The average vessel used 48,102 gallons of fuel, and the average gallon of fuel was purchased for \$2.05 in 2009.

Fuel accounted for 43% of operating expenses, while other supplies accounted for 9%, leading to a total of 52% for non-labor variable costs (Figure C3). The expense for hired crew and captains was on average \$50,393, or 22% of expenses, which indicates the importance of the industry as a source of wage income. Of the vessels, 50% were owner operated, and we estimate that the average owner operator's contribution as captain was about \$15,000 per year ("opportunity cost of time"). Overall, labor accounted for 25.4% of operating expenses. Fixed costs accounted for the remaining 22% of operating expenses, split among maintenance (7%), major repairs (4%), estimated depreciation (5%), and overhead (6%).

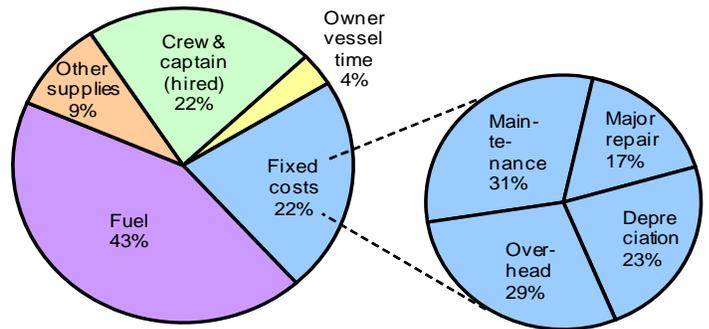


Figure C3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2009, not counted as operating expenses, included interest payments of \$4,231 (financing costs), principal payments of \$8,763 (paying down debt), and new investment of \$2,466 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 4, column 1.

### Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average \$5,955 (Figure C4). This is a measure of the industry's liquidity and should usually be positive in an established industry. Yet it does not account for owner operators' labor contribution or the vessels' depreciation. The difference between revenue from commercial fishing operations and operating expenses---net revenue from operations---is on average negative \$3,371, which accounts for all costs of production. Finally, when financing costs are subtracted and non-operational income (e.g., gov. payments) is added, the average loss for each owner is \$2,345.

Figure C4: Net Cash Flow, Net Revenue, Profit

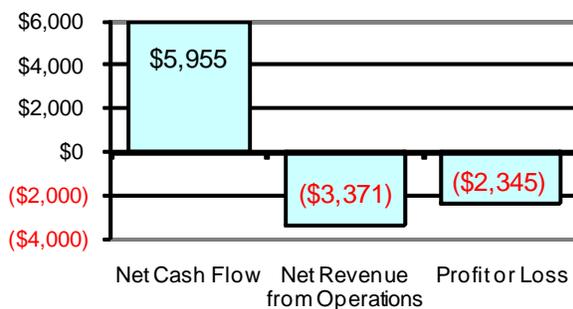


Figure C5: Financial Returns



An average economic return of negative 1.7% is calculated by dividing net operating revenue by the value of vessel assets (Figure C5). Economic return quantifies the productivity of a shrimp vessel's production from a societal perspective. In contrast, the return on equity is the primary concern of the individual owner. The return on equity of negative 1.8% is calculated by dividing the loss by the equity currently invested by the owner in the vessel. Finally, we estimate that the fleet generated fishing revenue of \$4.65 for each gallon of fuel used (measure of fuel efficiency).

Performance does vary substantially by state (Appendix, Table 4). On average, vessels from Alabama and Mississippi are somewhat profitable (5% economic returns); Texas vessels are breaking even (2%); Louisiana vessels are making losses (negative 6%); and Florida vessels are making unsustainable losses (negative 15% return).

## D: Economic Status of the **Inactive** Gulf Shrimp Fleet (with SPGM permit)

This section reports results for inactive commercial shrimping vessels in the Gulf. Of the estimated 1,611 vessels in the federally-permitted *Gulf shrimp* fleet, approximately 396 did not report any landings. The results below are based on a random sample of 54 vessels from this population with complete and usable surveys. Due to the limited sample size, caution interpreting the numbers is warranted. Tabulated results for this fleet can be found in the Appendix, Table 3, column 5.

Average vessel characteristics of the sample of inactive vessels differ materially from the overall population of vessels with Gulf shrimp permits (page 1). The inactive vessels average 55 feet long; 18 feet shorter than the population average. They also are on average 8 years older (built in 1978) and much less likely to be made of steel or use freezers as refrigeration. The geographic distribution of the permit owners' residence across Florida, Alabama and Mississippi, Louisiana, Texas, and outside the Gulf region (Other) is provided in Figure D1. The distribution of the inactive Gulf shrimp vessels across the states is roughly proportional to the active vessels---with Florida slightly over- and Louisiana slightly under-represented among the inactive vessels.

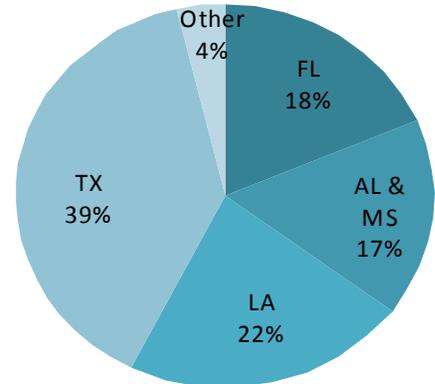


Figure D1: State of Residency of Owner

### Balance Sheet

The average market value of a vessel (incl. fishing permits) was \$81,482 in 2009, about \$18 thousand less than the original purchase price. The average vessel only had \$16,601 of liabilities as only 15% of the vessels had an outstanding loan. This implies an average equity of \$64,881 for each owner and a debt to equity ratio of 26%. Only 4% of the vessels had hull insurance. The average implicit value of a vessel's fishing permits was \$13,105. The vessel market value and purchase price are significantly less than for the active fleet, as is the owner's equity and the implicit permit price.

### Landings and Revenue

In 2009, by definition, none of the inactive permitted Gulf shrimp fleet had any commercial landings. The only source of revenue was government payments of \$384.

### Costs

In 2009, average annual expenses for operations were \$8,482, where operations refer to commercial fishing activities. Operating expenses include both variable costs, usually paid on a trip basis, and fixed costs, such as insurance. For the inactive fleet the activity amounts to the maintenance of fishing capacity. The average inactive vessel used 41 gallons of fuel, and the average gallon of fuel was purchased for \$2.57 in 2009.

Fuel accounted for 1% of operating expenses, while other supplies accounted for 1%, leading to a total of 2% for non-labor variable costs (Figure D3). There were no expenses for hired crew and captains. Of the vessels, 46% were owner operated (in principle). Fixed costs accounted for the remaining 98% of operating expenses, split among maintenance (23%), major repairs (26%), estimated depreciation (18%), and overhead (32%).

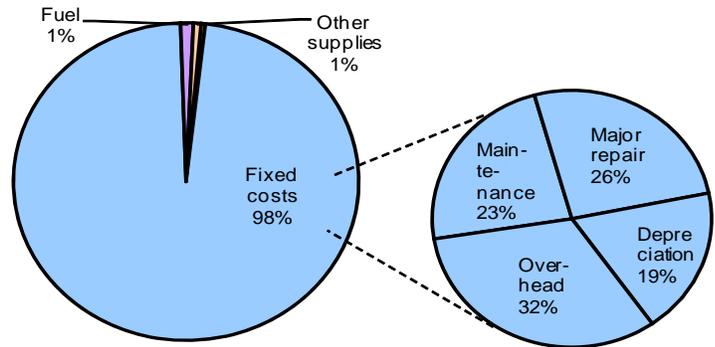


Figure D3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2009, not counted as operating expenses, included interest payments of \$580 (financing costs), principal payments of \$246 (paying down debt), and new investment of \$444 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 3, column 5.

### Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average negative \$7,795 (Figure D4). This is a measure of the industry's liquidity and should usually be positive in an established industry. Yet it does not account for owner operators' labor contribution or the vessels' depreciation. The difference between revenue from commercial fishing operations and operating expenses---net revenue from operations---is on average negative \$8,473, which accounts for all costs of production. Finally, when financing costs are subtracted and non-operational income (e.g., gov. payments) is added, the average loss for each owner is \$8,669.

Figure D4: Net Cash Flow, Net Revenue, Profit

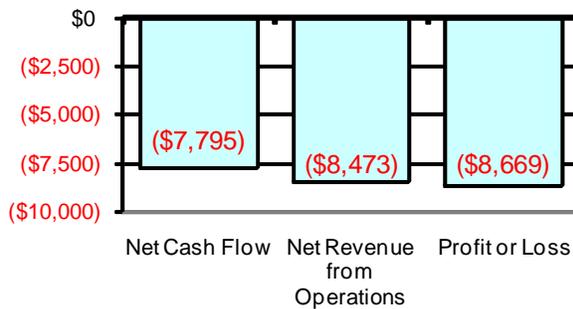
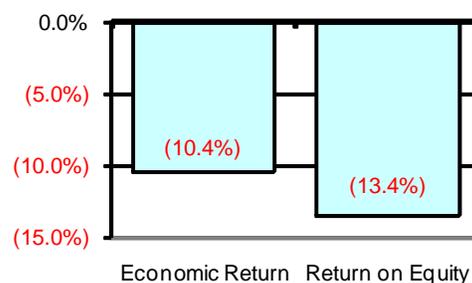


Figure D5: Financial Returns



An average economic return of negative 10.4% is calculated by dividing net operating revenue by the value of vessel assets (Figure D5). Economic return quantifies the productivity of a shrimp vessel's production from a societal perspective. In contrast, the return on equity is the primary concern of the individual owner. The return on equity of negative 13.4% is calculated by dividing the loss by the equity currently invested by the owner in the vessel.

The sample size is too low to warrant a breakout by state.

## Summary

The economic data is collected to provide an overview of the financial and economic health of the federal Gulf of Mexico shrimp fishery. The economic condition of “the fishery” depends on how the population is defined, i.e., which vessel are included and which are not included in the “fleet”. For the vessels in the total permitted fleet, the Gulf shrimp fleet, and the active Gulf shrimp fleet the average net cash flow was positive (with the active Florida sub-fleet being the odd exception) (Table 2). We would generally expect to find a positive cash flow. Commercial operations with a negative cash flow face an imminent liquidity problem. Unless they have access to some outside sources of cash, they will be unable to pay their bills and be forced into bankruptcy, eventually to sell or lose their vessel and permit. For active vessels from Florida (average net cash flow of negative \$9 thousand) the negative cash flow is large enough to raise questions about the accuracy of the numbers. On the other hand, negative cash flow for inactive vessels (negative \$8 thousand) seems reasonable and consistent with previous years.

Table 2: Financial Results for the Average SPGM-permitted Vessel by Fleets (thousand dollars)

	# of Obs.	Assets	Equity	Net Cash Flow	Net Rev. from Operations	"Profit" - Net Revenue (before taxes)	Economic Return	Return on Equity
Total Fleet	427	209	148	8	1	1	0%	1%
Gulf Shrimp Fleet	402	179	120	4	(4)	(3)	(2%)	(3%)
Active Gulf Shrimp Fleet	348	195	129	6	(3)	(2)	(2%)	(2%)
Inactive Gulf Shrimp Fleet	54	81	65	(8)	(8)	(9)	(10%)	(13%)
<u>Active Gulf Shrimp Fleet in:</u>								
Florida	51	123	111	(9)	(19)	(16)	(15%)	(15%)
Alabama and Mississippi	54	262	180	16	13	14	5%	8%
Louisiana	97	197	134	6	(12)	(7)	(6%)	(5%)
Texas	142	190	108	9	3	1	2%	1%

Unlike the positive cash flow, once all costs are considered in the income statement, the average net revenues and returns are negative for the Gulf shrimp fleet and its active and inactive components. Only the total fleet---all vessels that own a SPGM permit---generate, on average, minimally positive net revenues and returns. But these profits, on average, are being made by vessels active in non-shrimp fisheries and not active in the Gulf shrimp fishery. An average return on equity of negative 2% for the active Gulf shrimp fleet on the substantial financial and entrepreneurial capital invested in the average shrimping enterprise depicts an unhealthy industry.

In summary, the results indicate that the commercial harvest of Gulf shrimp is currently, on average, not a profitable activity. These results are averages and hence hide the variation that clearly exists within all fleets. Many further caveats apply to these results, including the general difficulty of collecting economic data. Hence the results should only be viewed as tentative indicators of the general economic situation of the industry.

## **Appendix**

## Data Tables

Table 1: F&E Results: Averages for the Total Fleet by Fishery (2009)

(in USD unless otherwise noted)	Total Fleet	Total Fleet		
		Other Fish	S. Atlantic Shrimp	Gulf Shrimp
# of Observations	427	9	15	402
<b><u>Vessel Characteristics</u></b>				
Length (feet)	68	71	71	67
Gross tons	105	110	110	104
Horse power	522	540	480	524
Year built	1986	1984	1985	1986
Hull material - Steel (%)	74%	78%	47%	76%
Refrigeration - Freezer (%)	55%	22%	53%	55%
State of Owner - Florida (%)	16%	11%	40%	15%
State of Owner - Alabama or Mississippi (%)	15%	0%	0%	16%
State of Owner - Louisiana (%)	26%	11%	0%	27%
State of Owner - Texas (%)	38%	11%	0%	41%
State of Owner - Other (%)	5%	67%	60%	1%
<b><u>Balance Sheet (end of 2009)</u></b>				
<b>Assets - Market value of vessel</b>	<b>209,311</b>	<b>1,401,778</b>	<b>308,005</b>	<b>179,328</b>
<i>Original value of vessel (purchase price)</i>	256,772	377,222	274,051	253,883
<i>Implicit permit value</i>	47,460	1,055,556	67,138	20,429
<b>Liabilities - Loan on vessel</b>	<b>61,221</b>	<b>187,658</b>	<b>43,659</b>	<b>59,198</b>
<i>% of vessels with loan</i>	41%	11%	40%	42%
<b>Equity - Owner's equity in vessel</b>	<b>148,090</b>	<b>1,214,120</b>	<b>264,346</b>	<b>120,130</b>
<i>Insurance coverage (% of vessels / % of assets)</i>	38% / 47%	78% / 22%	60% / 58%	36% / 51%
<b><u>Vessel Operation (2009)</u></b>				
Owner-operator (%)	49%	22%	53%	49%
Actively shrimping (%)	85%	0%	100%	87%
Shrimp landed (pounds)	84,208	377	67,313	86,925
Shrimp price per pound (vessel basis / pound basis)	2.33 / 2.23	-	2.61 / 2.32	2.32 / 2.23
Annual fuel use (gallons)	41,240	41,658	32,863	41,646
Fuel price per gallon (vessel basis / gallon basis)	2.14 / 2.05	2.27 / 2.08	2.23 / 2.06	2.13 / 2.05
Fuel efficiency I (vessel basis / gallon basis)	3.2 / 2.0	-	2.2 / 2.0	3.2 / 2.1
Fuel efficiency II (vessel basis / gallon basis)	6.08 / 4.56	-	5.35 / 4.76	6.13 / 4.65
<b><u>Cash Flow (2009)</u></b>				
<b>Inflow - Total</b>	<b>212,148</b>	<b>779,468</b>	<b>218,038</b>	<b>199,755</b>
Shrimp landings	187,930	1,045	156,291	193,762
Non-shrimp landings	19,862	778,423	61,107	1,390
Government payments received (shrimp related)	4,356	0	640	4,603
<b>Outflow - Total</b>	<b>203,879</b>	<b>573,945</b>	<b>215,270</b>	<b>195,647</b>
Fuel	84,547	86,512	67,577	85,346
Other supplies	19,237	46,691	25,925	18,421
Crew & captain (hired)	49,392	292,569	61,369	43,624
Regular maintenance (vessel and gear)	14,910	56,937	18,465	13,862
Major repair and haul-out	7,913	14,661	6,952	7,806
Overhead (excluding loan payments)	13,823	41,972	18,813	13,034
Interest payments made (on vessel loans)	3,898	13,594	2,560	3,741
Principal payments made (on vessel loans)	7,756	15,272	7,440	7,619
New investments and upgrades (in vessel)	2,403	5,737	6,170	2,194
<b>Net Cash Flow</b>	<b>8,269</b>	<b>205,523</b>	<b>2,767</b>	<b>4,108</b>

	Total Fleet 427	Total Fleet		
		Other Fish 9	S. Atlantic Shrimp 15	Gulf Shrimp 402
<b><u>Income Statement (2009)</u></b>				
<b>Operating Activities</b>				
Revenue (from commercial fishing)	207,793	779,468	217,398	195,152
<b>Expenses</b>	<b>207,069</b>	<b>557,477</b>	<b>220,488</b>	<b>199,209</b>
<i>Variable costs - Non-Labor</i>	<u>50.1%</u>	<u>23.9%</u>	<u>42.4%</u>	<u>52.1%</u>
Fuel	40.8%	15.5%	30.6%	42.8%
Other supplies	9.3%	8.4%	11.8%	9.2%
<i>Variable costs - Labor</i>	<u>27.1%</u>	<u>53.0%</u>	<u>32.2%</u>	<u>25.3%</u>
Crew & captain (hired)	23.9%	52.5%	27.8%	21.9%
Owner's vessel time	3.2%	0.6%	4.4%	3.4%
<i>Fixed costs</i>	<u>22.8%</u>	<u>23.1%</u>	<u>25.4%</u>	<u>22.7%</u>
Regular maintenance (vessel and gear)	7.2%	10.2%	8.4%	7.0%
Major repair and haul-out	3.8%	2.6%	3.2%	3.9%
Depreciation	5.1%	2.7%	5.3%	5.2%
Overhead (excluding loan payments)	6.7%	7.5%	8.5%	6.5%
<b>Net Revenue from Operations</b>	<b>723</b>	<b>221,991</b>	<b>(3,090)</b>	<b>(4,056)</b>
<b>Non-Operating Activities</b>				
Interest payments made (on vessel loans)	3,898	13,594	2,560	3,741
Government payments received (shrimp related)	4,356	0	640	4,603
<b>Net Revenue (before tax) - "Profit/Loss"</b>	<b>1,181</b>	<b>208,397</b>	<b>(5,010)</b>	<b>(3,195)</b>
<i>Owner's vessel time</i>	6,708	3,107	9,626	6,697
<i>Depreciation</i>	10,539	15,029	11,761	10,419

Table 2: F&amp;E Results: Averages for the Total Fleet by State (2009)

(in USD unless otherwise noted)	Total Fleet				
	FL	AL+MS	LA	TX	Other
# of Observations	68	29 + 34	110	164	22
<b><u>Vessel Characteristics</u></b>					
Length (feet)	59	71	63	72	77
Gross tons	81	110	87	121	129
Horse power	402	586	479	570	573
Year built	1980	1987	1988	1986	1988
Hull material - Steel (%)	22%	79%	80%	91%	73%
Refrigeration - Freezer (%)	51%	49%	25%	78%	55%
State of Owner - Florida (%)	100%	0%	0%	0%	0%
State of Owner - Alabama or Mississippi (%)	0%	100%	0%	0%	0%
State of Owner - Louisiana (%)	0%	0%	100%	0%	0%
State of Owner - Texas (%)	0%	0%	0%	100%	0%
State of Owner - Other (%)	0%	0%	0%	0%	100%
<b><u>Balance Sheet (end of 2009)</u></b>					
<b>Assets - Market value of vessel</b>	<b>113,853</b>	<b>238,489</b>	<b>184,216</b>	<b>169,940</b>	<b>839,773</b>
<i>Original value of vessel (purchase price)</i>	<i>137,054</i>	<i>320,302</i>	<i>238,885</i>	<i>281,799</i>	<i>347,762</i>
<i>Implicit permit value</i>	<i>7,700</i>	<i>19,862</i>	<i>13,306</i>	<i>29,843</i>	<i>486,182</i>
<b>Liabilities - Loan on vessel</b>	<b>15,041</b>	<b>73,872</b>	<b>54,928</b>	<b>71,661</b>	<b>121,369</b>
<i>% of vessels with loan</i>	<i>19%</i>	<i>48%</i>	<i>43%</i>	<i>46%</i>	<i>41%</i>
<b>Equity - Owner's equity in vessel</b>	<b>98,812</b>	<b>164,616</b>	<b>129,288</b>	<b>98,279</b>	<b>718,404</b>
<i>Insurance coverage (% of vessels / % of assets)</i>	<i>18% / 28%</i>	<i>49% / 66%</i>	<i>36% / 36%</i>	<i>37% / 58%</i>	<i>77% / 36%</i>
<b><u>Vessel Operation (2009)</u></b>					
Owner-operator (%)	41%	51%	76%	36%	27%
Actively shrimping (%)	84%	86%	88%	87%	59%
Shrimp landed (pounds)	52,562	100,698	76,032	100,348	55,365
Shrimp price per pound (vessel basis / pound basis)	3.13 / 2.53	2.14 / 2.20	1.80 / 1.84	2.43 / 2.37	2.51 / 2.32
Annual fuel use (gallons)	27,319	44,639	28,027	54,285	43,363
Fuel price per gallon (vessel basis / gallon basis)	2.25 / 2.10	2.18 / 2.08	2.16 / 2.10	2.06 / 2.02	2.10 / 2.00
Fuel efficiency I (vessel basis / gallon basis)	2.4 / 1.9	2.9 / 2.3	4.6 / 2.7	2.7 / 1.8	2.3 / 1.3
Fuel efficiency II (vessel basis / gallon basis)	7.46 / 4.87	5.41 / 4.97	7.17 / 4.99	5.11 / 4.38	5.37 / 2.97
<b><u>Cash Flow (2009)</u></b>					
<b>Inflow - Total</b>	<b>138,652</b>	<b>229,978</b>	<b>149,394</b>	<b>243,367</b>	<b>469,310</b>
Shrimp landings	133,118	221,921	139,866	237,798	128,590
Non-shrimp landings	3,060	3,249	1,563	2,547	339,947
Government payments received (shrimp related)	2,475	4,807	7,966	3,021	773
<b>Outflow - Total</b>	<b>149,590</b>	<b>217,182</b>	<b>143,720</b>	<b>235,875</b>	<b>395,873</b>
Fuel	57,334	92,656	58,827	109,686	86,636
Other supplies	17,027	17,817	16,143	20,806	33,912
Crew & captain (hired)	39,267	49,900	30,248	51,708	157,685
Regular maintenance (vessel and gear)	13,650	14,865	9,365	15,642	41,196
Major repair and haul-out	10,369	6,653	5,471	8,113	14,650
Overhead (excluding loan payments)	7,686	17,468	9,971	15,036	32,577
Interest payments made (on vessel loans)	654	4,430	3,525	4,693	8,347
Principal payments made (on vessel loans)	1,931	9,894	7,826	8,691	12,327
New investments and upgrades (in vessel)	1,673	3,499	2,344	1,501	8,543
<b>Net Cash Flow</b>	<b>(10,937)</b>	<b>12,796</b>	<b>5,675</b>	<b>7,491</b>	<b>73,437</b>

	Total Fleet				
	FL	AL+MS	LA	TX	Other
# of Observations	68	29 + 34	110	164	22
<b>Income Statement (2009)</b>					
<b>Operating Activities</b>					
Revenue (from commercial fishing)	136,178	225,171	141,429	240,345	468,538
<b>Expenses</b>	<b>156,032</b>	<b>214,818</b>	<b>152,201</b>	<b>238,067</b>	<b>385,893</b>
<i>Variable costs - Non-Labor</i>	<i>47.7%</i>	<i>51.4%</i>	<i>49.3%</i>	<i>54.8%</i>	<i>31.2%</i>
Fuel	36.7%	43.1%	38.7%	46.1%	22.5%
Other supplies	10.9%	8.3%	10.6%	8.7%	8.8%
<i>Variable costs - Labor</i>	<i>28.7%</i>	<i>26.6%</i>	<i>26.5%</i>	<i>23.9%</i>	<i>41.8%</i>
Crew & captain (hired)	25.2%	23.2%	19.9%	21.7%	40.9%
Owner's vessel time	3.5%	3.4%	6.6%	2.2%	0.9%
<i>Fixed costs</i>	<i>23.7%</i>	<i>22.0%</i>	<i>24.3%</i>	<i>21.3%</i>	<i>27.0%</i>
Regular maintenance (vessel and gear)	8.7%	6.9%	6.2%	6.6%	10.7%
Major repair and haul-out	6.6%	3.1%	3.6%	3.4%	3.8%
Depreciation	3.4%	3.8%	8.0%	5.0%	4.1%
Overhead (excluding loan payments)	4.9%	8.1%	6.6%	6.3%	8.4%
<b>Net Revenue from Operations</b>	<b>(19,854)</b>	<b>10,352</b>	<b>(10,773)</b>	<b>2,278</b>	<b>82,644</b>
<b>Non-Operating Activities</b>					
Interest payments made (on vessel loans)	654	4,430	3,525	4,693	8,347
Government payments received (shrimp related)	2,475	4,807	7,966	3,021	773
<b>Net Revenue (before tax) - "Profit/Loss"</b>	<b>(18,033)</b>	<b>10,729</b>	<b>(6,332)</b>	<b>607</b>	<b>75,070</b>
<i>Owner's vessel time</i>	<i>5,448</i>	<i>7,276</i>	<i>10,033</i>	<i>5,207</i>	<i>3,547</i>
<i>Depreciation</i>	<i>5,251</i>	<i>8,183</i>	<i>12,144</i>	<i>11,870</i>	<i>15,690</i>

Table 3: F&E Results: Averages for the Gulf Shrimp Fleet by State and by Activity Status (2009)

(in USD unless otherwise noted)	Gulf Shrimp Fleet				Gulf Shrimp Fleet	
	FL	AL+MS	LA	TX	Inactive	Active
# of Observations	61	29 + 34	109	163	54	348
<b><u>Vessel Characteristics</u></b>						
Length (feet)	59	71	63	72	55	69
Gross tons	81	110	87	121	66	110
Horse power	402	586	480	571	350	551
Year built	1980	1987	1988	1986	1978	1987
Hull material - Steel (%)	23%	79%	81%	91%	52%	79%
Refrigeration - Freezer (%)	51%	49%	26%	79%	24%	60%
State of Owner - Florida (%)	100%	0%	0%	0%	19%	15%
State of Owner - Alabama or Mississippi (%)	0%	100%	0%	0%	17%	16%
State of Owner - Louisiana (%)	0%	0%	100%	0%	22%	28%
State of Owner - Texas (%)	0%	0%	0%	100%	39%	41%
State of Owner - Other (%)	0%	0%	0%	0%	4%	1%
<b><u>Balance Sheet (end of 2009)</u></b>						
<b>Assets - Market value of vessel</b>	<b>113,065</b>	<b>238,489</b>	<b>185,585</b>	<b>170,946</b>	<b>81,482</b>	<b>194,510</b>
<i>Original value of vessel (purchase price)</i>	136,388	320,302	240,801	282,975	99,778	277,796
<i>Implicit permit value</i>	7,661	19,862	13,442	30,062	13,105	21,613
<b>Liabilities - Loan on vessel</b>	<b>16,767</b>	<b>73,872</b>	<b>55,432</b>	<b>72,101</b>	<b>16,601</b>	<b>65,808</b>
<i>% of vessels with loan</i>	21%	48%	43%	46%	15%	46%
<b>Equity - Owner's equity in vessel</b>	<b>96,298</b>	<b>164,616</b>	<b>130,153</b>	<b>98,845</b>	<b>64,881</b>	<b>128,703</b>
<i>Insurance coverage (% of vessels / % of assets)</i>	15% / 26%	49% / 66%	37% / 37%	37% / 58%	4% / 10%	41% / 54%
<b><u>Vessel Operation (2009)</u></b>						
Owner-operator (%)	38%	51%	76%	36%	46%	50%
Actively shrimping (%)	84%	86%	89%	87%	0%	100%
Shrimp landed (pounds)	54,959	100,698	76,730	100,963	-	100,412
Shrimp price per pound (vessel basis / pound basis)	3.15 / 2.53	2.14 / 2.20	1.80 / 1.84	2.43 / 2.37	-	2.32 / 2.23
Annual fuel use (gallons)	28,242	44,639	28,258	54,544	41	48,102
Fuel price per gallon (vessel basis / gallon basis)	2.23 / 2.08	2.18 / 2.08	2.15 / 2.10	2.05 / 2.02	2.67 / 2.57	2.12 / 2.05
Fuel efficiency I (vessel basis / gallon basis)	2.5 / 1.9	2.9 / 2.3	4.6 / 2.7	2.7 / 1.9	-	3.2 / 2.1
Fuel efficiency II (vessel basis / gallon basis)	7.81 / 4.92	5.41 / 4.97	7.17 / 4.99	5.11 / 4.39	-	6.13 / 4.65
<b><u>Cash Flow (2009)</u></b>						
<b>Inflow - Total</b>	<b>142,109</b>	<b>229,978</b>	<b>150,481</b>	<b>243,326</b>	<b>394</b>	<b>230,690</b>
Shrimp landings	139,059	221,921	141,149	239,257	10	223,827
Non-shrimp landings	292	3,249	1,293	1,029	0	1,606
Government payments received (shrimp related)	2,759	4,807	8,039	3,040	384	5,257
<b>Outflow - Total</b>	<b>150,882</b>	<b>217,182</b>	<b>144,863</b>	<b>236,229</b>	<b>8,189</b>	<b>224,735</b>
Fuel	58,849	92,656	59,293	110,138	105	98,574
Other supplies	16,458	17,817	16,246	20,688	61	21,270
Crew & captain (hired)	39,624	49,900	30,525	51,510	0	50,393
Regular maintenance (vessel and gear)	13,962	14,865	9,417	15,738	1,919	15,715
Major repair and haul-out	10,706	6,653	5,521	8,163	2,160	8,682
Overhead (excluding loan payments)	7,193	17,468	10,040	15,128	2,674	14,641
Interest payments made (on vessel loans)	729	4,430	3,558	4,721	580	4,231
Principal payments made (on vessel loans)	2,152	9,894	7,898	8,744	246	8,763
New investments and upgrades (in vessel)	1,209	3,499	2,366	1,398	444	2,466
<b>Net Cash Flow</b>	<b>(8,774)</b>	<b>12,796</b>	<b>5,618</b>	<b>7,097</b>	<b>(7,795)</b>	<b>5,955</b>

	Gulf Shrimp Fleet				Gulf Shrimp Fleet	
	FL	AL+MS	LA	TX	Inactive	Active
# of Observations	61	29 + 34	109	163	54	348
<b>Income Statement (2009)</b>						
<b>Operating Activities</b>						
Revenue (from commercial fishing)	139,350	225,171	142,442	240,286	10	225,433
<b>Expenses</b>	<b>156,447</b>	<b>214,818</b>	<b>153,301</b>	<b>238,546</b>	<b>8,482</b>	<b>228,804</b>
<i>Variable costs - Non-Labor</i>	<u>48.1%</u>	<u>51.4%</u>	<u>49.3%</u>	<u>54.8%</u>	<u>2.0%</u>	<u>52.4%</u>
Fuel	37.6%	43.1%	38.7%	46.2%	1.2%	43.1%
Other supplies	10.5%	8.3%	10.6%	8.7%	0.7%	9.3%
<i>Variable costs - Labor</i>	<u>28.2%</u>	<u>26.6%</u>	<u>26.4%</u>	<u>23.8%</u>	<u>0.4%</u>	<u>25.4%</u>
Crew & captain (hired)	25.3%	23.2%	19.9%	21.6%	0.0%	22.0%
Owner's vessel time	2.9%	3.4%	6.5%	2.2%	0.4%	3.4%
<i>Fixed costs</i>	<u>23.6%</u>	<u>22.0%</u>	<u>24.3%</u>	<u>21.4%</u>	<u>97.6%</u>	<u>22.2%</u>
Regular maintenance (vessel and gear)	8.9%	6.9%	6.1%	6.6%	22.6%	6.9%
Major repair and haul-out	6.8%	3.1%	3.6%	3.4%	25.5%	3.8%
Depreciation	3.3%	3.8%	8.0%	5.0%	18.0%	5.2%
Overhead (excluding loan payments)	4.6%	8.1%	6.5%	6.3%	31.5%	6.4%
<b>Net Revenue from Operations</b>	<b>(17,097)</b>	<b>10,352</b>	<b>(10,858)</b>	<b>1,740</b>	<b>(8,473)</b>	<b>(3,371)</b>
<b>Non-Operating Activities</b>						
Interest payments made (on vessel loans)	729	4,430	3,558	4,721	580	4,231
Government payments received (shrimp related)	2,759	4,807	8,039	3,040	384	5,257
<b>Net Revenue (before tax) - "Profit/Loss"</b>	<b>(15,067)</b>	<b>10,729</b>	<b>(6,377)</b>	<b>58</b>	<b>(8,669)</b>	<b>(2,345)</b>
<i>Owner's vessel time</i>	4,524	7,276	10,004	5,239	37	7,730
<i>Depreciation</i>	5,131	8,183	12,255	11,942	1,527	11,799

Table 4: F&amp;E Results: Averages for the Active Gulf Shrimp Fleet by State (2009)

(in USD unless otherwise noted)	Active Gulf Shrimp	Active Gulf Shrimp Fleet			
		FL	AL+MS	LA	TX
# of Observations	348	51	24 + 30	97	142
<b><u>Vessel Characteristics</u></b>					
Length (feet)	69	60	73	65	74
Gross tons	110	87	117	93	127
Horse power	551	422	623	506	597
Year built	1987	1981	1989	1988	1988
Hull material - Steel (%)	79%	24%	83%	86%	94%
Refrigeration - Freezer (%)	60%	57%	56%	29%	84%
State of Owner - Florida (%)	15%	100%	0%	0%	0%
State of Owner - Alabama or Mississippi (%)	16%	0%	100%	0%	0%
State of Owner - Louisiana (%)	28%	0%	0%	100%	0%
State of Owner - Texas (%)	41%	0%	0%	0%	100%
State of Owner - Other (%)	1%	0%	0%	0%	0%
<b><u>Balance Sheet (end of 2009)</u></b>					
<b>Assets - Market value of vessel</b>	<b>194,510</b>	<b>122,617</b>	<b>261,817</b>	<b>196,536</b>	<b>189,676</b>
<i>Original value of vessel (purchase price)</i>	277,796	142,876	347,759	260,622	312,091
<i>Implicit permit value</i>	21,613	8,489	21,889	13,320	33,491
<b>Liabilities - Loan on vessel</b>	<b>65,808</b>	<b>11,655</b>	<b>81,669</b>	<b>62,289</b>	<b>81,910</b>
<i>% of vessels with loan</i>	46%	20%	52%	48%	51%
<b>Equity - Owner's equity in vessel</b>	<b>128,703</b>	<b>110,962</b>	<b>180,147</b>	<b>134,247</b>	<b>107,766</b>
<i>Insurance coverage (% of vessels / % of assets)</i>	41% / 54%	18% / 29%	57% / 70%	40% / 39%	43% / 60%
<b><u>Vessel Operation (2009)</u></b>					
Owner-operator (%)	50%	37%	50%	76%	37%
Actively shrimping (%)	100%	100%	100%	100%	100%
Shrimp landed (pounds)	100,412	65,735	117,475	86,222	115,894
Shrimp price per pound (vessel basis / pound basis)	2.32 / 2.23	3.15 / 2.53	2.14 / 2.20	1.80 / 1.84	2.43 / 2.37
Annual fuel use (gallons)	48,102	33,768	52,070	31,743	62,611
Fuel price per gallon (vessel basis / gallon basis)	2.12 / 2.05	2.22 / 2.08	2.17 / 2.08	2.15 / 2.10	2.05 / 2.02
Fuel efficiency I (vessel basis / gallon basis)	3.2 / 2.1	2.5 / 1.9	2.9 / 2.3	4.6 / 2.7	2.7 / 1.9
Fuel efficiency II (vessel basis / gallon basis)	6.13 / 4.65	7.81 / 4.93	5.41 / 4.97	7.17 / 5.00	5.11 / 4.39
<b><u>Cash Flow (2009)</u></b>					
<b>Inflow - Total</b>	<b>230,690</b>	<b>169,971</b>	<b>268,147</b>	<b>169,036</b>	<b>279,264</b>
Shrimp landings	223,827	166,325	258,899	158,611	274,640
Non-shrimp landings	1,606	349	3,791	1,453	1,181
Government payments received (shrimp related)	5,257	3,297	5,457	8,972	3,443
<b>Outflow - Total</b>	<b>224,735</b>	<b>178,623</b>	<b>251,712</b>	<b>162,577</b>	<b>270,061</b>
Fuel	98,574	70,356	108,071	66,602	126,426
Other supplies	21,270	19,673	20,783	18,240	23,747
Crew & captain (hired)	50,393	47,394	58,216	34,302	59,128
Regular maintenance (vessel and gear)	15,715	16,586	17,040	10,479	17,787
Major repair and haul-out	8,682	12,432	7,535	6,204	8,769
Overhead (excluding loan payments)	14,641	7,410	19,983	11,219	17,172
Interest payments made (on vessel loans)	4,231	831	4,852	3,998	5,389
Principal payments made (on vessel loans)	8,763	2,574	11,520	8,875	10,037
New investments and upgrades (in vessel)	2,466	1,368	3,712	2,658	1,605
<b>Net Cash Flow</b>	<b>5,955</b>	<b>(8,652)</b>	<b>16,434</b>	<b>6,459</b>	<b>9,203</b>

	Active Gulf	Active Gulf Shrimp Fleet			
	Shrimp	FL	AL+MS	LA	TX
# of Observations	348	51	24 + 30	97	142
<b><u>Income Statement (2009)</u></b>					
<b>Operating Activities</b>					
Revenue (from commercial fishing)	225,433	166,674	262,690	160,064	275,821
<b>Expenses</b>	<b>228,804</b>	<b>185,332</b>	<b>249,297</b>	<b>171,818</b>	<b>272,689</b>
<i>Variable costs - Non-Labor</i>	<u>52.4%</u>	<u>48.6%</u>	<u>51.7%</u>	<u>49.4%</u>	<u>55.1%</u>
Fuel	43.1%	38.0%	43.4%	38.8%	46.4%
Other supplies	9.3%	10.6%	8.3%	10.6%	8.7%
<i>Variable costs - Labor</i>	<u>25.4%</u>	<u>28.5%</u>	<u>26.8%</u>	<u>26.5%</u>	<u>23.9%</u>
Crew & captain (hired)	22.0%	25.6%	23.4%	20.0%	21.7%
Owner's vessel time	3.4%	2.9%	3.4%	6.5%	2.2%
<i>Fixed costs</i>	<u>22.2%</u>	<u>22.9%</u>	<u>21.6%</u>	<u>24.1%</u>	<u>21.0%</u>
Regular maintenance (vessel and gear)	6.9%	8.9%	6.8%	6.1%	6.5%
Major repair and haul-out	3.8%	6.7%	3.0%	3.6%	3.2%
Depreciation	5.2%	3.3%	3.7%	7.9%	5.0%
Overhead (excluding loan payments)	6.4%	4.0%	8.0%	6.5%	6.3%
<b>Net Revenue from Operations</b>	<b>(3,371)</b>	<b>(18,658)</b>	<b>13,393</b>	<b>(11,754)</b>	<b>3,132</b>
<b>Non-Operating Activities</b>					
Interest payments made (on vessel loans)	4,231	831	4,852	3,998	5,389
Government payments received (shrimp related)	5,257	3,297	5,457	8,972	3,443
<b>Net Revenue (before tax) - "Profit/Loss"</b>	<b>(2,345)</b>	<b>(16,191)</b>	<b>13,998</b>	<b>(6,779)</b>	<b>1,187</b>
<i>Owner's vessel time</i>	7,730	5,411	8,488	11,221	6,014
<i>Depreciation</i>	11,799	6,070	9,180	13,551	13,646

Table 5: F&E Results: Averages for the Active Gulf Shrimp Fleet by Ownership Structure; and of the Owner-Operated Sub-Fleet by Captain's Share Structure (2009)

(in USD unless otherwise noted)	Active Gulf	Active Gulf Shrimp Fleet		Own-Operator	Act. Gulf Shr.
	Shrimp	Hired Captain	Own-Operator	without Share	with Share
# of Observations	348	175	173	121	52
<b><u>Vessel Characteristics</u></b>					
Length (feet)	69	72	66	66	66
Gross tons	110	123	97	97	98
Horse power	551	567	534	517	574
Year built	1987	1988	1986	1986	1986
Hull material - Steel (%)	79%	83%	76%	80%	65%
Refrigeration - Freezer (%)	60%	83%	37%	33%	46%
State of Owner - Florida (%)	15%	18%	11%	8%	17%
State of Owner - Alabama or Mississippi (%)	16%	15%	16%	13%	21%
State of Owner - Louisiana (%)	28%	13%	43%	47%	33%
State of Owner - Texas (%)	41%	51%	30%	31%	29%
State of Owner - Other (%)	1%	2%	1%	1%	0%
<b><u>Balance Sheet (end of 2009)</u></b>					
<b>Assets - Market value of vessel</b>	<b>194,510</b>	<b>212,755</b>	<b>176,055</b>	<b>177,404</b>	<b>172,916</b>
<i>Original value of vessel (purchase price)</i>	277,796	312,263	242,930	238,802	252,535
<i>Implicit permit value</i>	21,613	16,157	27,409	29,372	22,948
<b>Liabilities - Loan on vessel</b>	<b>65,808</b>	<b>84,026</b>	<b>47,379</b>	<b>45,668</b>	<b>51,361</b>
<i>% of vessels with loan</i>	46%	53%	39%	36%	46%
<b>Equity - Owner's equity in vessel</b>	<b>128,703</b>	<b>128,729</b>	<b>128,676</b>	<b>131,736</b>	<b>121,555</b>
<i>Insurance coverage (% of vessels / % of assets)</i>	41% / 54%	51% / 61%	31% / 45%	31% / 45%	31% / 47%
<b><u>Vessel Operation (2009)</u></b>					
Owner-operator (%)	50%	0%	100%	100%	100%
Actively shrimping (%)	100%	100%	100%	100%	100%
Shrimp landed (pounds)	100,412	117,714	82,910	77,813	94,770
Shrimp price per pound (vessel basis / pound basis)	2.32 / 2.23	2.47 / 2.36	2.17 / 2.04	2.22 / 2.07	2.05 / 1.98
Annual fuel use (gallons)	48,102	58,775	37,305	36,201	39,874
Fuel price per gallon (vessel basis / gallon basis)	2.12 / 2.05	2.06 / 2.02	2.19 / 2.10	2.15 / 2.08	2.28 / 2.14
Fuel efficiency I (vessel basis / gallon basis)	3.2 / 2.1	2.3 / 2.0	4.1 / 2.2	3.4 / 2.1	5.7 / 2.4
Fuel efficiency II (vessel basis / gallon basis)	6.13 / 4.65	5.59 / 4.73	6.68 / 4.53	6.31 / 4.45	7.53 / 4.70
<b><u>Cash Flow (2009)</u></b>					
<b>Inflow - Total</b>	<b>230,690</b>	<b>284,102</b>	<b>176,662</b>	<b>169,340</b>	<b>193,697</b>
Shrimp landings	223,827	277,962	169,067	161,123	187,553
Non-shrimp landings	1,606	1,501	1,712	2,158	673
Government payments received (shrimp related)	5,257	4,639	5,882	6,059	5,471
<b>Outflow - Total</b>	<b>224,735</b>	<b>286,883</b>	<b>161,868</b>	<b>155,149</b>	<b>177,502</b>
Fuel	98,574	118,618	78,298	75,254	85,381
Other supplies	21,270	27,389	15,079	14,598	16,199
Crew & captain (hired)	50,393	71,555	28,986	28,158	30,913
Regular maintenance (vessel and gear)	15,715	20,412	10,963	10,114	12,939
Major repair and haul-out	8,682	11,895	5,432	5,028	6,373
Overhead (excluding loan payments)	14,641	19,235	9,995	9,986	10,016
Interest payments made (on vessel loans)	4,231	4,851	3,605	3,492	3,867
Principal payments made (on vessel loans)	8,763	10,291	7,218	6,852	8,069
New investments and upgrades (in vessel)	2,466	2,637	2,292	1,668	3,744
<b>Net Cash Flow</b>	<b>5,955</b>	<b>(2,782)</b>	<b>14,794</b>	<b>14,191</b>	<b>16,196</b>

	Active Gulf	Active Gulf Shrimp Fleet		Own-Operator Act. Gulf Shr.	
	Shrimp	Hired Captain	Own-Operator	without Share	with Share
# of Observations	348	175	173	121	52
<b>Income Statement (2009)</b>					
<b>Operating Activities</b>					
Revenue (from commercial fishing)	225,433	279,462	170,779	163,281	188,226
<b>Expenses</b>	<b>228,804</b>	<b>281,589</b>	<b>175,409</b>	<b>170,086</b>	<b>187,797</b>
<i>Variable costs - Non-Labor</i>	<i>52.4%</i>	<i>51.9%</i>	<i>53.2%</i>	<i>52.8%</i>	<i>54.1%</i>
Fuel	43.1%	42.1%	44.6%	44.2%	45.5%
Other supplies	9.3%	9.7%	8.6%	8.6%	8.6%
<i>Variable costs - Labor</i>	<i>25.4%</i>	<i>25.4%</i>	<i>25.4%</i>	<i>25.2%</i>	<i>25.8%</i>
Crew & captain (hired)	22.0%	25.4%	16.5%	16.6%	16.5%
Owner's vessel time	3.4%	0.0%	8.9%	8.6%	9.4%
<i>Fixed costs</i>	<i>22.2%</i>	<i>22.7%</i>	<i>21.4%</i>	<i>22.0%</i>	<i>20.1%</i>
Regular maintenance (vessel and gear)	6.9%	7.2%	6.3%	5.9%	6.9%
Major repair and haul-out	3.8%	4.2%	3.1%	3.0%	3.4%
Depreciation	5.2%	4.4%	6.3%	7.2%	4.5%
Overhead (excluding loan payments)	6.4%	6.8%	5.7%	5.9%	5.3%
<b>Net Revenue from Operations</b>	<b>(3,371)</b>	<b>(2,126)</b>	<b>(4,630)</b>	<b>(6,804)</b>	<b>429</b>
<b>Non-Operating Activities</b>					
Interest payments made (on vessel loans)	4,231	4,851	3,605	3,492	3,867
Government payments received (shrimp related)	5,257	4,639	5,882	6,059	5,471
<b>Net Revenue (before tax) - "Profit/Loss"</b>	<b>(2,345)</b>	<b>(2,338)</b>	<b>(2,353)</b>	<b>(4,237)</b>	<b>2,033</b>
<i>Owner's vessel time</i>	<i>7,730</i>	<i>0</i>	<i>15,550</i>	<i>14,666</i>	<i>17,607</i>
<i>Depreciation</i>	<i>11,799</i>	<i>12,485</i>	<i>11,106</i>	<i>12,282</i>	<i>8,368</i>

## Definitions

**Balance Sheet:** A balance sheet is a snapshot of a company's financial condition. A company's balance sheet has three parts: assets, liabilities, and the owner's equity. The asset side of a balance sheet lists all assets of a company and their value at a given point in time. The liability side lists the various sources of money invested to acquire these assets (the financial capital). Beyond investing their own capital (money), most company owners borrow financial capital from other sources, such as banks. The current equity, the net worth of the company to the owner, always equals the difference between the value of all assets and what is owed.

**Cash Flow Statement:** The cash flow statement shows a company's flow of money. Money accruing to the company is called cash inflow. In this study, the most important cash inflow is revenue generated through the sale of commercially harvested seafood. Money leaving the company is called cash outflow, which includes the various costs of owning and operating the shrimp vessel. Transactions that do not directly create cash receipts and payments are excluded. The difference between inflow and outflow---the net cash flow---reflects the vessel owner's liquidity or solvency and is useful in determining the short-term viability of a company.

**Income Statement:** An income statement is intended to help owners and investors determine the true economic performance of a company over a specified period of time. The income statement is sometimes called the profit and loss statement. The income statement begins with the revenue generated from operations (sale of product or service) and subtracts all operating costs, including non-cash costs such as the value of owner's labor and depreciation. The result is the net revenue from operations. This is a measure of the true economic return to a productive activity. More relevant to the owners of a company is the net revenue before taxes, i.e. their actual "profit" or "loss". This "bottom line" is calculated by subtracting financing costs (such as interest payments) and adding non-operating income to net revenue from operations.

## Data Sources

Permit and vessel data: Constituency Services Branch, Southeast Regional Office, NMFS.  
Revenue and landings data: Trip ticket programs of the various Gulf and Atlantic States as consolidated by the NMFS, SE Fisheries Science Center, Galveston lab (Gulf shrimp system); the Atlantic Coastal Cooperative Statistics Program; & Florida Trip Ticket Program.  
Economic data: NMFS, SE Fisheries Science Center, Miami lab, Social Science Research Group.

## More Information

For more definitions, as well as background on the survey design, processing and cleaning of the data, and the quality, caveats, and idiosyncrasies associated with each data field, please see the NOAA Technical memorandum (NMFS-SEFSC-601) available at:  
[www.sefsc.noaa.gov/socialscience/shrimp.htm](http://www.sefsc.noaa.gov/socialscience/shrimp.htm)

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