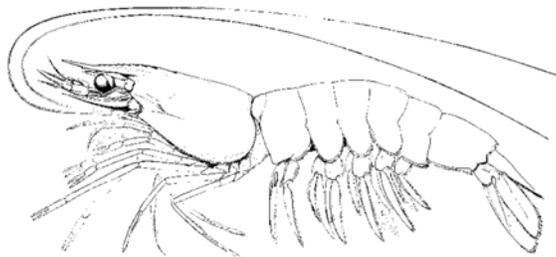


2010
Economics of the Federal South Atlantic Shrimp Fisheries
Annual Report



National Marine Fisheries Service
Southeast Fisheries Science Center
Miami Laboratory
75 Virginia Beach Drive
Miami, Florida 33149

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Table of Contents

Federal South Atlantic Shrimp Fisheries	1
Shrimp Landings and Revenue	1
Permits and Vessels	1
Fishing Revenue by Permitted Vessels.....	1
Annual Economic Survey of Federal South Atlantic Shrimp Permit Holders.....	2
Data Collection	2
Results.....	2
Economics of the Federal South Atlantic Shrimp Fisheries	3
A: Economic Status of the SPA-permitted Fleet (penaeid shrimp permit).....	4
B: Economic Status of the RSLA-permitted Fleet (rock shrimp permit)	6
C: Economic Status of the Active South Atlantic Penaeid Shrimp Fleet	8
D: Economic Status of the Active South Atlantic Rock Shrimp Fleet	10
E: Economic Status of the Active, <i>Predominantly-SA Penaeid Shrimp</i> Fleet.....	12
Summary	14
Appendix.....	15
Data Tables	16
Definitions.....	22
Data Sources	22
More Information.....	22
Contact	22

Federal South Atlantic Shrimp Fisheries

This report presents results of the Annual Economic Survey of Federal South Atlantic Shrimp Permit Holders for the calendar year 2010. The report provides fishermen, fishery managers, other constituents, and the public with an overview of the financial and economic health of the South Atlantic (SA) shrimp fisheries.

Shrimp Landings and Revenue

Total landings of penaeid and rock shrimp in South Atlantic ports were 21.8 and 1.4 million pounds (live weight), respectively, in 2010 (Table 1). Total ex-vessel revenue approached \$46 million. Rock shrimp were caught exclusively by federally-permitted vessels, while 25% of penaeid shrimp revenue was generated by vessels without federal permits (Table 2).

Table 1: SA Shrimp Landings and Revenue

	Total Landings (lbs)	Total Revenue (\$)
Penaeid Shrimp	21,815,547	44,054,796
Rock Shrimp	1,382,142	1,967,581
Total	23,197,689	46,022,377

Table 2: Share of Revenue by Permit Status

	Non-Federal Permit Vessels	Federal Permit Vessels
Penaeid Shrimp Rev.	25%	75%
Rock Shrimp Revenue	0%	100%
Total Shrimp Revenue	24%	76%

Permits and Vessels

The commercial shrimp fleet that operates in federal waters off the coasts of North and South Carolina, Georgia, and the east coast of Florida is managed under the Fishery Management Plan for the Shrimp Fishery of the South Atlantic Region. Fishing vessels are required to have the federal SA Penaeid Shrimp permit (the open-access SPA permit) for the commercial catch of penaeid shrimp, or one of two permits for the catch of rock shrimp (the limited-access RSLA permit south of the SC-GA border or the open-access RSCZ permit to the north; the latter is primarily for the incidental catch of rock shrimp). There were approximately 699 vessels that held one or more SA shrimp permits in 2010. Vessels in this fleet are, on average, 59 feet long, powered by 454 hp motor(s), and 30 years old. One-third of the vessels have steel hulls and 34% use a freezer for refrigeration. Vessels with RSLA permits are, on average, larger, more powerful, and newer. Most are made of steel (75%) and have freezers (83%).

Fishing Revenue by Permitted Vessels

Vessels with federal South Atlantic shrimp permit(s) are active in a wide variety of shrimp and non-shrimp fisheries in the SA region and elsewhere. As a result, SA shrimp landings are responsible for about \$35 million of permitted vessels' total revenue (27%). Gulf shrimp landings (all species) accounted for 31%, while 42% are derived from non-shrimp landings (with Northeast scallops being important). Table 3 shows the total revenue derived from different fisheries for vessels with different South Atlantic shrimp permit(s) configurations.

Table 3: Total Fishing Revenue (\$) by Fishery and SA Shrimp Permit Type

	<u>Vessels with SA shrimp permit type:</u>				Total
	SPA-only	SPA & RSLA	SPA & RSCZ	RSLA or RSCZ	
Number of Vessels	420	97	141	41	699
SA Penaeid Shrimp (\$)	18,049,696	8,444,833	6,374,193	243,743	33,112,466
SA Rock Shrimp (\$)	0	1,967,581	0	0	1,967,581
Gulf Shrimp (any) (\$)	15,477,068	15,800,958	4,551,855	3,405,812	39,235,693
Non-Shrimp Landings (\$)	10,764,234	11,988,844	24,521,546	6,908,800	54,183,424

Annual Economic Survey of Federal South Atlantic 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

The population of interest is all vessels with an SPA, RSLA, or RSCZ permit, including active and inactive vessels. In 2010, 254 vessels were randomly selected, stratified by state, from the population of approximately 699 vessels with permits to shrimp in federal waters of the South Atlantic. Of the 254 surveys that were sent out, 180 were returned and complete. After adjusting for 24 vessels that were deemed ineligible because their permits were sold or terminated, a response rate of 78% was achieved. Due to problems linking cost and revenue datasets, the final number of observations used in the analyses was 162 (64% 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. Most vessels owning South Atlantic shrimp permits are engaged in multiple fisheries, with less than half actually reporting SA shrimp landings in 2010. In this report, economic results are presented for five fleets (which are not mutually exclusive!):

- A: Vessels holding a penaeid shrimp permit (SPA)
- B: Vessels holding a limited access rock shrimp permit (RSLA)
- C: Vessels reporting penaeid shrimp landings in the South Atlantic in 2010 (active SPA)
- D: Vessels reporting rock shrimp landings in the South Atlantic in 2010 (active RSLA)
- E: Vessels, for which penaeid shrimp revenue exceeded 50% of total revenue (“shrimpers”)

Results for other fleets are reported in the appendix, including for 21 inactive vessels not engaged in commercial fishing, 19 vessels not harvesting any shrimp, and 46 vessels only harvesting shrimp in the Gulf of Mexico. 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.

In fleets A and B, some sampled Gulf shrimp vessels participated in BP's vessel of opportunity program (VOOP) cleaning up the Deep Water Horizon oil spill. As a result, business operations and resulting costs---as reported on the survey---reflect both fishing and VOOP activities. Since the survey did not ask respondents to separate revenue from participation in VOOP (active income) and damage claims (passive income), we cannot determine 'Revenue from Operations' and hence cannot calculate 'Net Revenue from Operations' or 'Economic Return' for these fleets.

Economics of the Federal South Atlantic Shrimp Fisheries

A: Economic Status of the SPA-permitted Fleet (penaeid shrimp permit)

In 2010, approximately 658 vessels had a South Atlantic penaeid shrimp permit (SPA). The results below are based on 153 complete and usable surveys randomly sampled from this population. Tabulated results for this fleet can be found in Table 5, column 1, in the Appendix. The sample's vessel characteristics are not materially different from the SPA population and all vessels with SA shrimp permits (page 1). The geographic distribution of the permit owners' residence is provided in Figure A1, and indicates that 25% of the SPA permits were held by vessels outside the SA region (NE and Gulf).

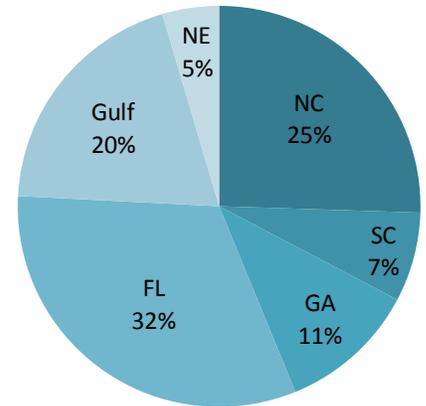


Figure A1: State of Residency of Owner

Balance Sheet

The average market value of a vessel was \$189,287 in 2010, about \$27 thousand less than the original purchase price. The average vessel only has \$20,412 of liabilities, and only 24% of the vessels have an outstanding loan. This implies an average equity of \$168,875 for each owner and a debt to equity ratio of only 12%. This is a small amount of leverage. Only 40% of the vessels had hull insurance. However, because newer, more valuable vessels are much more likely to have insurance, 65% of total asset value is insured. The average implicit value of a vessel's fishing permits is \$135,183. The high value reflects the ownership of valuable Atlantic scallop permits by some of vessels in the sample. The value of the limited access rock shrimp and Gulf shrimp permits might account for a fraction of the total.

Table A1: Landings, prices, and revenue by (fishery) category

	Landings (lbs, head-off)	Price (\$ per lbs)	Revenue (\$)
Shrimp - Atlantic - Penaeid shrimp	20,805	3.12	64,976
Shrimp - Atlantic - Rock shrimp	2,924	2.34	6,857
Shrimp - Gulf - Any shrimp	27,596	3.30	91,010
Non-shrimp species	-	-	95,395
Government payments (shrimp related)	-	-	824
DWH-related payments (VOOP, claims)	-	-	42,554

Landings and Revenue

Of the vessels with SPA permits, 49% landed SA penaeid shrimp, 5% landed SA rock shrimp, and 31% landed Gulf shrimp. Also, 7% participated in BP's VOOP cleaning up oil. In 2010, the average vessel landed 21, 3, and 28 thousand pounds of SA penaeid, SA rock, and Gulf shrimp, respectively (Table A1). SA penaeid shrimp averaged \$3.12 per pound, while a pound of SA rock shrimp yielded \$2.34. In 2010, average annual revenue from all sources was \$301,616. As a percentage of revenue, non-shrimp landings for 32%, Gulf shrimp accounted for 30%, SA penaeid shrimp for 22%, DWH-related payments for 14% (damage claims and VOOP), and SA rock shrimp for 2% (Figure A2).

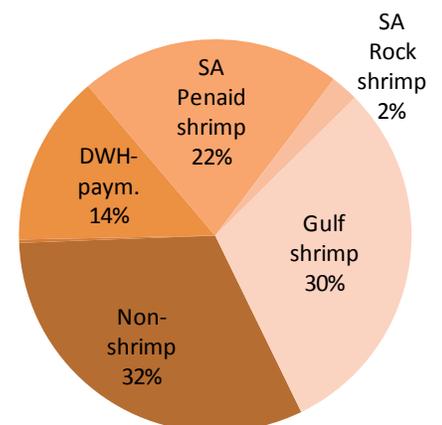


Figure A2: Revenue by Fishery

Costs

In 2010, average annual expenses for operations were \$248,485, where operations refer to commercial fishing and VOOB oil cleanup activities. Operating expenses include both variable costs, usually paid on a trip basis, and fixed costs, such as insurance. The average vessel used 27,038 gallons of fuel, and the average gallon of fuel was purchased for \$2.55 in 2010. Fuel accounted for 28% of operating expenses (though VOOB provided fuel for free), and other supplies accounted for 10% (Figure A3). The expense for hired crew and captains is on average \$84,118, or 34% of expenses, which indicates the importance of the industry as a source of wage income. Of the vessels, 52% are owner operated, and we estimate that the average owner operator's contribution *as captain* is about \$21,000 per year ("opportunity cost of time"). Overall, labor accounts for 38% of operating expenses. Fixed costs account for the remaining 24% of operating expenses, themselves split among maintenance (32%), major repairs (17%), estimated depreciation (17%), insurance payments (13%), and other overhead (21%).

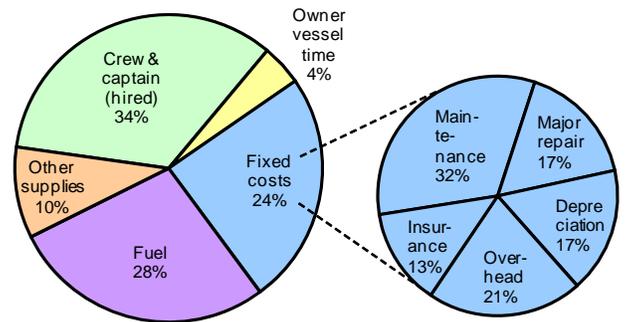


Figure A3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2010, not counted as operating expenses, include interest payments of \$1,898 (financing costs), principal payments of \$6,797 (paying down debt), and new investment of \$3,448 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 5, column 1.

Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average \$61,965 (Figure A4). This is a measure of the industry's liquidity and should usually be positive in an established industry. Since the survey did not ask respondents to separate revenue from participation in VOOB (active income) and damage claims (passive income), we cannot determine 'Revenue from Operations' and hence cannot calculate 'Net Revenue from Operations' or 'Economic Return' for this fleet. When owner operators' labor contribution, the vessels' depreciation, and financing costs are subtracted and non-operational income (government and DWH-related payments) is added, the average profit is \$51,232.

Figure A4: Net Cash Flow, Net Revenue, Profit

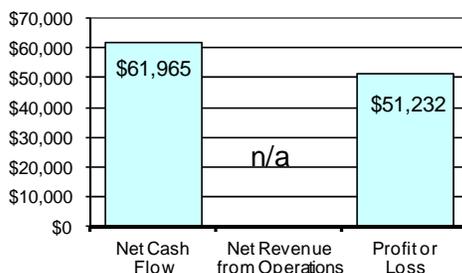
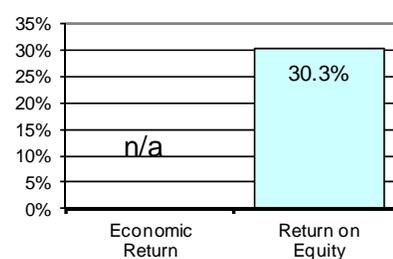


Figure A5: Financial Returns



The return on equity is the primary concern of the individual owner. The return on equity of 30.3% is calculated by dividing the profit by the equity currently invested by the owner in the vessel (Figure A5). Finally, we estimate that the fleet generated fishing revenue of \$9.55 for each gallon of fuel used (measure of efficiency).

B: Economic Status of the RSLA-permitted Fleet (rock shrimp permit)

In 2010, approximately 111 vessels had a South Atlantic rock shrimp permit (RSLA). The results below are based on a random sample of 43 permits with complete and usable surveys from this population. Tabulated results for this fleet can be found in Table 5, column 2, in the Appendix. The sample's vessel characteristics are not materially different from the RSLA population, but are larger, more powerful, and newer compared to all vessels with SA shrimp permits. The geographic distribution of the permit owners' residence is provided in Figure B1, and indicates that 58% of RSLA permits were held by vessels outside the SA region (NE and Gulf).

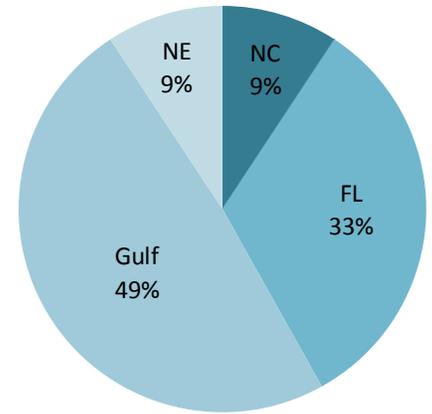


Figure B1: State of Residency of Owner

Balance Sheet

The average market value of a vessel was \$409,021 in 2010, about \$22 thousand more than the original purchase price. The average vessel has \$104,292 of liabilities, and 49% of the vessels have an outstanding loan. This implies an average equity of \$304,729 for each owner and a debt to equity ratio of only 34%. 74% of the vessels had hull insurance. The average implicit value of a vessel's fishing permits is \$321,687. The high value reflects the ownership of valuable Atlantic scallop permits by some of vessels in the sample. The value of the limited access rock shrimp and Gulf shrimp permits might account for a few thousand dollars of the total.

Table B1: Landings, prices, and revenue by (fishery) category

	Landings (lbs, head-off)	Price (\$ per lbs)	Revenue (\$)
Shrimp - Atlantic - Penaeid shrimp	26,959	3.12	84,029
Shrimp - Atlantic - Rock shrimp	10,405	2.34	24,399
Shrimp - Gulf - Any shrimp	60,326	3.63	219,093
Non-shrimp species	-	-	123,506
Government payments (shrimp related)	-	-	1,681
DWH-related payments (VOOP, claims)	-	-	95,903

Landings and Revenue

Of the vessels with RSLA permits, 30% landed SA penaeid shrimp, 16% landed SA rock shrimp, and 58% landed Gulf shrimp. Also, 16% participated in BP's VOOP cleaning up oil. In 2010, the average vessel landed 27, 10, and 60 thousand pounds of SA penaeid, SA rock, and Gulf shrimp, respectively (Table B1). SA penaeid shrimp averaged \$3.12 per pound, while a pound of SA rock shrimp yielded \$2.34. In 2010, average annual revenue from all sources was \$548,611. As a percentage of revenue, Gulf shrimp accounted for 40%, non-shrimp landings for 23%, SA penaeid shrimp for 15%, SA rock shrimp for 4%, and DWH-related payments (damage claims and VOOP) for 18% (Figure B2).

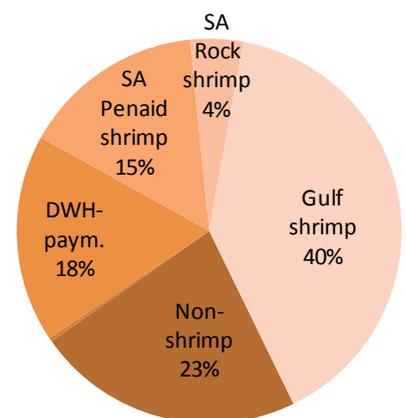


Figure B2: Revenue by Fishery

Costs

In 2010, average annual expenses for operations were \$435,493, where operations refer to commercial fishing activities and VOOB oil cleanup activities. Operating expenses include both variable costs, usually paid on a trip basis, and fixed costs, such as insurance. The average vessel used 50,040 gallons of fuel, and the average gallon of fuel was purchased for \$2.49 in 2010. Fuel accounted for 29% of operating expenses (though VOOB provided fuel for free), and other supplies accounted for 8% (Figure B3). The expense for hired crew and captains is on average \$150,496, or 35% of expenses, which indicates the importance of the industry as a source of wage income. Of the vessels, 33% are owner operated, and we estimate that the average owner operator's contribution *as captain* is about \$31,000 per year ("opportunity cost of time"). Overall, labor accounts for 37% of operating expenses. Fixed costs account for the remaining 26% of operating expenses; themselves split among maintenance (32%), major repairs (15%), estimated depreciation (20%), insurance payments (17%), and other overhead (16%).

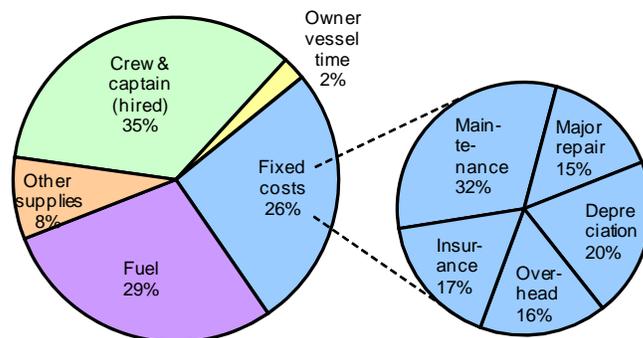


Figure B3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2010, not counted as operating expenses, include interest payments of \$8,465 (financing costs), principal payments of \$17,075 (paying down debt), and new investment of \$4,281 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 5, column 2.

Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average \$116,819 (Figure A4). This is a measure of the industry's liquidity and should usually be positive in an established industry. Since the survey did not ask respondents to separate revenue from participation in VOOB (active income) and damage claims (passive income), we cannot determine 'Revenue from Operations' and hence cannot calculate 'Net Revenue from Operations' or 'Economic Return' for this fleet. When owner operators' labor contribution, the vessels' depreciation, and financing costs are subtracted and non-operational income (government and DWH-related payments) is added, the average profit is \$104,653.

Figure B4: Net Cash Flow, Net Revenue, Profit

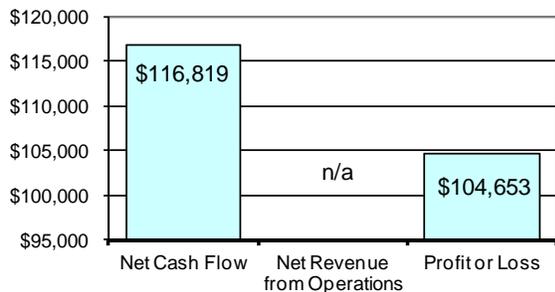
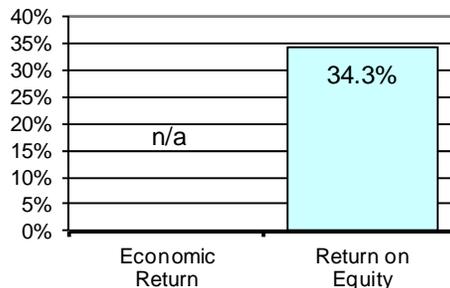


Figure B5: Financial Returns



The return on equity is the primary concern of the individual owner. The return on equity of 34.3% is calculated by dividing the profit by the equity currently invested by the owner in the vessel (Figure A5). Finally, we estimate that the fleet generated fishing revenue of \$9.01 for each gallon of fuel used (measure of efficiency).

C: Economic Status of the Active South Atlantic Penaeid Shrimp Fleet

In 2010, approximately 304 vessels landed SA penaeid shrimp who had an SPA permit---the active SA penaeid shrimp fleet. The results below are based on 76 complete and usable surveys randomly sampled from this population. Tabulated results for this fleet can be found in Table 6, column 1, in Appendix. The sample's vessel characteristics are not materially different from the SPA population and all vessels with SA shrimp permits (page 1). The geographic distribution of the permit owners' residence across the Northeast and the individual South Atlantic states is provided in Figure C1, and indicates that owners of active SPA permits mostly reside in the SA region.

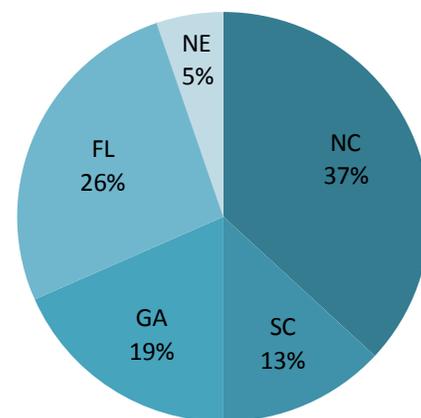


Figure C1: State of Residency of Owner

Balance Sheet

The average market value of a vessel was \$129,611 in 2010, about \$27 thousand less than the original purchase price. Since only 17% of the vessels have an outstanding loan, the average vessel only has \$10,328 of liabilities. This implies an average equity of \$119,283 for each owner and a debt to equity ratio of only 9%. Only 34% of the vessels had hull insurance. However, because newer, more valuable vessels are much more likely to have insurance, 68% of total asset value is insured. The average implicit value of a vessel's fishing permits is \$68,295. The high value reflects the ownership of valuable Atlantic scallop permits by some of vessels in the sample. The value of the limited access rock shrimp and Gulf shrimp permits might account for a few thousand dollars of the total.

Table C1: Landings, prices, and revenue by (fishery) category

	Landings (lbs, head-off)	Price (\$ per lbs)	Revenue (\$)
Shrimp - Atlantic - Penaeid shrimp	42,321	3.12	131,954
Shrimp - Atlantic - Rock shrimp	5,887	2.34	13,805
Shrimp - Gulf - Any shrimp	3,558	1.90	6,748
Non-shrimp species	-	-	70,058
Government payments (shrimp related)	-	-	387
DWH-related payments (VOOP, claims)	-	-	10,181

Landings and Revenue

Of vessels in the active SA penaeid shrimp fleet, 100% landed SA penaeid shrimp, 9% landed SA rock shrimp, and 8% landed Gulf shrimp. None of these vessels participated in BP's VOOP in 2010. In 2010, the average vessel landed 42, 6, and 4 thousand pounds of SA penaeid, SA rock, and Gulf shrimp, respectively (Table C1). SA penaeid shrimp averaged \$3.12 per pound, while a pound of SA rock shrimp yielded \$2.34. In 2010, average annual revenue from all sources was \$233,134. As a percentage of revenue, SA penaeid shrimp accounted for 57%, non-shrimp landings for 30%, SA rock shrimp for 6%, Gulf shrimp for 3%, and DWH-related damage claims for 4% (Figure C2).

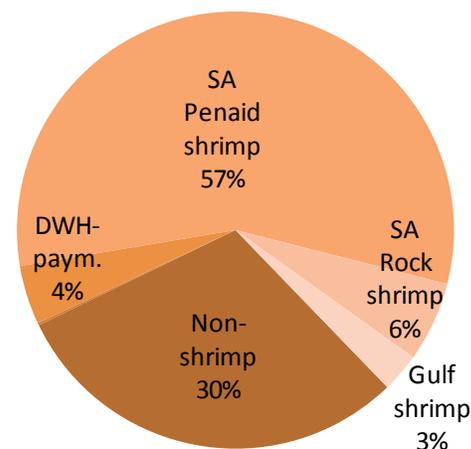


Figure C2: Revenue by Fishery

Costs

In 2010, average annual expenses for operations were \$203,996, 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 23,625 gallons of fuel, and the average gallon of fuel was purchased for \$2.60 in 2010. Fuel accounted for 30% of operating expenses, and other supplies accounted for 11% (Figure C3). The expense for hired crew and captains is on average \$60,075, or 29% of expenses, which indicates the importance of the industry as a source of wage income. Of the vessels, 66% are owner operated, and we estimate that the average owner operator's contribution *as captain* is about \$19,000 per year ("opportunity cost of time"). Overall, labor accounts for 36% of operating expenses. Fixed costs account for the remaining 24% of operating expenses; themselves split among maintenance (33%), major repairs (19%), estimated depreciation (15%), insurance payments (10%), and other overhead (23%).

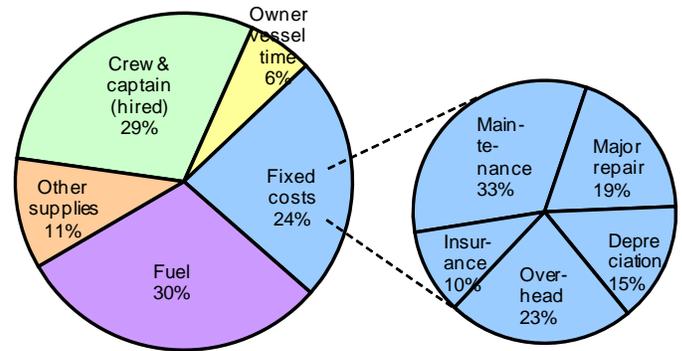


Figure C3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2010, not counted as operating expenses, include interest payments of \$808 (financing costs), principal payments of \$3,210 (paying down debt), and new investment of \$2,752 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 6, column 1.

Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average \$42,160 (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 \$18,570, 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 is \$28,330.

Figure C4: Net Cash Flow, Net Revenue, Profit

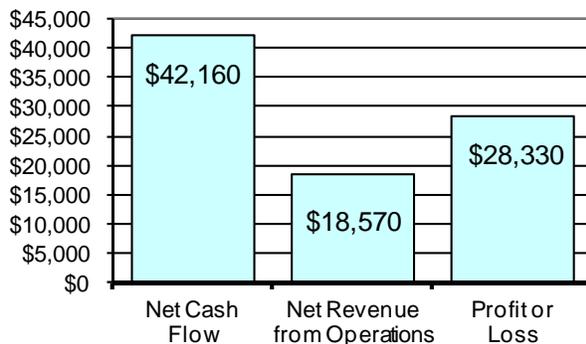
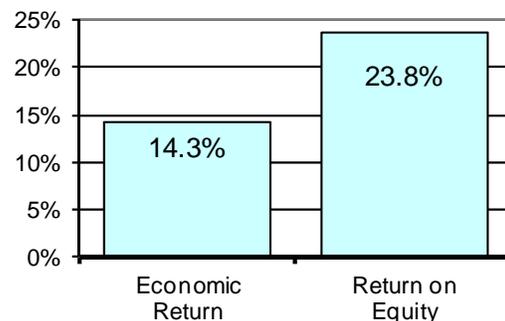


Figure C5: Financial Returns



The average economic return is 14.3% (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 is 23.8%, partly due to DWH-claims. Finally, we estimate that the fleet generated fishing revenue of \$9.42 for each gallon of fuel used (measure of efficiency).

D: Economic Status of the Active South Atlantic Rock Shrimp Fleet

In 2010, approximately 19 vessels landed SA rock shrimp---the active SA rock shrimp fleet. The results below are based on a random sample of 7 permits from this population with complete and usable surveys. A sample of 7 is very small, leading to a high level uncertainty concerning these results. Tabulated results for this fleet can be found in Table 6, column 2, in Appendix. The sample's vessel characteristics are not materially different from the RSLA population, but are larger, more powerful, and newer compared to all vessels with SA shrimp permits. The geographic distribution of the permit owners' residence across the individual South Atlantic states is provided in Figure D1.

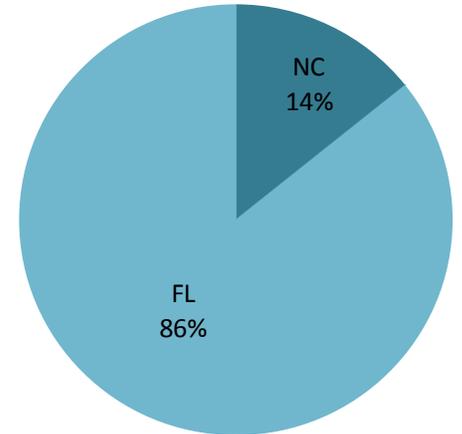


Figure D1: State of Residency of Owner

Balance Sheet

The average market value of a vessel was \$406,429 in 2010, about \$119 thousand less than the original purchase price. The average vessel has \$49,286 of liabilities, and 43% of the vessels have an outstanding loan. This implies an average equity of \$357,143 for each owner and a debt to equity ratio of 14%. 100% of the vessels had hull insurance. The average implicit value of a vessel's fishing permits is \$75,531. In addition to the limited access RSLA permit, all 7 vessels also owned the limited access Gulf shrimp permit. It is unknown if any other fishing permits contributed to the value.

Table D1: Landings, prices, and revenue by (fishery) category

	Landings (lbs, head-off)	Price (\$ per lbs)	Revenue (\$)
Shrimp - Atlantic - Penaeid shrimp	114,425	3.06	350,040
Shrimp - Atlantic - Rock shrimp	63,918	2.34	149,880
Shrimp - Gulf - Any shrimp	37,286	1.81	67,538
Non-shrimp species	-	-	22,169
Government payments (shrimp related)	-	-	1,528
DWH-related payments (VOOP, claims)	-	-	97,752

Landings and Revenue

Of vessels in the active SA rock shrimp fleet, 100% landed SA penaeid shrimp, 100% landed SA rock shrimp, and 71% landed Gulf shrimp. None of these vessels participated in BP's VOOP in 2010. In 2010, the average vessel landed 114, 64, and 37 thousand pounds of SA penaeid, SA rock, and Gulf shrimp, respectively (Table D1). SA penaeid shrimp averaged \$3.06 per pound, while a pound of SA rock shrimp yielded \$2.34. In 2010, average annual revenue from all sources was \$688,906. As a percentage of revenue, SA penaeid shrimp accounted for 51%, SA rock shrimp for 22%, Gulf shrimp for 10%, non-shrimp landings for 3%, and DWH-related damage claims for 14% (Figure D2).

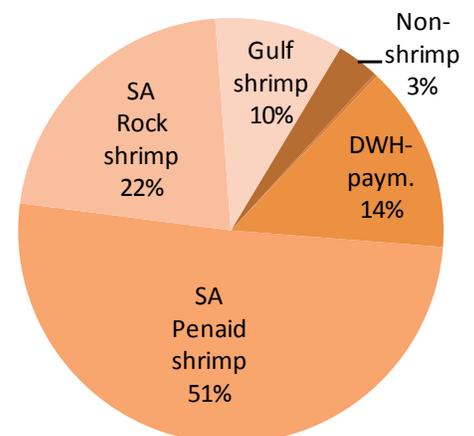


Figure D2: Revenue by Fishery

Costs

In 2010, average annual expenses for operations were \$554,286, 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 77,711 gallons of fuel, and the average gallon of fuel was purchased for \$2.62 in 2010. Fuel accounted for 37% of operating expenses, and other supplies accounted for 7% (Figure D3). The expense for hired crew and captains is on average \$148,875, or 27% of expenses, which indicates the importance of the industry as a source of wage income. Of the vessels, 29% are owner operated, and we estimate that the average owner operator's contribution *as captain* is about \$45,000 per year ("opportunity cost of time"). Overall, labor accounts for 29% of operating expenses. Fixed costs account for the remaining 27% of operating expenses; themselves split among maintenance (30%), repairs (25%), estimated depreciation (10%), insurance payments (14%), and overhead (21%).

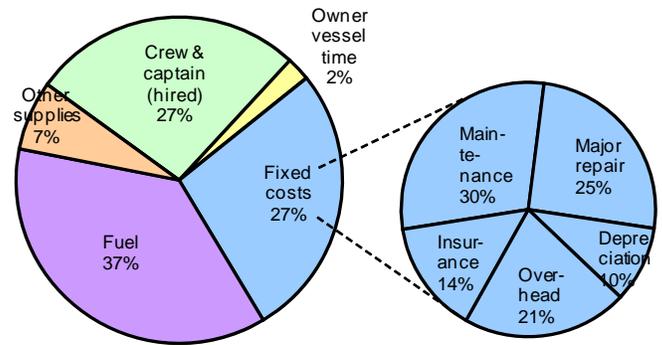


Figure D3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2010, not counted as operating expenses, include interest payments of \$4,191 (financing costs), principal payments of \$13,958 (paying down debt), and new investments (beyond maintenance and repair) of \$8,114. Tabulated results for this fleet can be found in the Appendix, Table 6, column 2.

Financial Performance

Given the small sample size, caution is advised when interpreting the results. There are large fluctuations in most numbers compared to last year which is likely the result of the small sample size. For the average vessel, the difference between total revenue and total expenses---the net cash flow---is negative \$136,152 (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 \$35,341, which accounts for all costs of production. Finally, when financing costs are subtracted and non-operational income (gov. and DWH-claims payments) is added, the average profit is \$130,430.

Figure D4: Net Cash Flow, Net Revenue, Profit

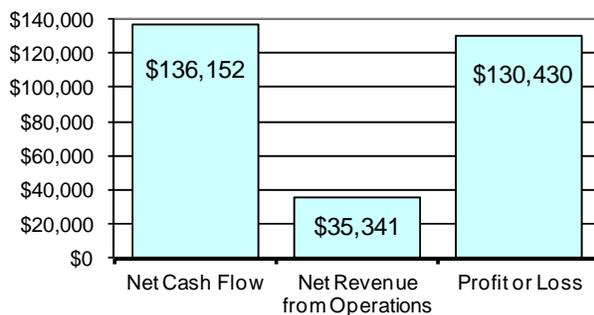
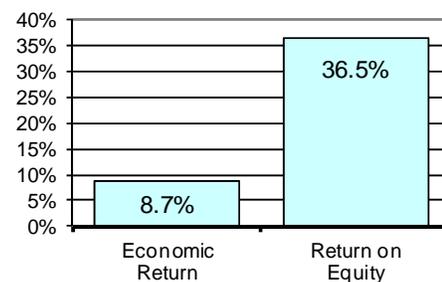


Figure D5: Financial Returns



An average economic return of 8.7% 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 is 36.5%, partly due to DWH-claims. We estimate that the fleet generated fishing revenue of \$7.59 for each gallon of fuel used (efficiency).

E: Economic Status of the **Active, Predominantly-SA Penaeid Shrimp Fleet**

This section reports results for vessels which, in 2010, predominantly caught SA penaeid shrimp. Of the 76 sampled vessels in the active SA penaeid shrimp fleet, only 53 derive the majority of their revenue from SA penaeid shrimp landings. Tabulated results for this fleet can be found in Table 6, column 3, in Appendix. Results for the 16 vessels whose primary catch is not SA penaeid shrimp are reported in Table 6, column 4. Vessels specializing on SA penaeid shrimp are generally smaller and older than the overall fleet and are rarely made of steel or use less freezers. The geographic distribution of the permit owners' residence across the individual South Atlantic states is provided in Figure E1.

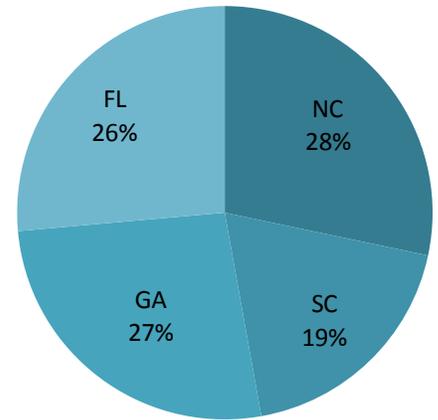


Figure E1: State of Residency of Owner

Balance Sheet

The average market value of a vessel was \$70,065 in 2010, about \$15 thousand less than the original purchase price. This is substantially less than for the overall fleet. Since only 15% of the vessels have an outstanding loan, the average vessel only has \$7,000 of liabilities. This implies an average equity of \$63,065 for each owner and a debt to equity ratio of only 11%. Hence, the use of credit is practically absent among these vessels. Also, only 11% of the vessels had hull insurance.

Table E1: Landings, prices, and revenue by (fishery) category

	Landings (lbs, head-off)	Price (\$ per lbs)	Revenue (\$)
Shrimp - Atlantic - Penaeid shrimp	39,378	3.14	123,500
Shrimp - Atlantic - Rock shrimp	0	-	0
Shrimp - Gulf - Any shrimp	0	-	0
Non-shrimp species	-	-	4,983
Government payments (shrimp related)	-	-	354
DWH-related payments (VOOP, claims)	-	-	1,689

Landings and Revenue

Of the vessels that primarily fished for SA penaeid shrimp, 100% landed SA penaeid shrimp, none landed SA rock shrimp or Gulf shrimp. None of these vessels participated in BP's VOOP in 2010. In 2010, the average vessel landed 39 thousand pounds of SA penaeid shrimp (Table E1). SA penaeid shrimp averaged \$3.14 per pound. In 2010, average annual revenue from all sources was \$130,525. As a percentage of revenue, SA penaeid shrimp accounted for 95%, non-shrimp landings for 4%, and DWH-related damage claims for 1% (Figure E2).

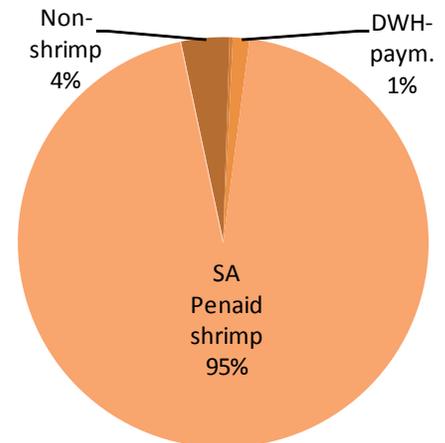


Figure E2: Revenue by Fishery

Costs

In 2010, average annual expenses for operations were \$122,549, 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 14,375 gallons of fuel, and the average gallon of fuel was purchased for \$2.66 in 2010. Fuel accounted for 31% of operating expenses, and other supplies accounted for 10% (Figure E3). The expense for hired crew and captains is on average \$33,390, or 27% of expenses. Of the vessels, 81% are owner operated, and we estimate that the average owner operator's contribution *as captain* is about \$18,000 per year ("opportunity cost of time"). Overall, labor accounts for 39% of operating expenses. Fixed costs account for the remaining 20% of operating expenses; themselves split among maintenance (34%), major repairs (19%), estimated depreciation (23%), insurance payments (3%), and other overhead (21%).

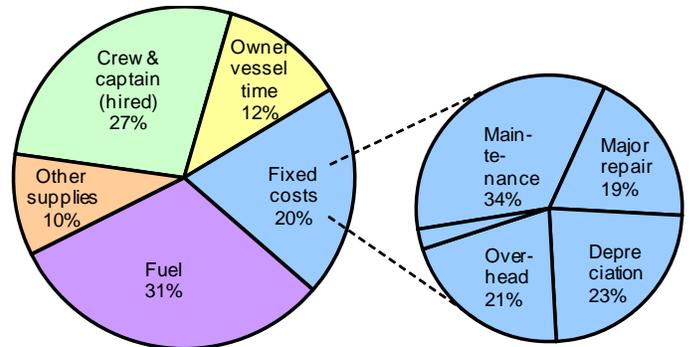


Figure E3: Percentage Breakup of Total Costs and Fixed Costs

Additional expenses in 2010, not counted as operating expenses, include interest payments of \$498 (financing costs), principal payments of \$2,210 (paying down debt), and new investment of \$2,278 (beyond maintenance and repair). Tabulated results for this fleet can be found in the Appendix, Table 6, column 3.

Financial Performance

For the average vessel, the difference between total revenue and total expenses---the net cash flow---is on average negative \$23,304 (Figure E4). 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 \$5,934, which accounts for all costs of production. Finally, when financing costs are subtracted and non-operational income (gov. and DWH-claims payments) is added, the average profit is \$7,478.

Figure E4: Net Cash Flow, Net Revenue, Profit

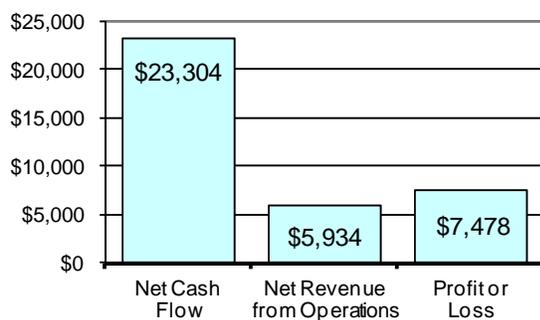
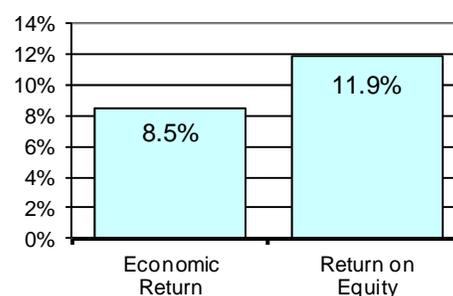


Figure E5: Financial Returns



An average economic return of 8.5% is calculated by dividing net operating revenue by the value of vessel assets (Figure E5). 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 11.9% 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 \$8.94 for each gallon of fuel (measure of efficiency).

Summary

This report provides an overview of the financial and economic health of vessels holding a federal permit for harvesting shrimp in the South Atlantic. The analysis suggests that SPA permitted vessels (Fleet A) are, on average, generating a positive cash flow and profit (Table 4). The return on the investment is positive. It should be noted that much of this profit is being made by vessels not active or not primarily active in the SA penaeid or rock shrimp fisheries, and/or or is the result of DWH damage claims and working for BP's VOOP cleaning up oil. When only vessels that land penaeid shrimp are considered (Fleet C)---none of which engaged in VOOP---the results are somewhat moderated, but qualitatively similar, with positive cash flow and returns. The economic return, a reflection of the return to commercial fishing, is 14%. In contrast to last year, even when only vessels that generate a majority of their revenue from penaeid shrimp are considered (Fleet E), positive cash flow and 8% economic return are evident in 2010.

Looking at fleets defined by ownership of the limited-entry rock shrimp permit (RSLA) leads to similar results. All vessels that own a RSLA permit (Fleet B) have quite substantial positive cash flow and return on equity. Again, the contribution of DWH damage claims and working for BP's VOOP are substantial. When only vessels actually landing rock shrimp are considered (Fleet D)---none of which engaged in VOOP--- qualitatively the results do not change. The return to equity is 37%, partly driven by DWH-damage claims, and the economic return (to commercial fishing) is 9% .

Table 4: Financial Results for the Average Vessel by Fleets in 2010 (thousand dollars)

	# of Obs.	Assets	Equity	Net Cash Flow	Net Rev. from Operations	Profit or Loss	Economic Return	Return on Equity
A: SPA-permitted fleet	153	189	169	62	***	51	***	30%
B: RSLA-permitted fleet	43	409	305	117	***	105	***	34%
C: Active SA penaeid shrimp fleet	76	130	119	42	19	28	14%	24%
D: Active SA rock shrimp fleet	7	406	357	136	35	130	9%	37%
E: Predominantly SA penaeid fleet	53	70	63	23	6	7	8%	12%

In summary, the results indicate that the commercial harvest of South Atlantic shrimp, independent of DWH-related revenue and costs (i.e., focusing on Fleets C, D, and E), is a profitable activity, in contrast to last year. These results are averages and hence hide the wide variation that clearly exists within all fleets. The reader is cautioned that many further caveats apply to these results, including small sample sizes and the general difficulty of collecting economic data. Hence the results should be viewed as tentative indicators of the general economic health of the industry.

Appendix

Data Tables

Table 5: F&E Results: Averages for the Permitted Fleet by Shrimp Permit (2010)

	Permitted Fleet		
	SPA	RSLA	RSCZ
# of Observations	153	43	31
<u>Vessel Characteristics</u>			
Length (feet)	63	75	70
Gross tons	88	129	103
Horse power	480	629	525
Year built	1983	1991	1988
Hull material - Steel	41%	77%	55%
Refrigeration - Freezer	42%	91%	39%
State of Owner - North Carolina	25%	9%	48%
State of Owner - South Carolina	7%	0%	6%
State of Owner - Georgia	11%	0%	3%
State of Owner - Florida	32%	33%	13%
State of Owner - Gulf of Mexico Region	20%	49%	10%
State of Owner - Northeast Region	5%	9%	19%
Permit - SPA	100%	88%	87%
Permit - RSLA	25%	100%	0%
Permit - RSCZ	18%	2%	100%
Permit - SPGM	48%	84%	48%
<u>Balance Sheet (end of 2010)</u>			
Assets - Market value of vessel	189,287	409,021	272,562
<i>Original value of vessel (purchase price)</i>	215,973	386,835	442,361
<i>Implicit value of fishing permit(s)</i>	135,183	321,687	297,749
Liabilities - Loan on vessel	20,412	104,292	91,847
<i>% of vessels with loan</i>	24%	49%	29%
Equity - Owner's equity in vessel	168,875	304,729	180,715
<i>Insurance coverage (% of vessels / % of assets)</i>	40% / 65%	74% / 76%	61% / 84%
<u>Vessel Operation (2010)</u>			
Owner-operator	52%	33%	45%
Active in BP's Vessel of Opportunity Program	7%	16%	10%
Actively shrimping - Atlantic - Penaeid shrimp	49%	30%	55%
Actively shrimping - Atlantic - Rock shrimp	5%	16%	0%
Actively shrimping - Gulf - Any shrimp	31%	58%	16%
Shrimp landed - Atlantic - Penaeid shrimp (pounds)	20,805	26,959	19,051
Shrimp landed - Atlantic - Rock shrimp (pounds)	2,924	10,405	0
Shrimp landed - Gulf - Any shrimp (pounds)	27,596	60,326	11,155
Price / lbs - Atlantic - Penaeid shrimp (vessel / pound basis)	3.16 / 3.12	3.28 / 3.12	3.14 / 3.42
Price / lbs - Atlantic - Rock shrimp (vessel / pound basis)	2.34 / 2.34	2.34 / 2.34	-
Price / lbs - Gulf - Any shrimp (vessel / pound basis)	3.29 / 3.30	3.51 / 3.63	3.43 / 3.10
Price / lbs - Overall shrimp (vessel / pound basis)	3.23 / 3.17	3.55 / 3.35	3.18 / 3.30
Annual fuel use (gallons)	27,038	50,040	27,326
Fuel price per gallon (vessel basis / gallon basis)	2.62 / 2.55	2.53 / 2.49	2.73 / 2.63
Fuel efficiency I (vessel basis / gallon basis)	-	-	-
Fuel efficiency II (vessel basis / gallon basis)	11.57 / 9.55	10.17 / 9.01	14.39 / 14.52

(in USD unless otherwise noted)	Permitted Fleet		
	SPA	RSLA	RSCZ
# of Observations	153	43	31
Cash Flow (2010)			
Inflow - Total	301,616	548,611	422,052
Shrimp revenue - Atlantic - Penaeid shrimp	64,976	84,029	65,236
Shrimp revenue - Atlantic - Rock shrimp	6,857	24,399	0
Shrimp revenue - Gulf - Any shrimp	91,010	219,093	34,562
Non-shrimp revenue	95,395	123,506	297,112
Government payments received (shrimp related)	824	1,681	214
DWH-related payments received (claims, VOOP)	42,554	95,903	24,929
Outflow - Total***	239,651	431,792	363,236
Fuel	68,999	124,763	71,986
Other supplies	23,809	35,538	42,347
Crew & captain (hired)	84,118	150,496	141,377
Regular maintenance (vessel and gear)	19,793	36,220	27,618
Major repair and haul-out	10,073	17,025	12,882
Insurance	7,958	19,347	13,711
Overhead (excluding loan payments)	12,758	18,583	28,310
Interest payments made (on vessel loans)	1,898	8,465	7,339
Principal payments made (on vessel loans)	6,797	17,075	14,221
New investments and upgrades (in vessel)	3,448	4,281	3,443
Net Cash Flow	61,965	116,819	58,816
Non-Cash Cost Estimates (2010)			
Owner's vessel time	10,681	10,157	11,433
Depreciation	10,297	23,365	15,042
Income Statement (2010)			
Revenue from Operations***	***	***	***
Cost of Operations***	248,485	435,493	364,707
<i>Variable costs - Non-Labor</i>	<i>37.3%</i>	<i>36.8%</i>	<i>31.3%</i>
<i>Variable costs - Labor</i>	<i>38.2%</i>	<i>36.9%</i>	<i>41.9%</i>
<i>Fixed costs</i>	<i>24.5%</i>	<i>26.3%</i>	<i>26.8%</i>
Net Revenue from Operations***	***	***	***
Profit or Loss (before taxes)	51,232	104,653	50,006
Industry Returns (2010)			
Economic Return***	***	***	***
Return on Equity	30.3%	34.3%	27.7%

*** This year, due to the Deep Water Horizon event, some sampled vessels, especially those located in the Gulf, participated in BP's vessel of opportunity program (VOOP) cleaning up oil. As a result, business operations and resulting costs---as reported on the survey and here---reflect both fishing and VOOP activities. In previous years, operations were strictly commercial fishing. Since the survey did not ask respondents to separate revenue from participation in VOOP (active income) and damage claims (passive income), we cannot determine 'Revenue from Operations' and hence cannot calculate 'Net Revenue from Operations' or 'Economic Return'.

Table 6: F&E Results: Averages for the South Atlantic Fleet Actively Shrimping and by Primary Fishery (Rock Shrimp, Penaeid Shrimp, or Other Fish) (2010)

	Active S. Atl.	Active South Atlantic Shrimp Fleet		
	Shrimp Fleet	Rock Shrimp	Penaeid - Primary	Penaeid - Secondary
# of Observations	76	7	53	16
<u>Vessel Characteristics</u>				
Length (feet)	63	81	58	70
Gross tons	83	148	69	101
Horse power	463	794	406	510
Year built	1981	1992	1978	1987
Hull material - Steel	28%	86%	13%	50%
Refrigeration - Freezer	26%	100%	19%	19%
State of Owner - North Carolina	37%	14%	28%	75%
State of Owner - South Carolina	13%	0%	19%	0%
State of Owner - Georgia	18%	0%	26%	0%
State of Owner - Florida	26%	86%	26%	0%
State of Owner - Gulf of Mexico Region	0%	0%	0%	0%
State of Owner - Northeast Region	5%	0%	0%	25%
Permit - SPA	99%	100%	98%	100%
Permit - RSLA	17%	100%	9%	6%
Permit - RSCZ	22%	0%	17%	50%
Permit - SPGM	22%	100%	13%	19%
<u>Balance Sheet (end of 2010)</u>				
Assets - Market value of vessel	129,611	406,429	70,065	205,750
<i>Original value of vessel (purchase price)</i>	<i>156,804</i>	<i>525,274</i>	<i>84,792</i>	<i>234,137</i>
<i>Implicit value of fishing permit(s)</i>	<i>68,295</i>	<i>75,531</i>	<i>23,183</i>	<i>214,563</i>
Liabilities - Loan on vessel	10,328	49,286	7,000	4,306
<i>% of vessels with loan</i>	<i>17%</i>	<i>43%</i>	<i>15%</i>	<i>13%</i>
Equity - Owner's equity in vessel	119,283	357,143	63,065	201,444
<i>Insurance coverage (% of vessels / % of assets)</i>	<i>34% / 68%</i>	<i>100% / 83%</i>	<i>11% / 27%</i>	<i>81% / 102%</i>
<u>Vessel Operation (2010)</u>				
Owner-operator	66%	29%	81%	31%
Active in BP's Vessel of Opportunity Program	0%	0%	0%	0%
Actively shrimping - Atlantic - Penaeid shrimp	100%	100%	100%	100%
Actively shrimping - Atlantic - Rock shrimp	9%	100%	0%	0%
Actively shrimping - Gulf - Any shrimp	8%	71%	0%	6%
Shrimp landed - Atlantic - Penaeid shrimp (pounds)	42,321	114,425	39,378	20,525
Shrimp landed - Atlantic - Rock shrimp (pounds)	5,887	63,918	0	0
Shrimp landed - Gulf - Any shrimp (pounds)	3,558	37,286	0	589
Price / lbs - Atlantic - Penaeid shrimp (vessel / pound basis)	3.16 / 3.12	3.06 / 3.06	3.17 / 3.14	3.15 / 3.14
Price / lbs - Atlantic - Rock shrimp (vessel / pound basis)	2.34 / 2.34	2.34 / 2.34	-	-
Price / lbs - Gulf - Any shrimp (vessel / pound basis)	2.52 / 1.90	2.18 / 1.81	-	4.26 / 4.26
Price / lbs - Overall shrimp (vessel / pound basis)	3.13 / 2.95	2.72 / 2.63	3.17 / 3.14	3.18 / 3.18
Annual fuel use (gallons)	23,625	77,711	14,375	30,605
Fuel price per gallon (vessel basis / gallon basis)	2.64 / 2.60	2.69 / 2.62	2.67 / 2.66	2.53 / 2.49
Fuel efficiency I (vessel basis / gallon basis)	-	2.9 / 2.8	3.4 / 2.7	-
Fuel efficiency II (vessel basis / gallon basis)	10.83 / 9.42	8.10 / 7.59	10.08 / 8.94	14.53 / 12.21

(in USD unless otherwise noted)	Active S. Atl.	Active South Atlantic Shrimp Fleet		
	Shrimp Fleet	Rock Shrimp	Penaeid - Primary	Penaeid - Secondary
# of Observations	76	7	53	16
<u>Cash Flow (2010)</u>				
Inflow - Total	233,134	688,906	130,525	373,624
Shrimp revenue - Atlantic - Penaeid shrimp	131,954	350,040	123,500	64,547
Shrimp revenue - Atlantic - Rock shrimp	13,805	149,880	0	0
Shrimp revenue - Gulf - Any shrimp	6,748	67,538	0	2,505
Non-shrimp revenue	70,058	22,169	4,983	306,571
Government payments received (shrimp related)	387	1,528	354	0
DWH-related payments received (claims, VOOP)	10,181	97,752	1,689	0
Outflow - Total	190,974	552,755	107,221	310,125
Fuel	61,494	203,390	38,280	76,314
Other supplies	21,673	38,248	11,759	47,259
Crew & captain (hired)	60,075	148,875	33,390	109,622
Regular maintenance (vessel and gear)	15,694	44,408	8,420	27,229
Major repair and haul-out	9,212	38,271	4,663	11,569
Insurance	5,025	21,634	602	12,408
Overhead (excluding loan payments)	11,030	31,667	5,122	21,572
Interest payments made (on vessel loans)	808	4,191	498	352
Principal payments made (on vessel loans)	3,210	13,958	2,210	1,822
New investments and upgrades (in vessel)	2,752	8,114	2,278	1,978
Net Cash Flow	42,160	136,152	23,304	63,500
<u>Non-Cash Cost Estimates (2010)</u>				
Owner's vessel time	12,723	13,130	14,599	6,329
Depreciation	7,069	14,663	5,715	8,233
<u>Income Statement (2010)</u>				
Revenue from Operations	222,565	589,627	128,482	373,624
Cost of Operations	203,996	554,286	122,549	320,535
<i>Variable costs - Non-Labor</i>	<i>40.8%</i>	<i>43.6%</i>	<i>40.8%</i>	<i>38.6%</i>
<i>Variable costs - Labor</i>	<i>35.7%</i>	<i>29.2%</i>	<i>39.2%</i>	<i>36.2%</i>
<i>Fixed costs</i>	<i>23.5%</i>	<i>27.2%</i>	<i>20.0%</i>	<i>25.3%</i>
Net Revenue from Operations	18,570	35,341	5,934	53,089
Profit or Loss (before taxes)	28,330	130,430	7,478	52,737
<u>Industry Returns (2010)</u>				
Economic Return	14.3%	8.7%	8.5%	25.8%
Return on Equity	23.8%	36.5%	11.9%	26.2%

Note: As in previous years, these numbers reflect strictly commercial fishing. Three vessels that also engaged in SA shrimping and BP's vessel of opportunity program (VOOP), cleaning up oil in the Gulf, were dropped from the analysis.

Table 7: F&E Results: Averages for the South Atlantic Fleet NOT Actively Shrimping (in the S. Atlantic) by Activity (Not Active, Other Fish, and Gulf Shrimp) (2010)

	IN-Active South Atlantic Shrimp Fleet		
	<u>Not Active</u>	<u>Non-Shrimp Only</u>	<u>Gulf Shrimp Only</u>
# of Observations	21	19	46
<u>Vessel Characteristics</u>			
Length (feet)	51	59	73
Gross tons	55	86	122
Horse power	393	478	571
Year built	1984	1986	1987
Hull material - Steel	33%	53%	70%
Refrigeration - Freezer	24%	32%	89%
State of Owner - North Carolina	19%	42%	0%
State of Owner - South Carolina	5%	0%	0%
State of Owner - Georgia	14%	0%	0%
State of Owner - Florida	29%	26%	39%
State of Owner - Gulf of Mexico Region	29%	5%	61%
State of Owner - Northeast Region	5%	26%	0%
Permit - SPA	95%	84%	91%
Permit - RSLA	24%	26%	43%
Permit - RSCZ	19%	32%	9%
Permit - SPGM	43%	37%	98%
<u>Balance Sheet (end of 2010)</u>			
Assets - Market value of vessel	61,357	418,680	305,155
<i>Original value of vessel (purchase price)</i>	69,762	569,579	322,863
<i>Implicit value of fishing permit(s)</i>	11,572	987,636	55,206
Liabilities - Loan on vessel	5,248	258,350	46,112
<i>% of vessels with loan</i>	14%	42%	48%
Equity - Owner's equity in vessel	56,109	160,330	259,043
<i>Insurance coverage (% of vessels / % of assets)</i>	10% / 18%	68% / 85%	59% / 67%
<u>Vessel Operation (2010)</u>			
Owner-operator	57%	26%	35%
Active in BP's Vessel of Opportunity Program	0%	0%	28%
Actively shrimping - Atlantic - Penaeid shrimp	0%	0%	0%
Actively shrimping - Atlantic - Rock shrimp	0%	0%	0%
Actively shrimping - Gulf - Any shrimp	0%	0%	100%
Shrimp landed - Atlantic - Penaeid shrimp (pounds)	0	0	0
Shrimp landed - Atlantic - Rock shrimp (pounds)	0	0	0
Shrimp landed - Gulf - Any shrimp (pounds)	0	0	95,082
Price / lbs - Atlantic - Penaeid shrimp (vessel / pound basis)	-	-	-
Price / lbs - Atlantic - Rock shrimp (vessel / pound basis)	-	-	-
Price / lbs - Gulf - Any shrimp (vessel / pound basis)	-	-	3.44 / 3.44
Price / lbs - Overall shrimp (vessel / pound basis)	-	-	3.44 / 3.44
Annual fuel use (gallons)	93	26,058	49,303
Fuel price per gallon (vessel basis / gallon basis)	3.20 / 3.08	2.76 / 2.69	2.50 / 2.46
Fuel efficiency I (vessel basis / gallon basis)	-	-	2.1 / 1.9
Fuel efficiency II (vessel basis / gallon basis)	-	27.78 / 24.60	7.18 / 6.71

(in USD unless otherwise noted)	IN-Active South Atlantic Shrimp Fleet		
	Not Active	Non-Shrimp Only	Gulf Shrimp Only
# of Observations	21	19	46
Cash Flow (2010)			
Inflow - Total	15	640,918	469,383
Shrimp revenue - Atlantic - Penaeid shrimp	0	0	0
Shrimp revenue - Atlantic - Rock shrimp	0	0	0
Shrimp revenue - Gulf - Any shrimp	0	0	327,145
Non-shrimp revenue	0	640,918	3,801
Government payments received (shrimp related)	15	0	2,221
DWH-related payments received (claims, VOOP)	0	0	136,215
Outflow - Total***	16,209	528,441	363,998
Fuel	287	70,030	121,372
Other supplies	19	46,944	33,606
Crew & captain (hired)	71	256,874	114,912
Regular maintenance (vessel and gear)	1,858	37,292	32,007
Major repair and haul-out	10,105	5,123	12,092
Insurance	733	23,465	13,090
Overhead (excluding loan payments)	1,293	40,011	11,083
Interest payments made (on vessel loans)	414	20,333	4,023
Principal payments made (on vessel loans)	369	23,847	16,704
New investments and upgrades (in vessel)	1,057	4,521	5,111
Net Cash Flow	(16,194)	112,477	105,385
Non-Cash Cost Estimates (2010)			
Owner's vessel time	119	7,463	12,382
Depreciation	4,380	38,074	15,471
Income Statement (2010)			
Revenue from Operations***	0	640,918	***
Cost of Operations***	18,867	525,277	366,014
<i>Variable costs - Non-Labor</i>	<i>1.6%</i>	<i>22.3%</i>	<i>42.3%</i>
<i>Variable costs - Labor</i>	<i>1.0%</i>	<i>50.3%</i>	<i>34.8%</i>
<i>Fixed costs</i>	<i>97.4%</i>	<i>27.4%</i>	<i>22.9%</i>
Net Revenue from Operations***	(18,867)	115,641	***
Profit or Loss (before taxes)	(19,267)	95,307	99,346
Industry Returns (2010)			
Economic Return***	(30.8%)	27.6%	***
Return on Equity	(34.3%)	59.4%	38.4%

*** This year, due to the Deep Water Horizon event, some sampled vessels, especially those located in the Gulf, participated in BP's vessel of opportunity program (VOOP) cleaning up oil. As a result, business operations and resulting costs---as reported on the survey and here---reflect both fishing and VOOP activities. In previous years, operations were strictly commercial fishing. Since the survey did not ask respondents to separate revenue from participation in VOOP (active income) and damage claims (passive income), we cannot determine 'Revenue from Operations' and hence cannot calculate 'Net Revenue from Operations' or 'Economic Return'.

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 equity, the owners' interest on the assets of the company, 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 estimates of 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 their actual profit or loss, which is calculated by subtracting financing costs (such as interest payments) and adding non-operating income to net revenue from operations. In contrast to the cash flow statement, loan principal and new investment expenses are not included, as they represent a shift among asset classes (e.g., cash to vessel) rather than an economic cost.

Returns: An "economic return" (of commercial fishing) is calculated by dividing net operating revenue by the value of vessel assets. 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 is calculated by dividing the profit or loss by the equity currently invested by the owner in the vessel.

Data Sources

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

Contact

Christopher Liese, Industry Economist
Social Science Research Group
Email: Christopher.Liese@noaa.gov
Telephone: (305) 361-4263