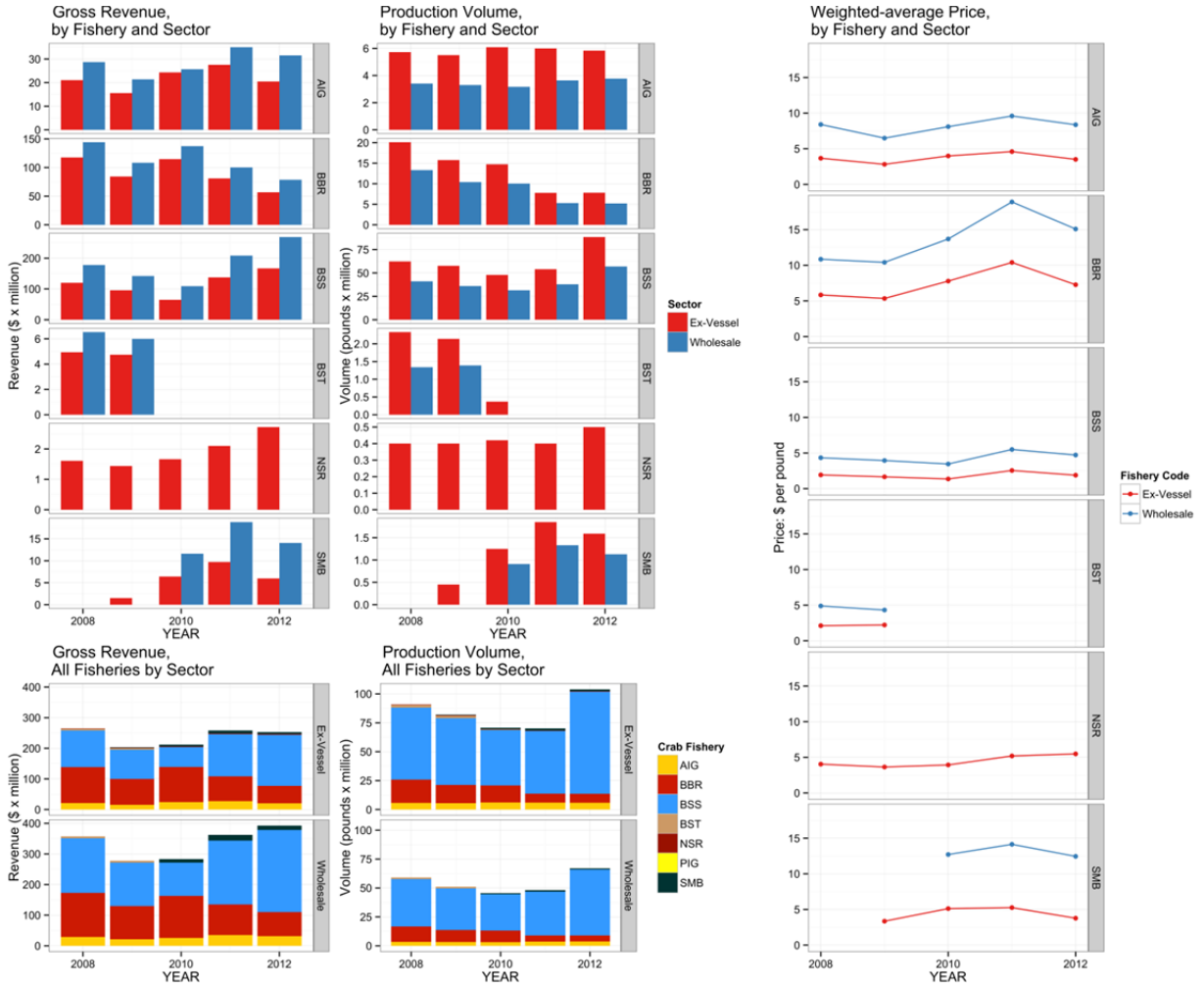
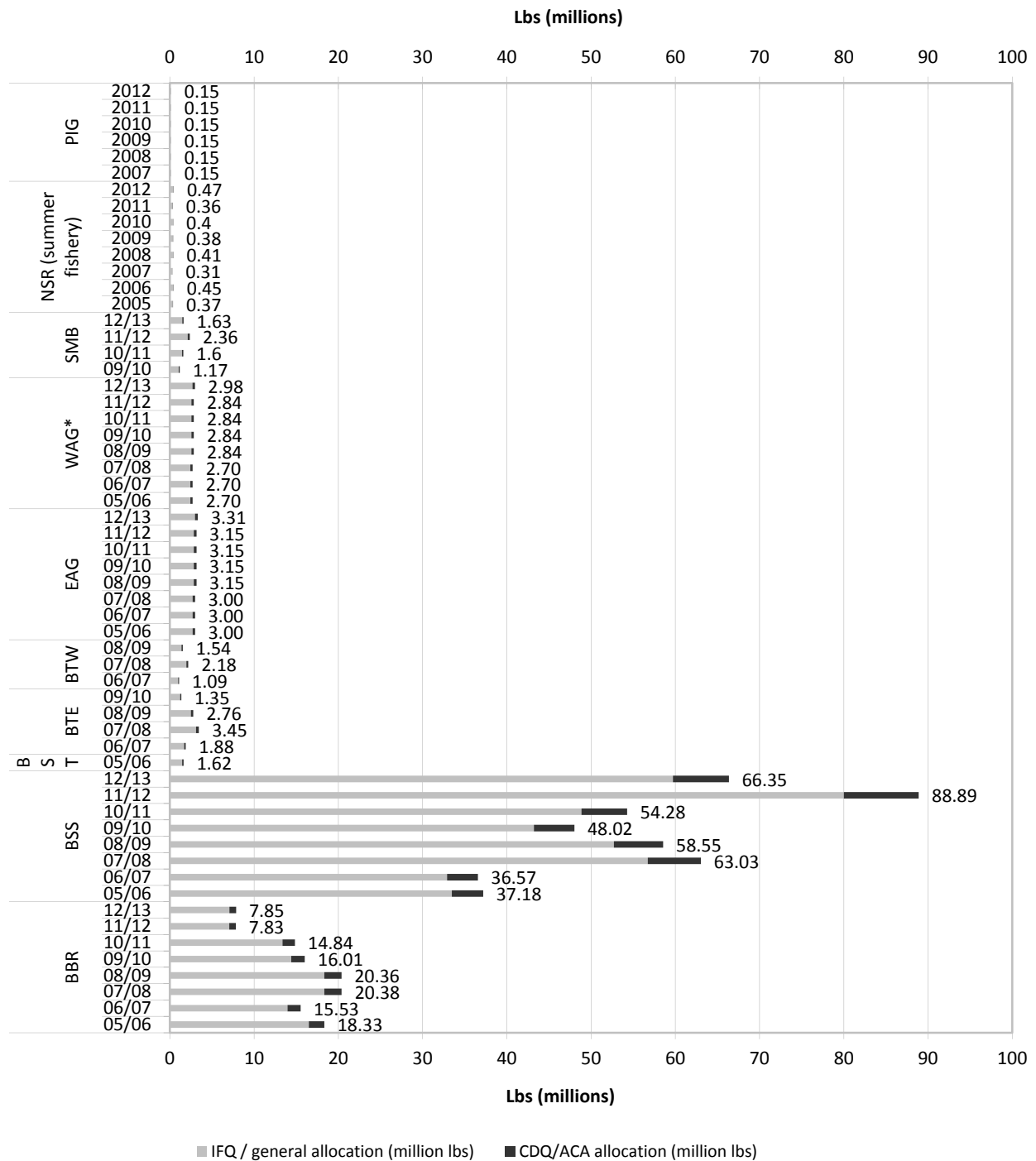


Figure 1: BSAI Crab Ex-vessel and First Wholesale Production, 2008-2012



(a)Revenue, (b)Volume, and (c) Weighted Average Price, 2008-2012; gross revenue and production volume by sector are presented in the upper pair of panels by individual crab fishery for comparison of within-fishery variation over time, and summarized over all fisheries in the lower panels to illustrate the variation in aggregate values and relative contribution of each fishery over time. See Table 1 footnotes for details.

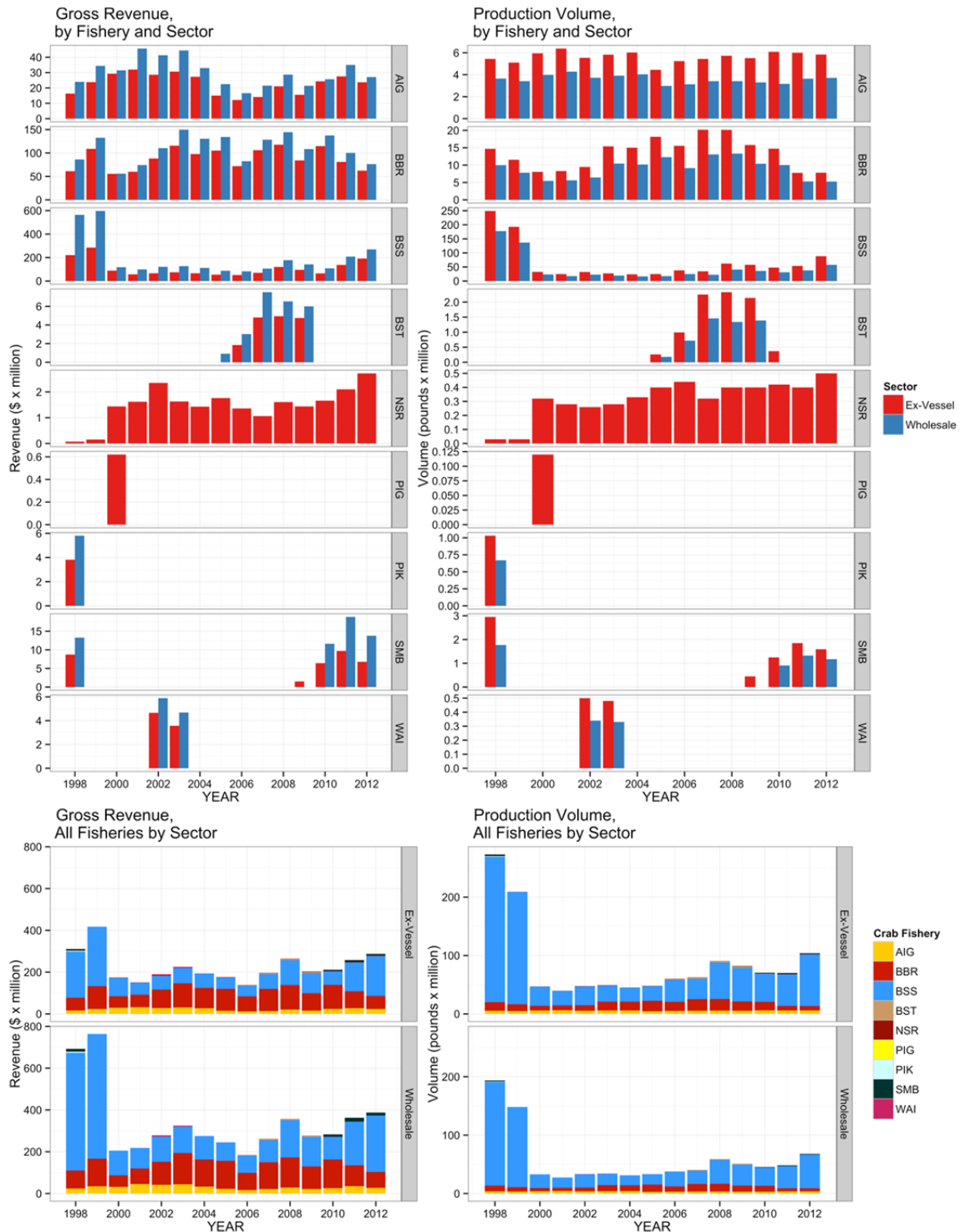
Figure 2: TACs/GHLs and Management Program Allocations, BSAI Crab Fisheries



Source: ADF&G. Tabular data available in Table 3.

Numeric values shown represent total TAC/GHL allocations to directed fishing, 10% of which is allocated to CDQ/Adak Community Allocation.

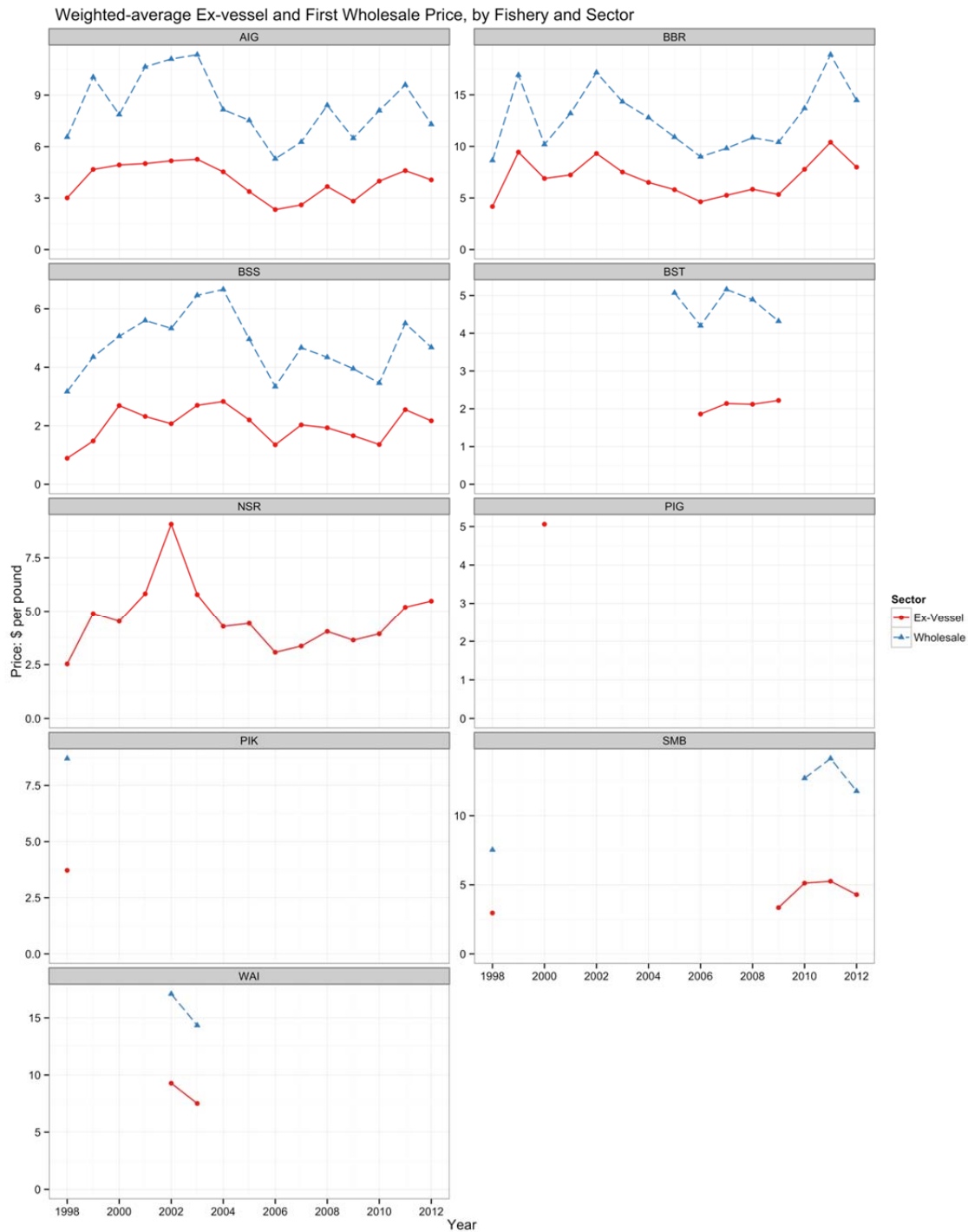
Figure 3: Ex-Vessel and First Wholesale Gross Revenue and Production Volume, by Calendar Year, Selected Fisheries



Source: ADF&G fish tickets, eLandings, CFEC pricing based on COAR buying reports. Data shown by calendar year. Tabular results are shown in Table 7 and Table 12.

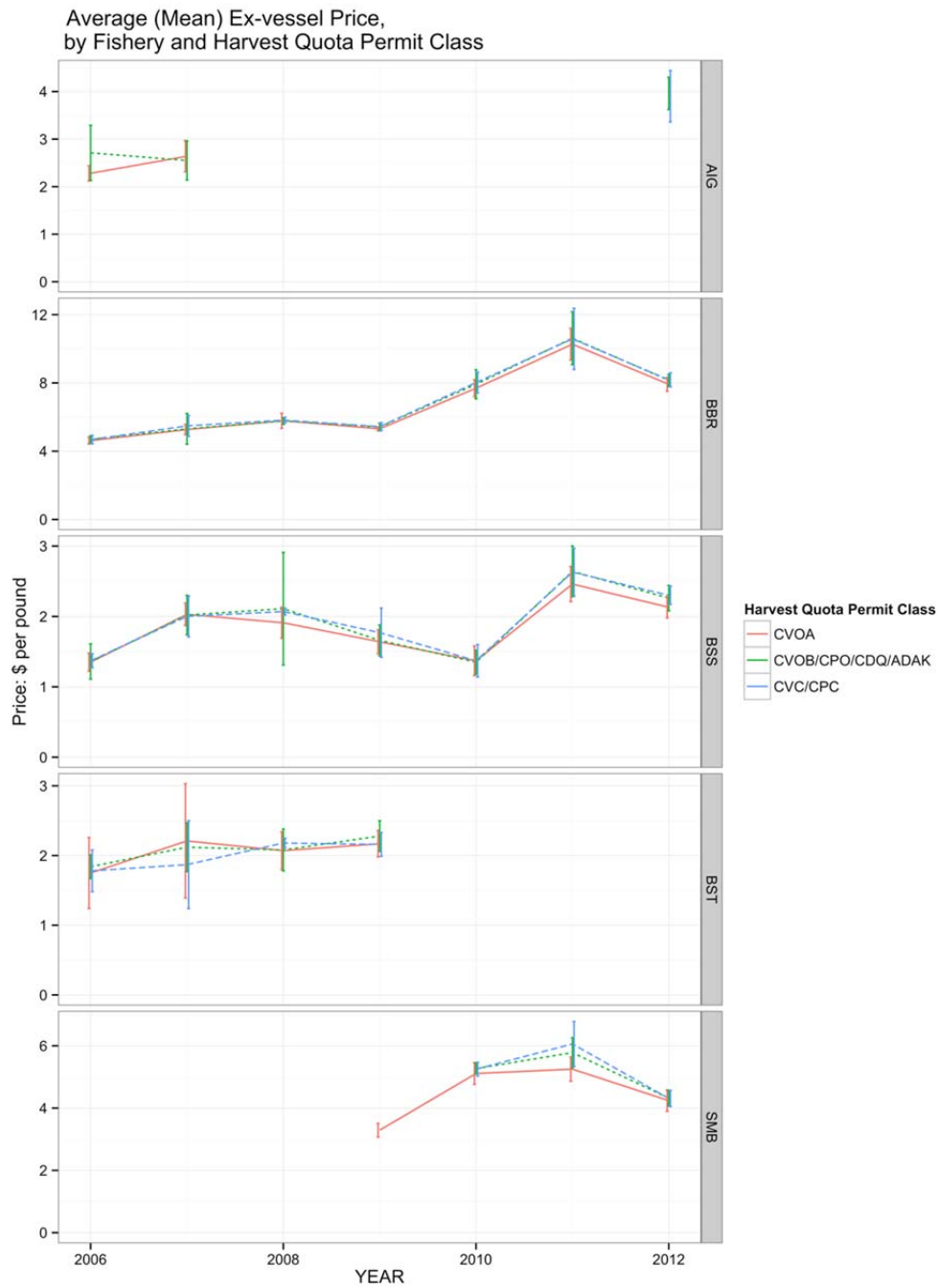
Includes commercial harvest from general, IFQ, and CDQ management programs and commercial pounds harvested by catcher/processors.

Figure 4: Ex-Vessel and First Wholesale Prices, Selected Fisheries



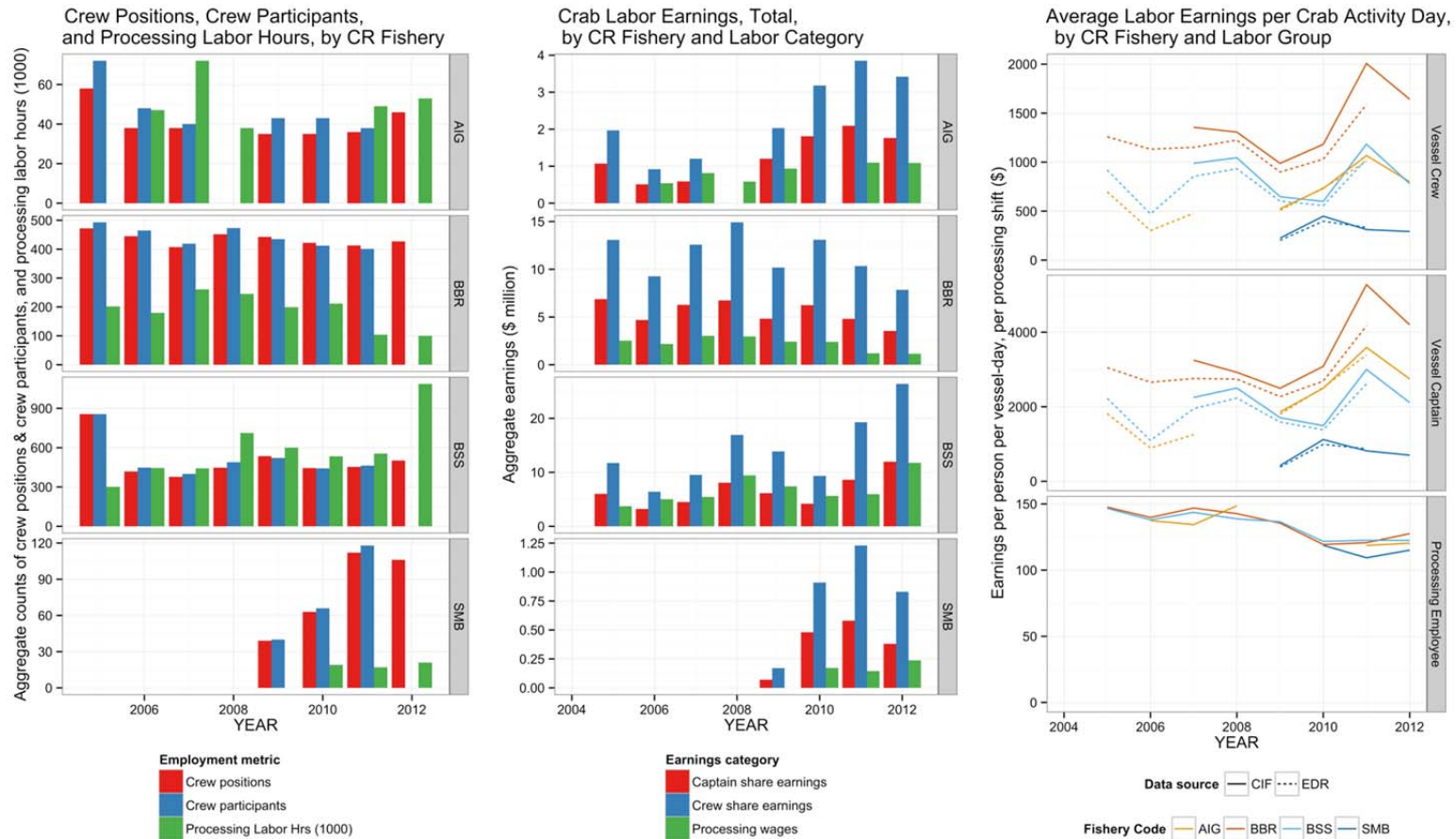
Source: ADF&G fish tickets via eLandings, CFEC pricing based on ADF&G Commercial Operators Annual Report, NMFS AFSC BSAI Crab Economic Data. Data shown by calendar year. Tabular results available in Tables 7 and 12 of this report.

Figure 5: Ex-Vessel Price by Quota Type, Selected Fisheries



Source: NMFS AFSC BSAI Crab Economic Data. Data shown by calendar year. Tabular data available in Table 10. CVC/CPC=catcher vessel and catcher/processor C share quota, CVOA=catcher vessel owner A share quota, CVOB=catcher vessel owner B share quota, CPO=catcher/processor owner quota. 2005 ex-vessel revenue data was reported over all quota types. 2005 BSS data includes revenue earned prior to and after rationalization. Error bars show one standard deviation from mean. Selected data for AIG and BST suppressed for confidentiality.

Figure 6: Harvest and Processing Employment and Compensation, Selected Crab Fisheries



Source: NMFS AFSC BSAI Crab Economic Data. Data shown by calendar year. Tabular data available in Tables 15, 19-20, and 23.

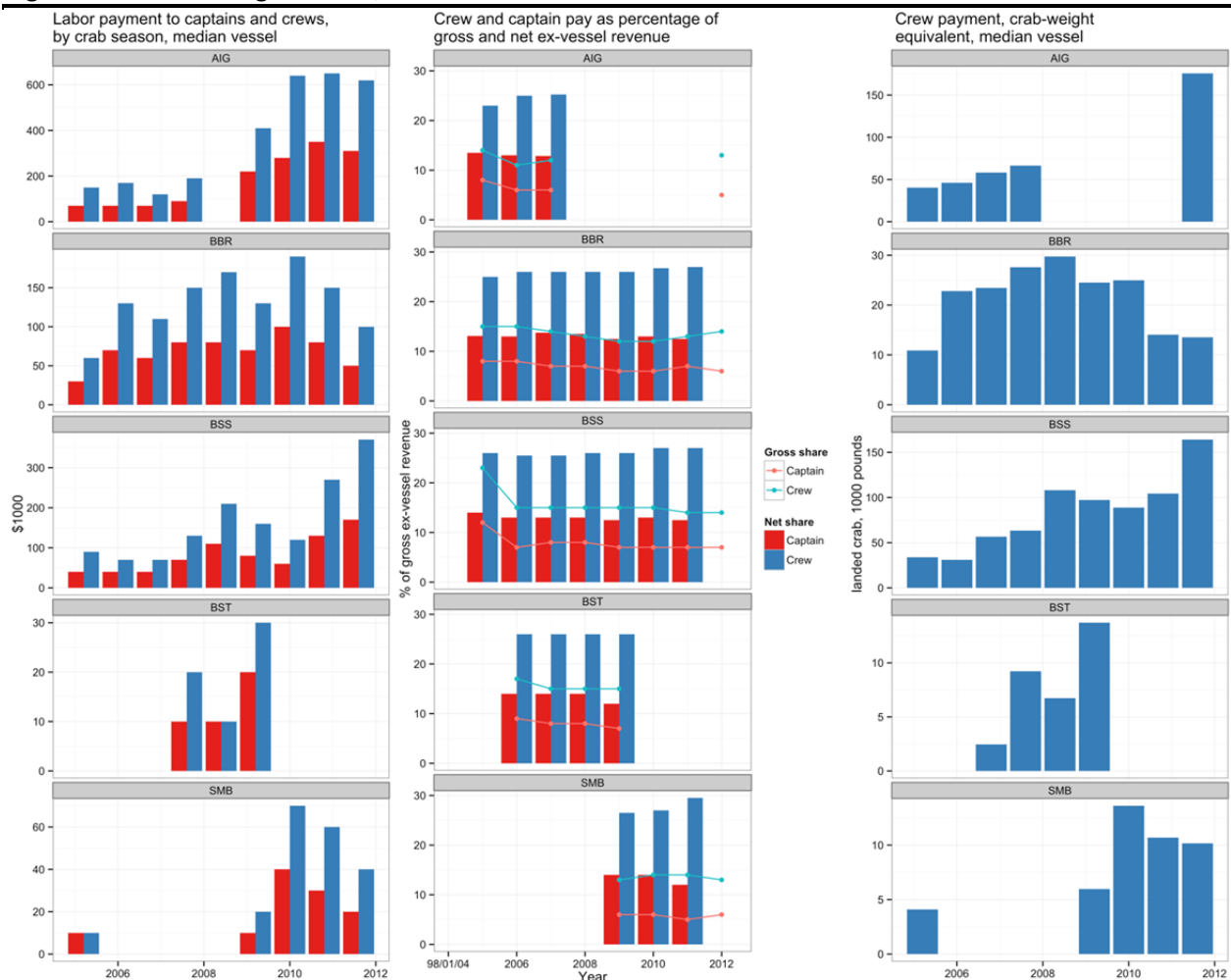
Values shown for 98/01/04 represent the annual average over the three-year series. Data for BST, PIK, and WAI fisheries are not shown. 2008 data for AIG are suppressed for confidentiality.

Labor earnings per activity day represent aggregate crew and captain labor payment per vessel, pro-rated over vessel activity days; processing labor earnings per day represent aggregate processing labor payments divided by number of 12-hour FTE shifts (aggregate processing labor-hours/12).

(a) 1998-2008 shows CV positions and participants only; 2009 shows data aggregated over CV and CP sectors 2005 and later crew positions data from ADF&G fish tickets. BSS crew position data were not collected in 2005.

(b) 1998-2008 data show total and median CV and SFP payments only; 2009 data show total and median crew payments over CV and CP sectors combined and processing employee payments over CP and SFP combined.

Figure 7: Crew Earnings Metrics, Selected Crab Fisheries

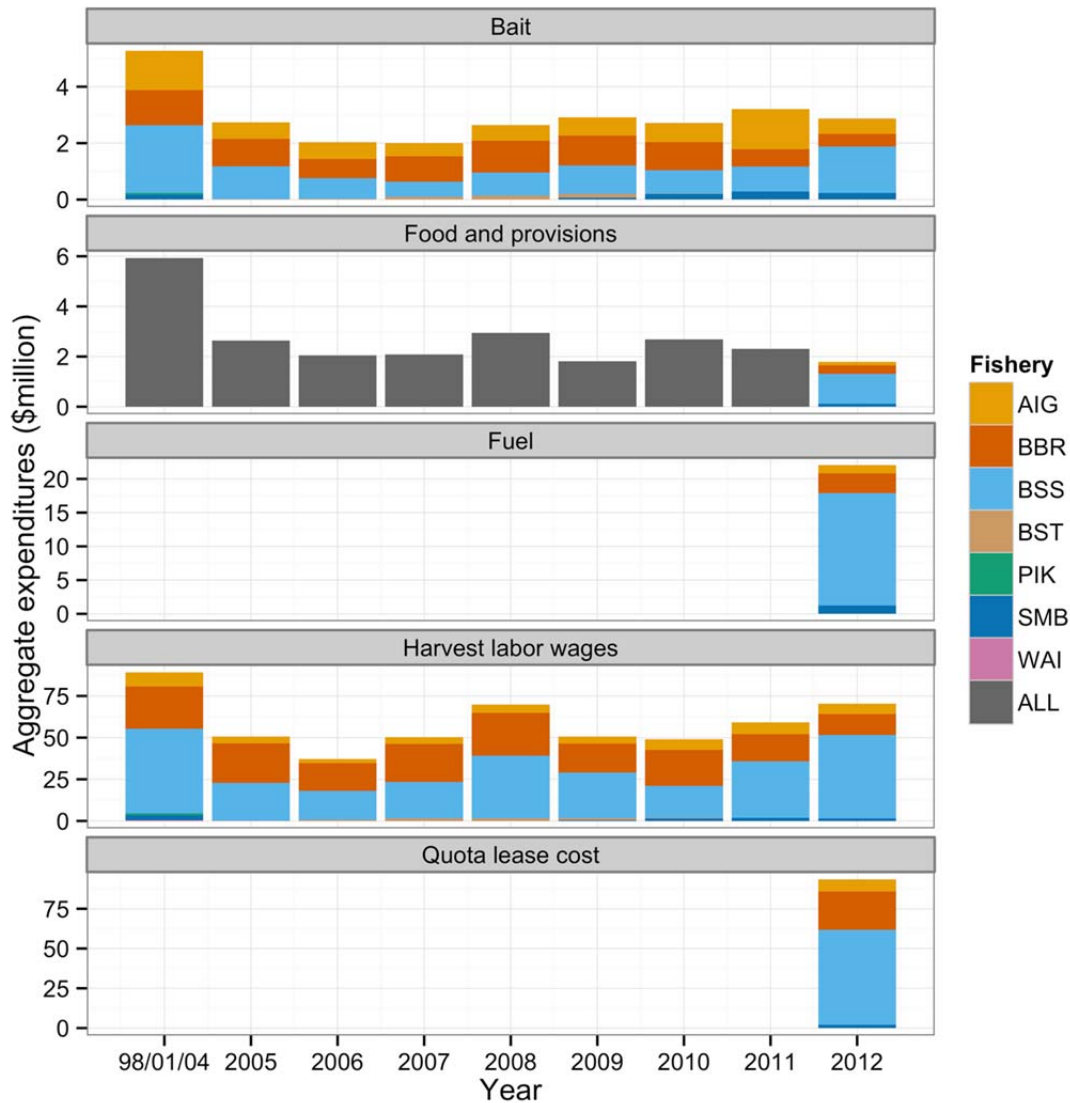


Source: NMFS AFSC BSAI Crab Economic Data. Data shown by calendar year. Tabular data available in Tables 15 and 22. Values shown for 98/01/04 represent the annual average over the three-year series. Median pay in dollars shown for CV sector only for 1998-2008 and for CV and CP sectors combined for 2009 and later. Median crab-equivalent crew pay is shown for CV sector only for all years. Crab equivalent pay is denominated in pounds and is calculated by dividing vessel crew share payment by ex-vessel price per pound; this represents the quantity of crab landed by the vessel in a given year that is converted to crew payment. Crew and captain pay as percentage share of net ex-vessel revenue is reported by annually by vessel owners in EDR, but reflects variation in the types and amounts of deductions for shared vessel operating expenses in determining crew settlements between different owners/crews. Percentage share of gross ex-vessel revenue is the median value over vessel-level observations of the calculated ratio of reported crew and captain labor payment to gross ex-vessel revenue. Selected data for AIG and BST fisheries suppressed for confidentiality.

Figure 8: (a) Aggregate CR Program Crab Vessel Operating and Capital Expenditures, by Cost Item, All Vessels, 1998-2012



Figure 8: (b) Aggregate Crab Vessel Operating and Capital Expenditures, by Cost Item and Fishery, All Vessels, 1998-2012



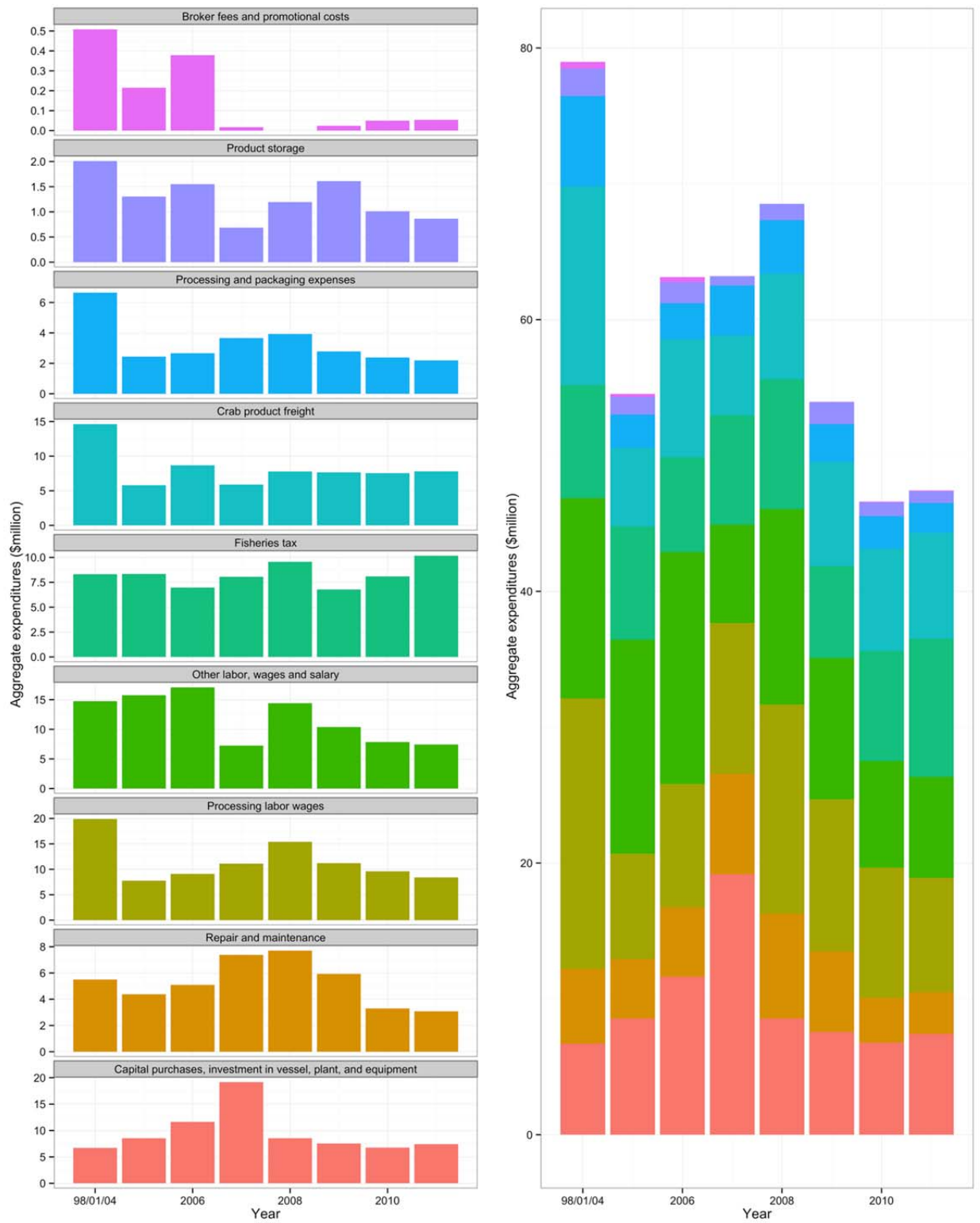
Source: NMFS AFSC BSAI Crab Economic Data. Tabular data available in Tables 25 - 28 and 33. Values shown for 98/01/04 represent the annual average of results pooled over the three years. Cost data shown include all major cost items for which data are available, but do not represent a comprehensive accounting of operating or capital expenditures.

Figures (a) and (b) present total annual expenditures by cost item for calendar years 1998-2012, aggregated over all vessel entities reporting except where data are suppressed for confidentiality. Note change in cost items reported for 1998-2011 and 2012: EDR data collection protocols implemented beginning 2012 discontinued reporting for several expenditure items and required reporting of expenditures for food and provisions by crab fishery. Data for fuel and quota lease expenses collected prior to 2012 are not shown in figures due to data quality limitations.

Figure (a) displays results for all cost items where data are available from 1998-2012, aggregated over all CR program fisheries; the left panel shows expenditure level (vertical axis) scaled separately for each cost item to indicate changes over time by cost item, and right panel shows expenditure level scaled uniformly across cost items to emphasize relative scale of expenditures between cost items.

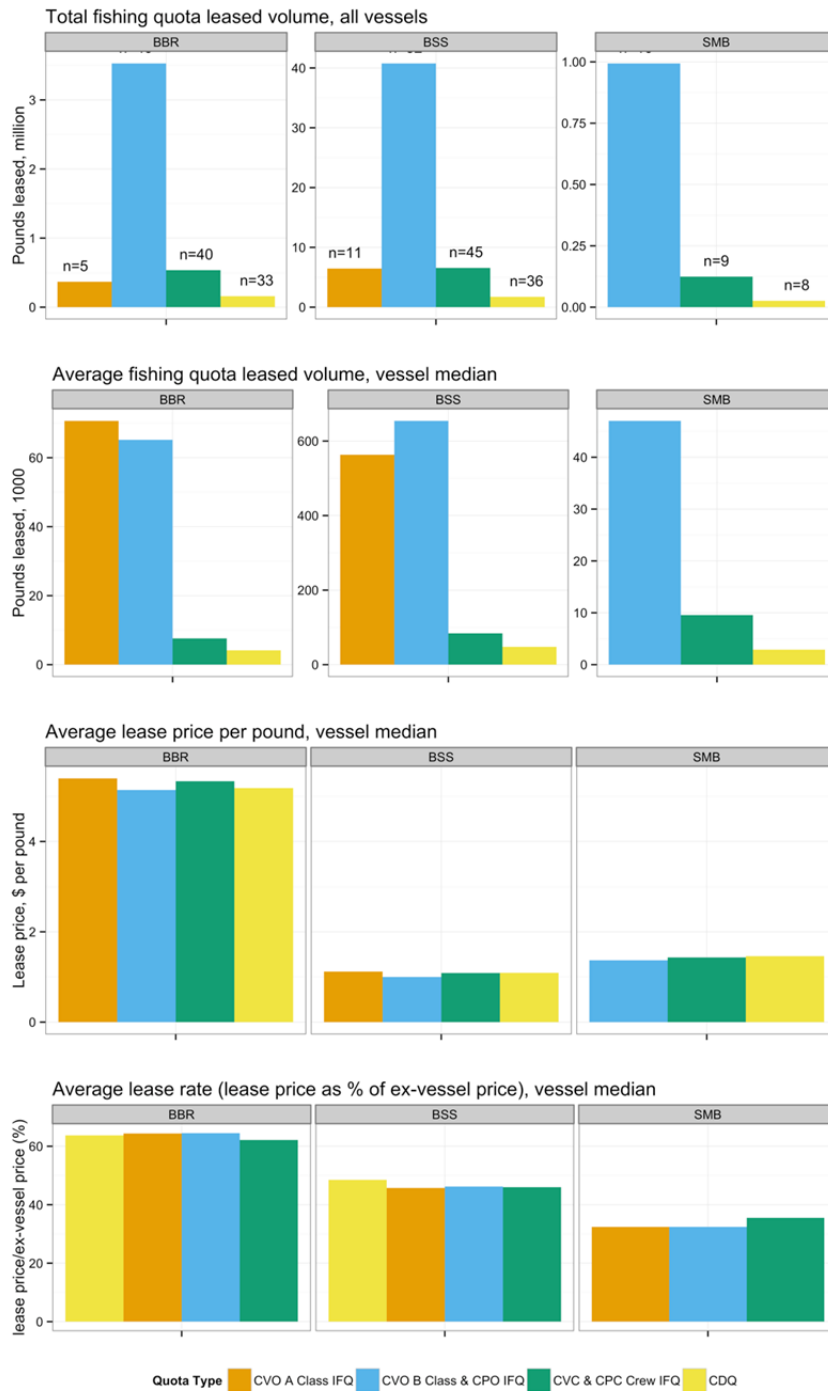
Figure (b) displays results by cost item and CR program fishery for cost items included in revised EDR implemented for 2012.

Figure 9: Crab Processor Operating and Capital Expenditures, by Cost Item



Source: NMFS AFSC BSAI Crab Economic Data. Tabular data available in Tables 24, 25, and 30. See Figure 8 notes for details and interpretation.

Figure 10: Crab harvest quota lease activity – lease volume, price, and rate, 2012 calendar year BBR, BSS, and SMB fisheries

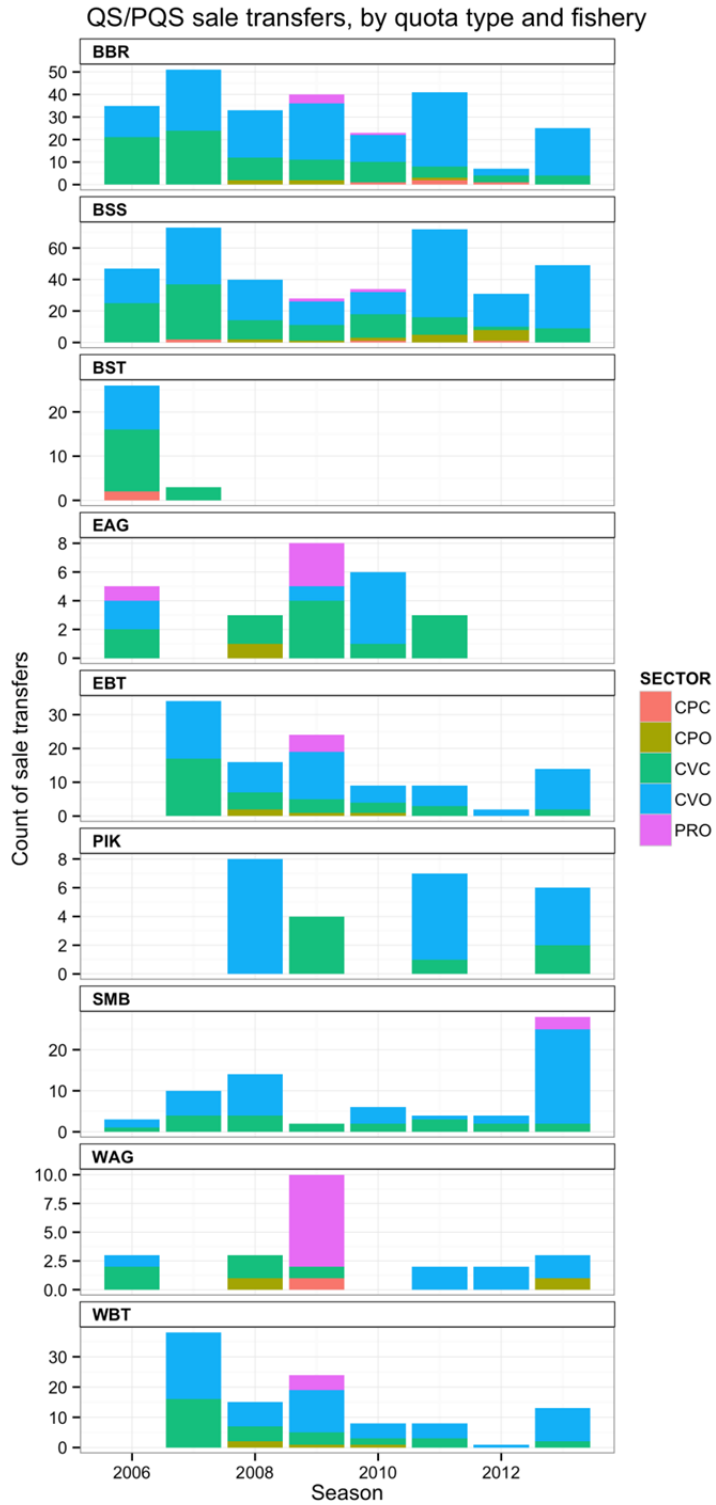


Source: NMFS AFSC BSAI Crab Economic Data. Tabular data available in Table 33.

Lease data shown represent arm's length lease transactions reported for active crab fishing vessels in the 2012 Crab EDR; data collected for earlier years is not reported due to data quality limitations.

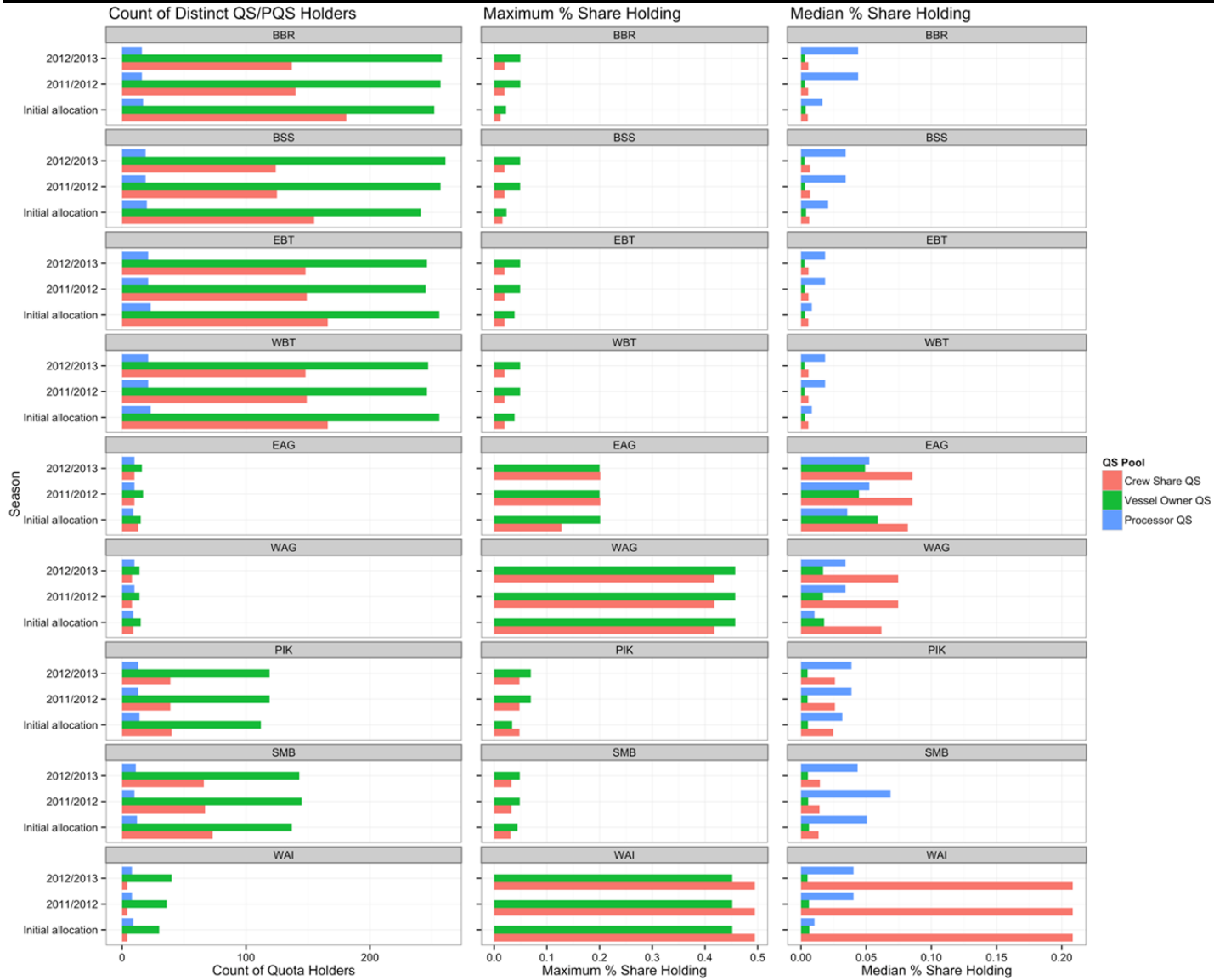
Harvest quota types are categorized in this report as the following: CVO A – catcher vessel owner Class A IFQ; CVO B + CPO – catcher vessel owner Class B IFQ and catcher/processor owner IFQ; CVC + CPC – catcher vessel crew IFQ and catcher/processor crew IFQ. Statistics reported represent results pooled over all quota types and/or regional designations within each category.

Figure 11: QS and PQS Sale Transfers



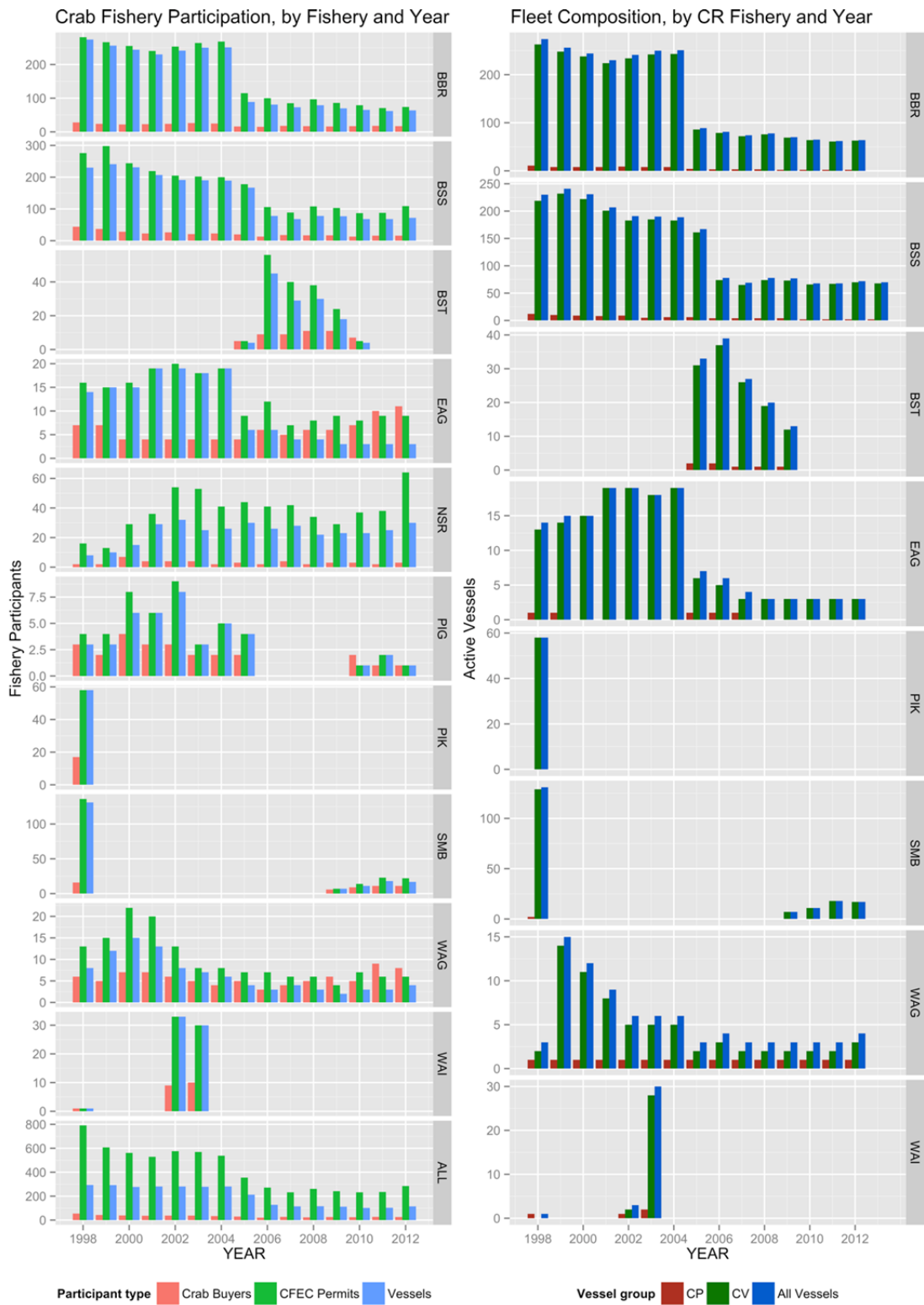
Source: NMFS AKRO RAM division, Quota share transfer data. Data resented in Table 34.

Figure 12: CR Program – Harvest and Processing Quota Share Holdings, Initial Allocation, 2011/2012, and 2012/2013 Seasons



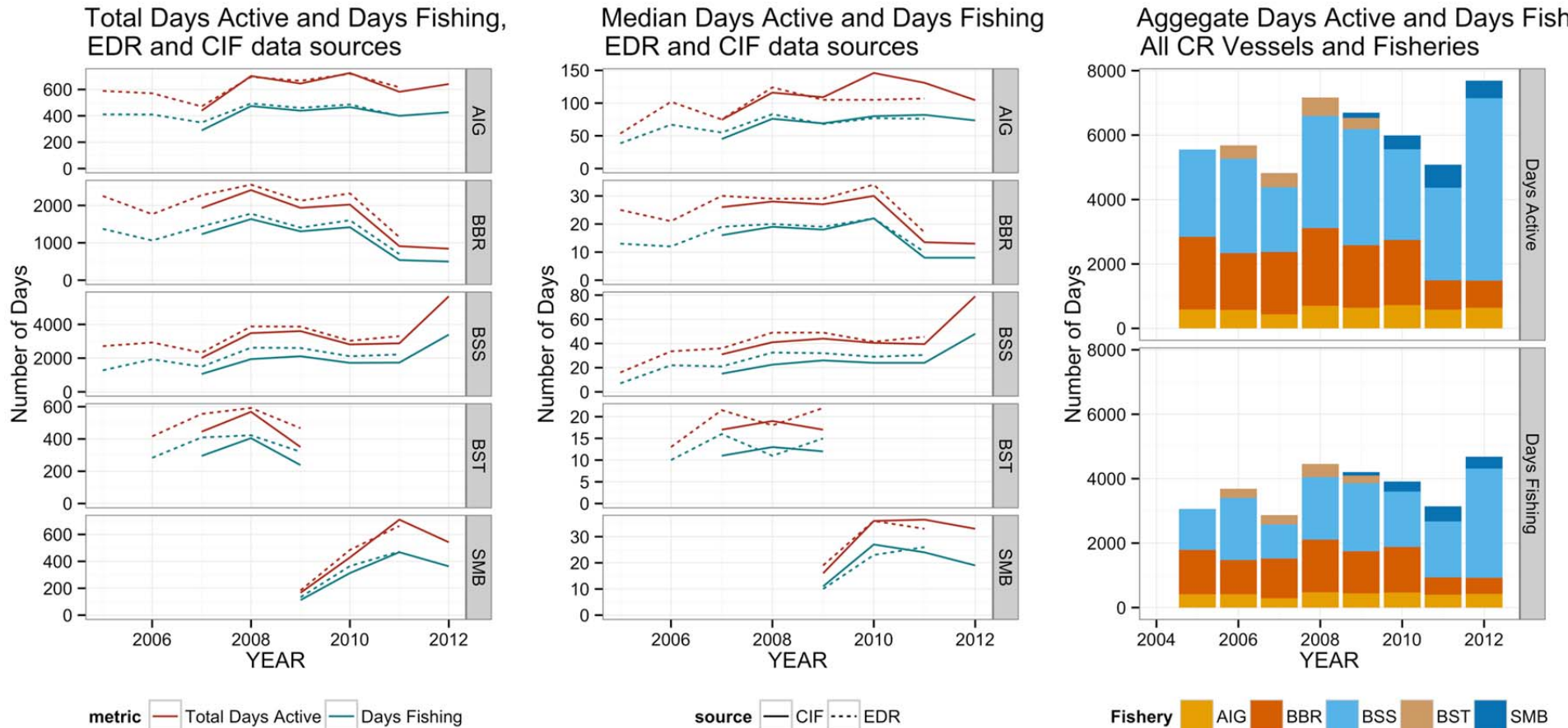
Source: NMFS AKRO RAM Division, quota share holders files. Tabular data available in Tables 39 and 41.

Figure 13: BSAI Crab Fishery Participation and Fleet Composition, 1998-2012



Source: ADF&G fish tickets, eLandings. Tabular data available in Tables 4 and 5. Gaps in time series for BST, PIG, PIK, SMB, and WAI indicate fishery closure years.

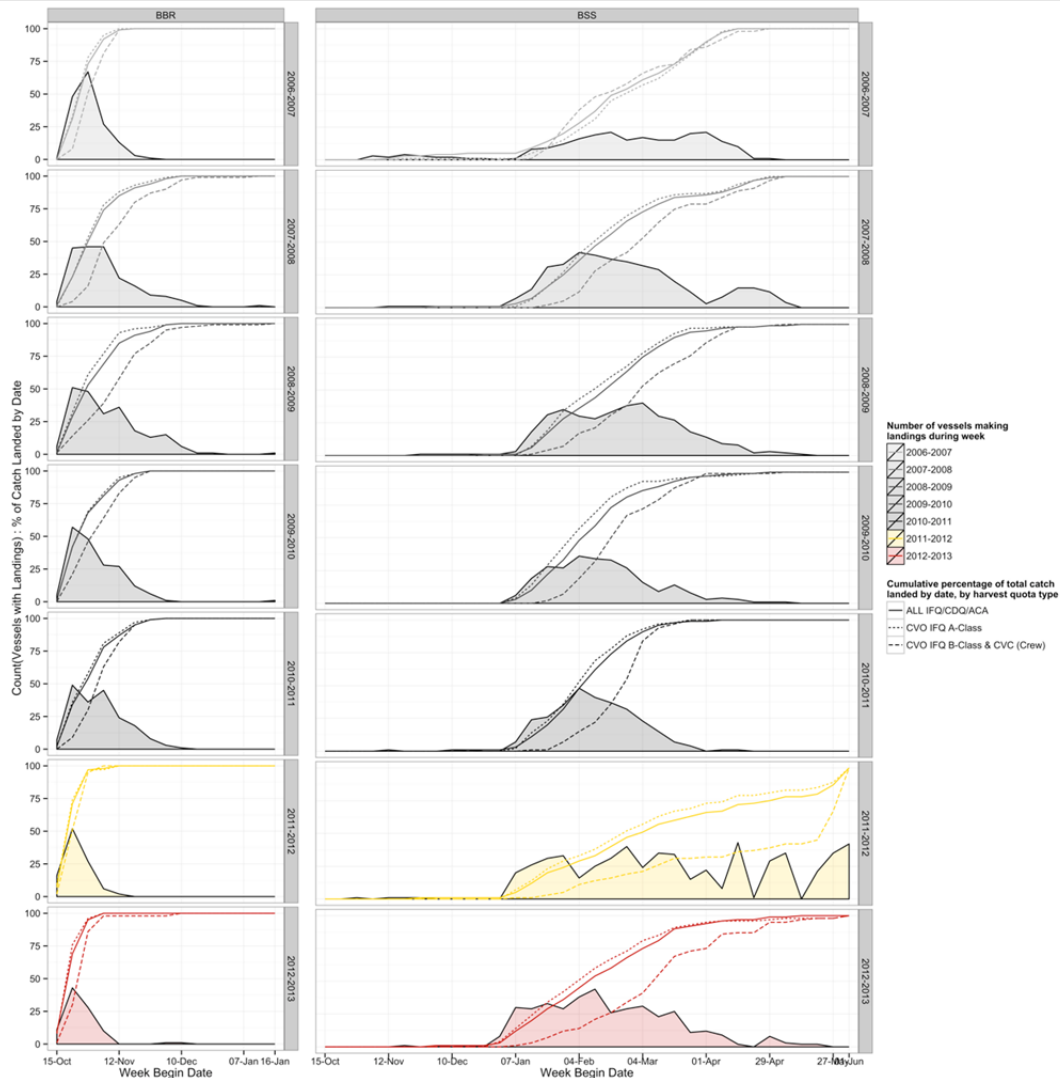
Figure 14: Harvest Vessel Activity Days, Selected Fisheries



Source: NMFS AFSC BSAI Crab Economic Data. Data shown by calendar year. Tabular data is presented in Table 23.

Data for PIK, SMB, and WAI fisheries not shown; gaps in time-series for AIG are suppressed for confidentiality, and gaps in BST time series reflect fishery closure years. 1998-2008 shows CV activity only; 2009 shows activity aggregated over CV and CP sectors. Total days active is calculated using days at sea reported in the 1998-2004 EDR and the sum of days fishing and days travelling and offloading in 2005 and later data. Median days are calculated over vessels participating in the fishery rather than all vessels in the BSAI crab fleet. Note that the 1998-2004 and 2005 and later figures for both total and median days active are not directly comparable, as the pre-2005 data do not include days spent queuing and offloading at processors. BST fishery was closed in 2001; reported days active in this fishery may reflect reporting error or days attributed to incidental catch of BST in another target fishery.

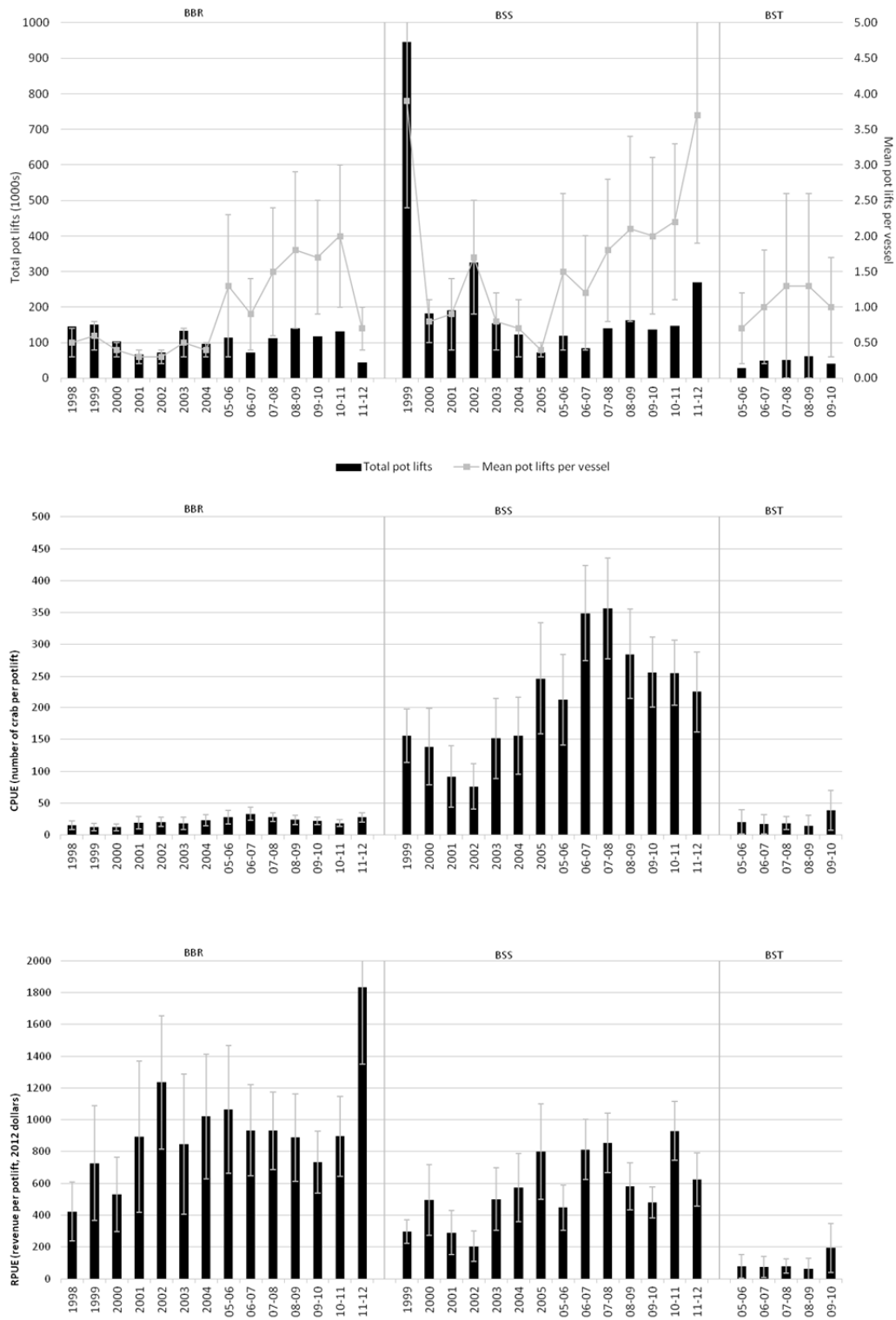
Figure 15: Crab vessel landing activity and cumulative catch, by quota share class and week of season: Bristol Bay red king and Bering Sea snow crab



Source: ADF&G fish tickets via eLandings. NMFS RAM Division, IFQ accounting database. Tabular data available in Table 51 and Table 52.

The vertical axis indicates both count of vessels and percentage of quota share, and horizontal axis shows the ending date of each week during the fishing season. The filled area in the graph indicates the count of vessels making landings each week. Plotted lines show the cumulative percentage of fishing quota expended on landings over the course of the season: ALL IFQ/CDQ/ACA (solid line) includes all IFQ and CDQ programs quota landed by catcher vessels and catcher/processors; IFQ A-Class (dotted line) includes CVO Class A IFQ quota permits only; CVO IFQ B-Class & CVC (Crew) (dashed line) includes CVO B Class IFQ and CVC (crew) IFQ. CDQ landings are not shown separately due to confidentiality restrictions. BSS seasons normally open October 15 and close May 31 of the next calendar year; the 2011/12 BSS season was extended until June 15 due to an extended period of sea ice cover which substantially delayed prosecution of the fishery.

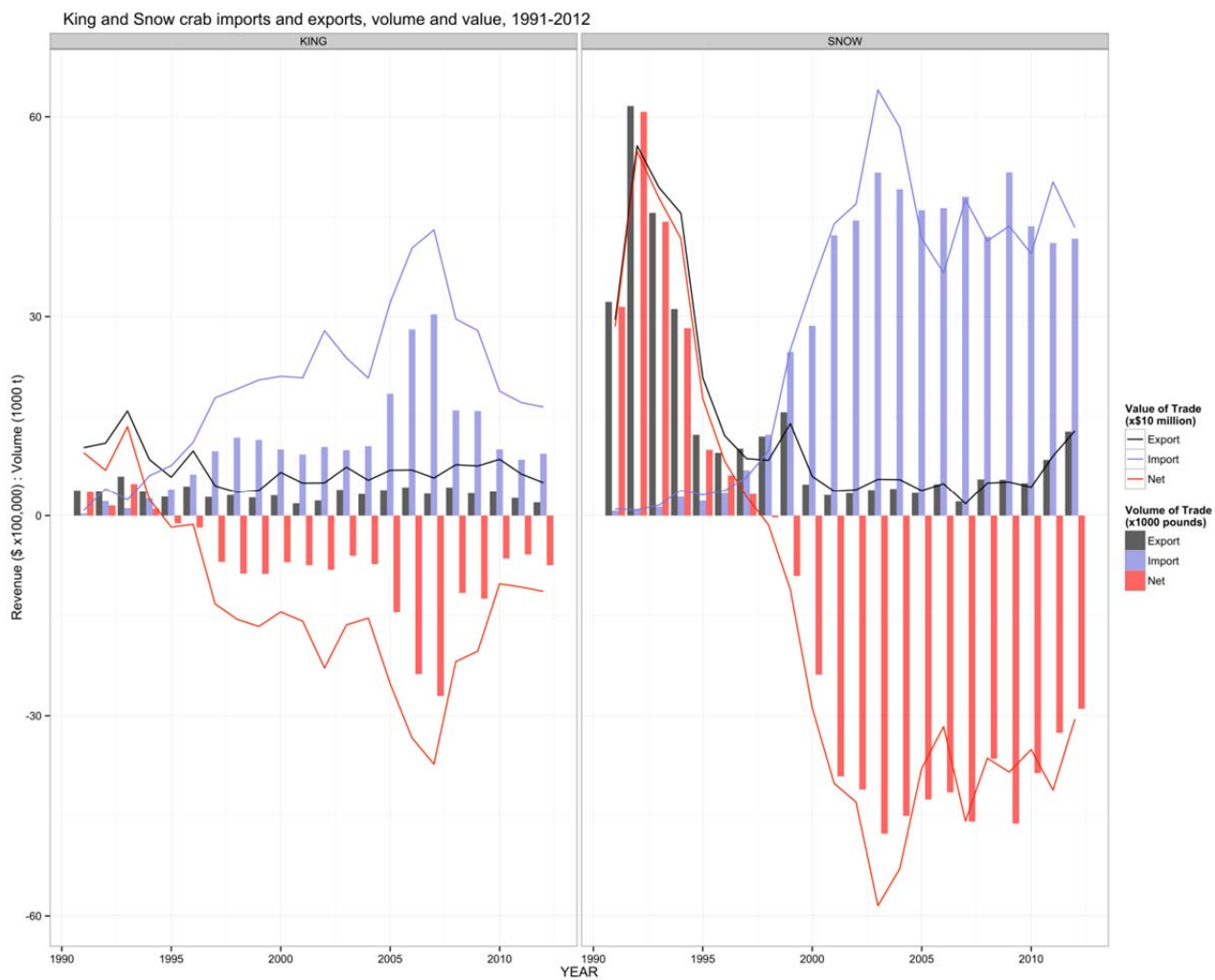
Figure 16: Pot lifts, mean CPUE, and mean RPUE by season, selected crab fisheries



Source: ADF&G fish tickets (August 2005 and later data via eLandings).

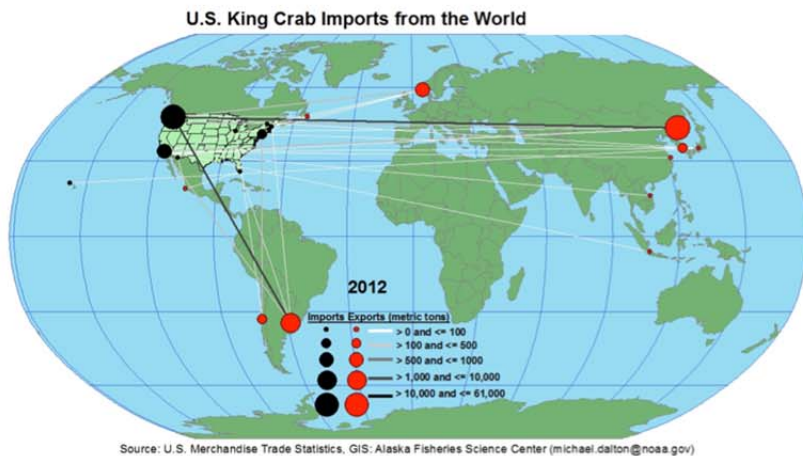
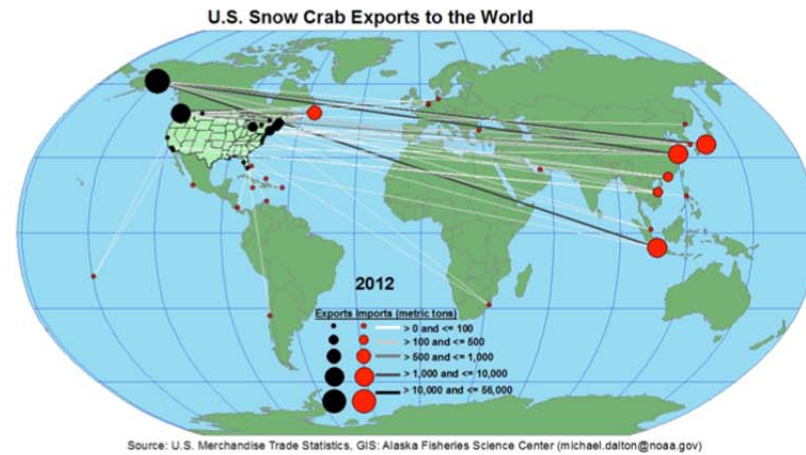
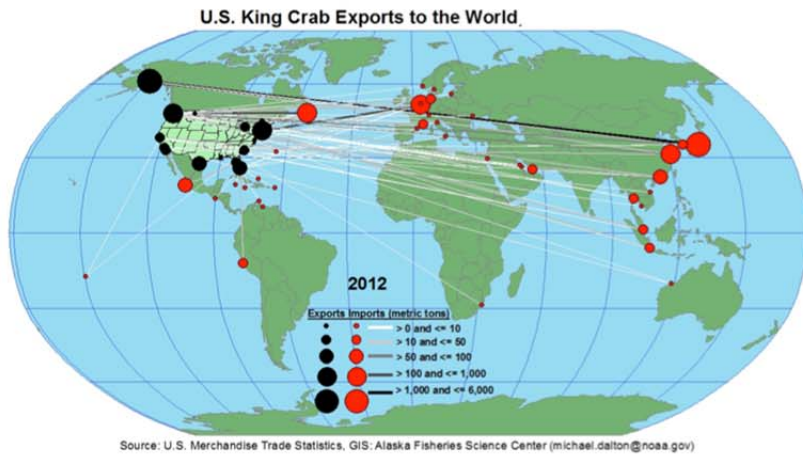
Error bars show one standard deviation from mean. CPUE = number of legal crab per potlift. RPUE = ex-vessel value of commercially sold crab per potlift, adjusted to 2010 dollars. Tabular data available in Table 53.

Figure 17: King and snow crab exports and imports by calendar year



Source: U.S. Foreign Census Bureau Foreign Trade Division, via NMFS Fisheries Statistics Division, U.S. Foreign Trade Database. Data available at <http://www.st.nmfs.noaa.gov/st1/trade/>; Tabular data shown in figure available in Table 54. Revenues are inflation-adjusted to 2012 equivalent dollars using the Producer Price Index for unprocessed and packaged fish. Imports and exports shown for TSUSA product codes 306144010 (frozen king crab) and 306144020 (frozen snow crab).

Figure 18: Volume of U.S. Imports and Exports of King and Snow Crab, by Country of Destination/Origin, 2012



Source: U.S. Merchandise Trade Statistics. Data show in figure available upon request from NOAA AFSC Economics and Social Science Research Program.

Figure 19: Cost recovery fees (inflation-adjusted 2012 dollars) collected for the IFQ Crab portion of the BSAI Crab Rationalization Program

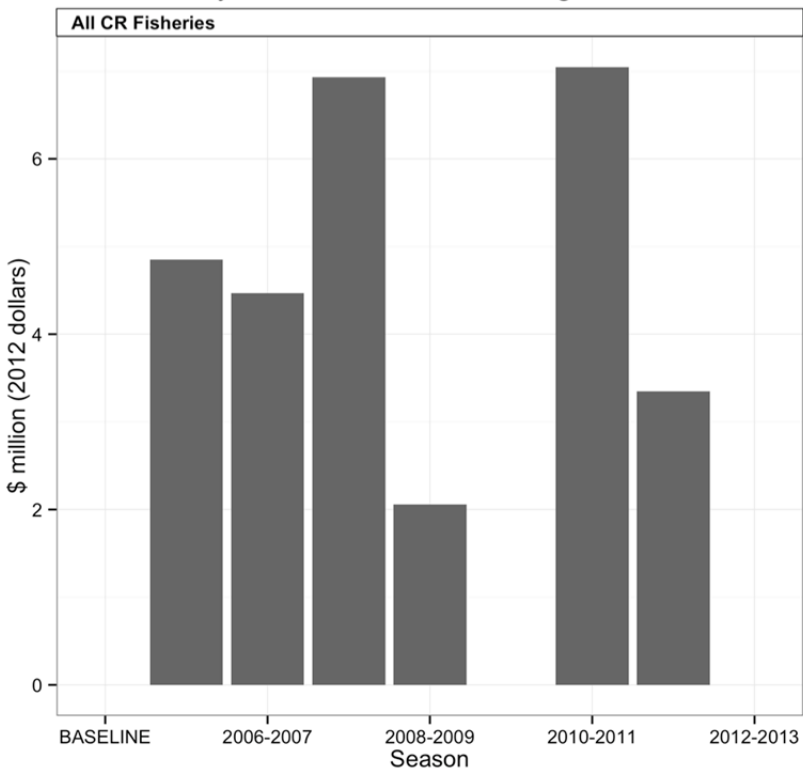


Figure 20: IFQ Crab quota and landings in the BSAI Crab Rationalization Program

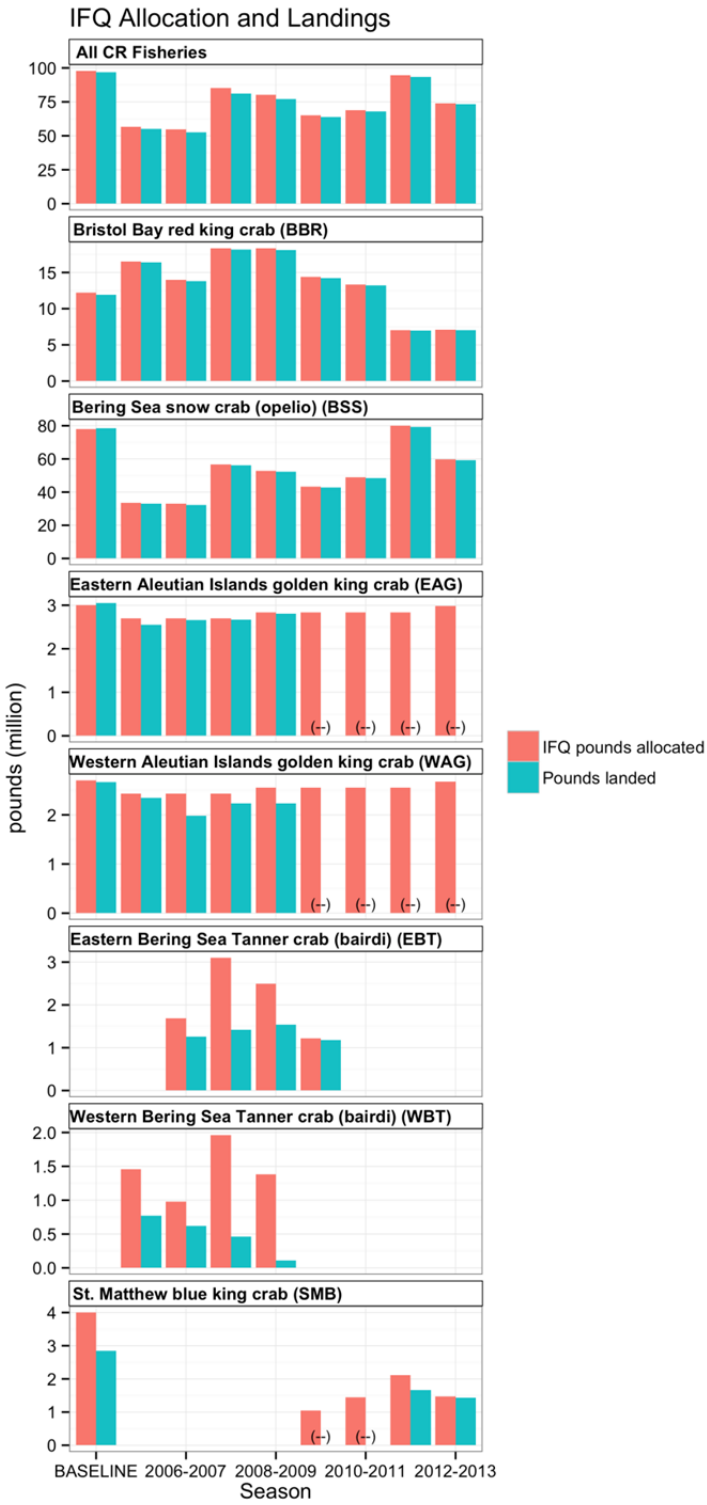


Figure 21: Utilization of available IFQ crab quota in the BSAI Crab Rationalization Program

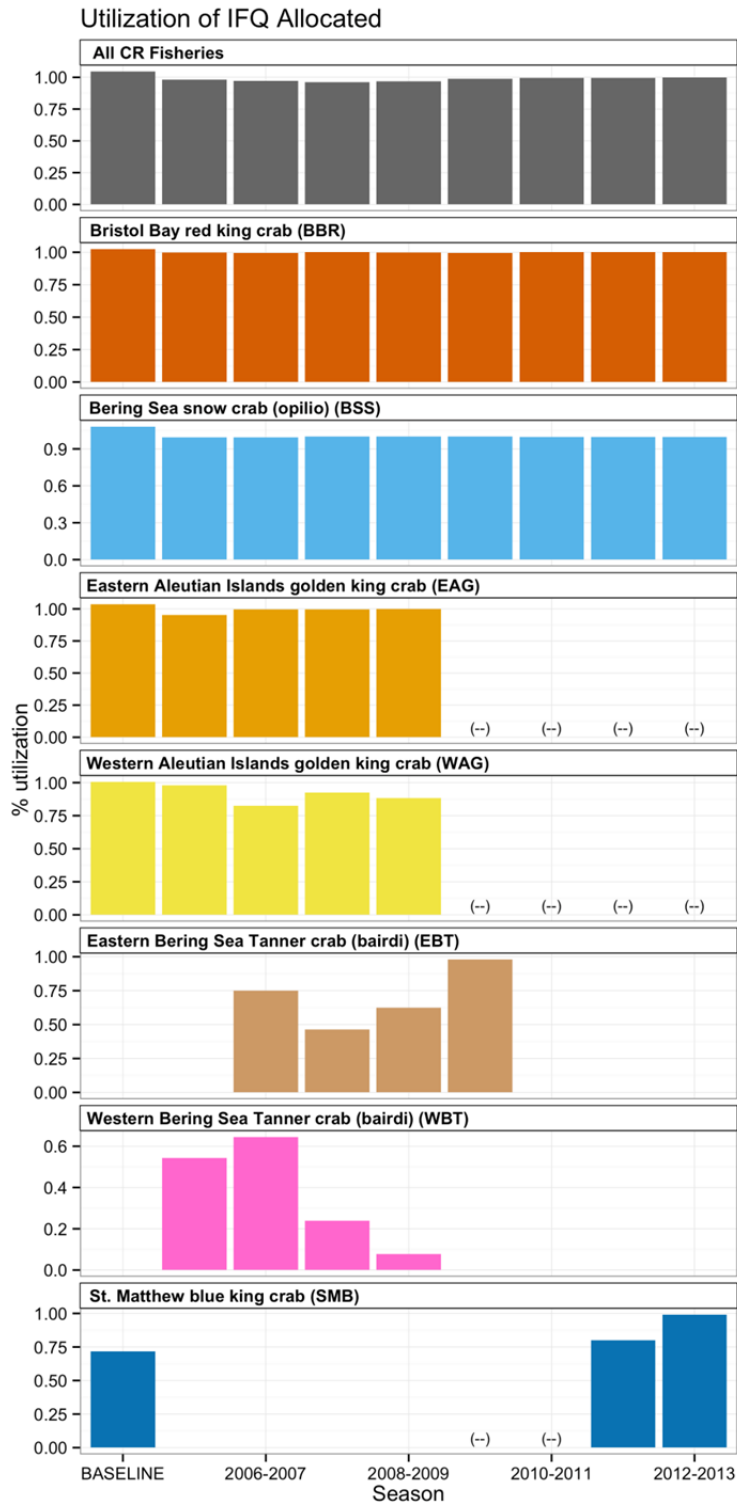


Figure 22: Number of entities holding IFQ crab share in the BSAI Crab Rationalization Program

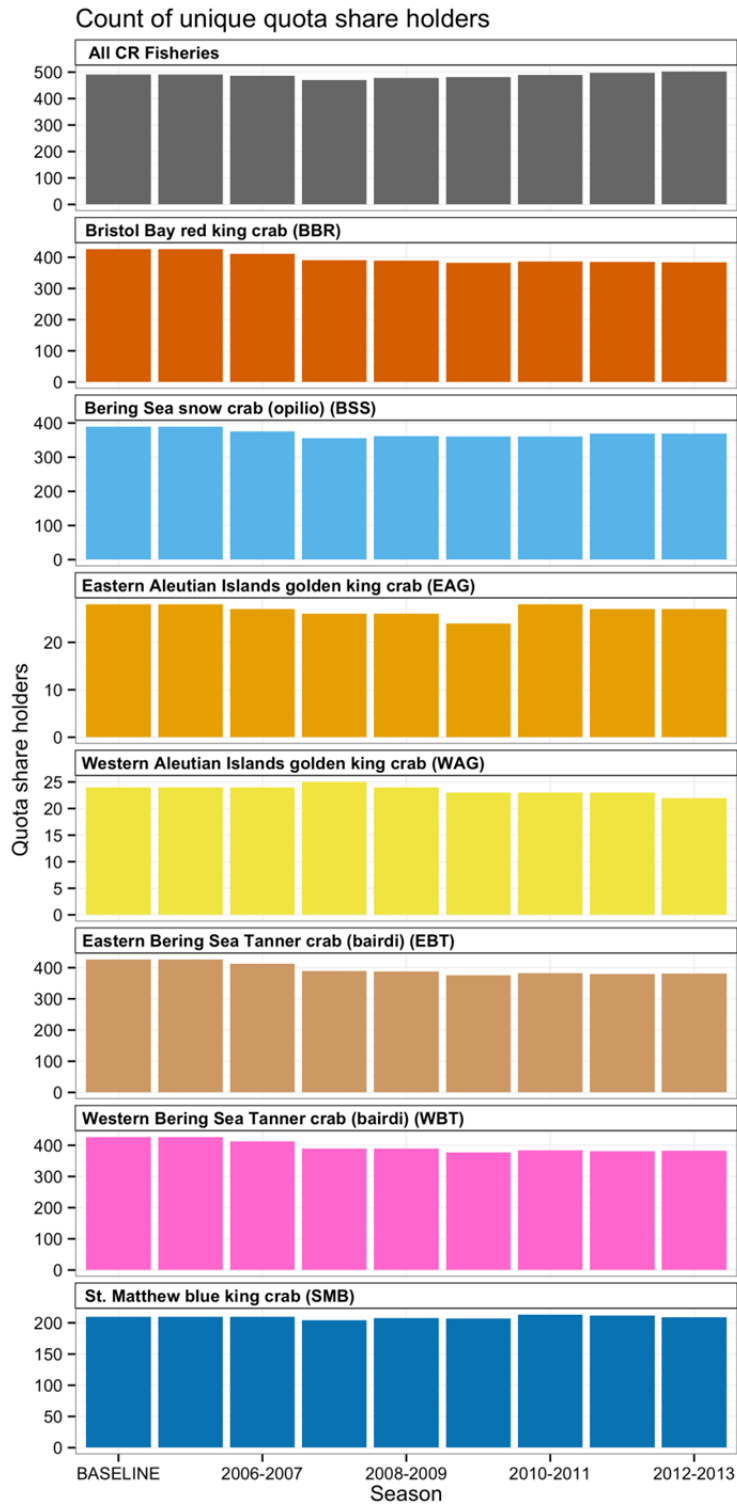


Figure 23: Active vessels fishing IFQ Crab quota in the BSAI Crab Rationalization Program



Figure 24: Number of trips harvesting IFQ Crab in the BSAI Crab Rationalization Program

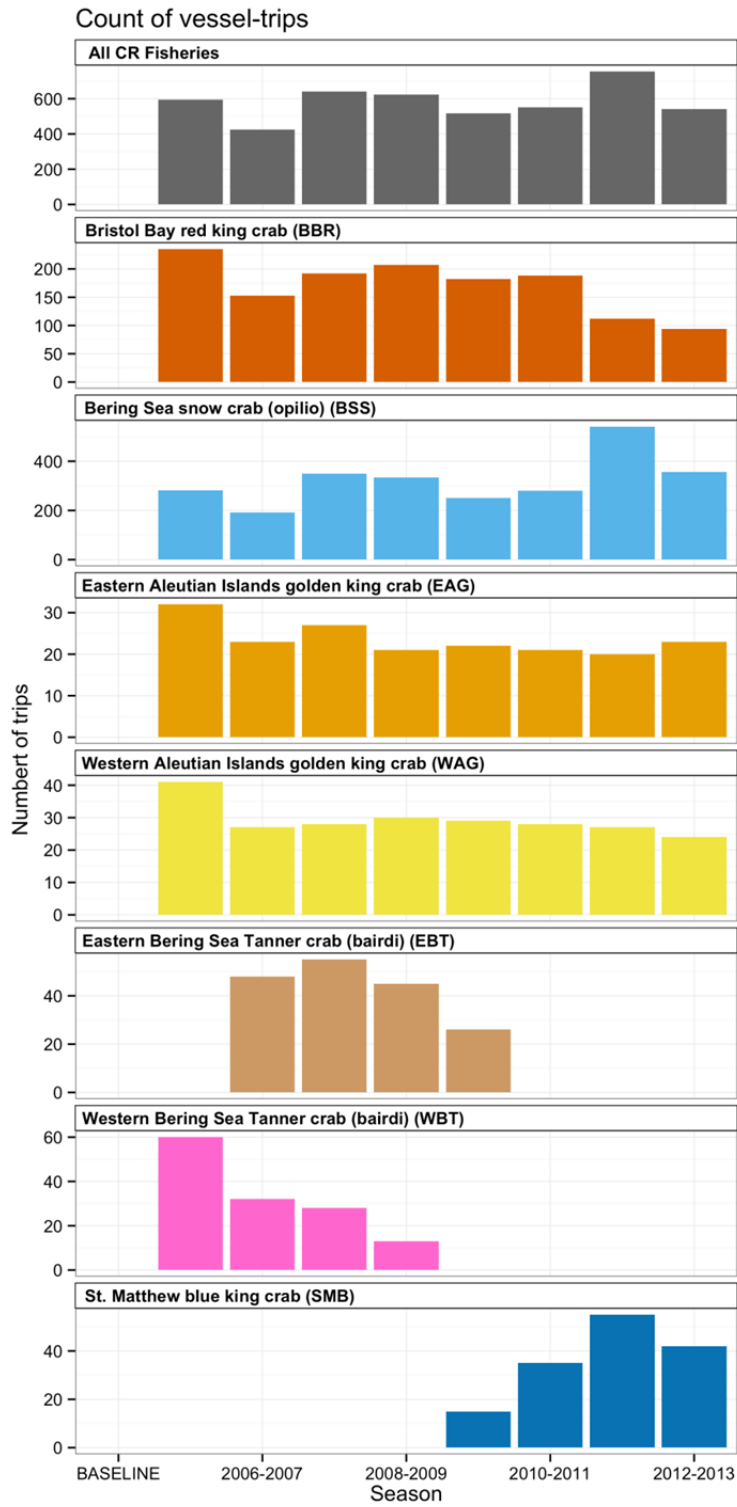


Figure 25: Season lengths in CR Crab Fisheries

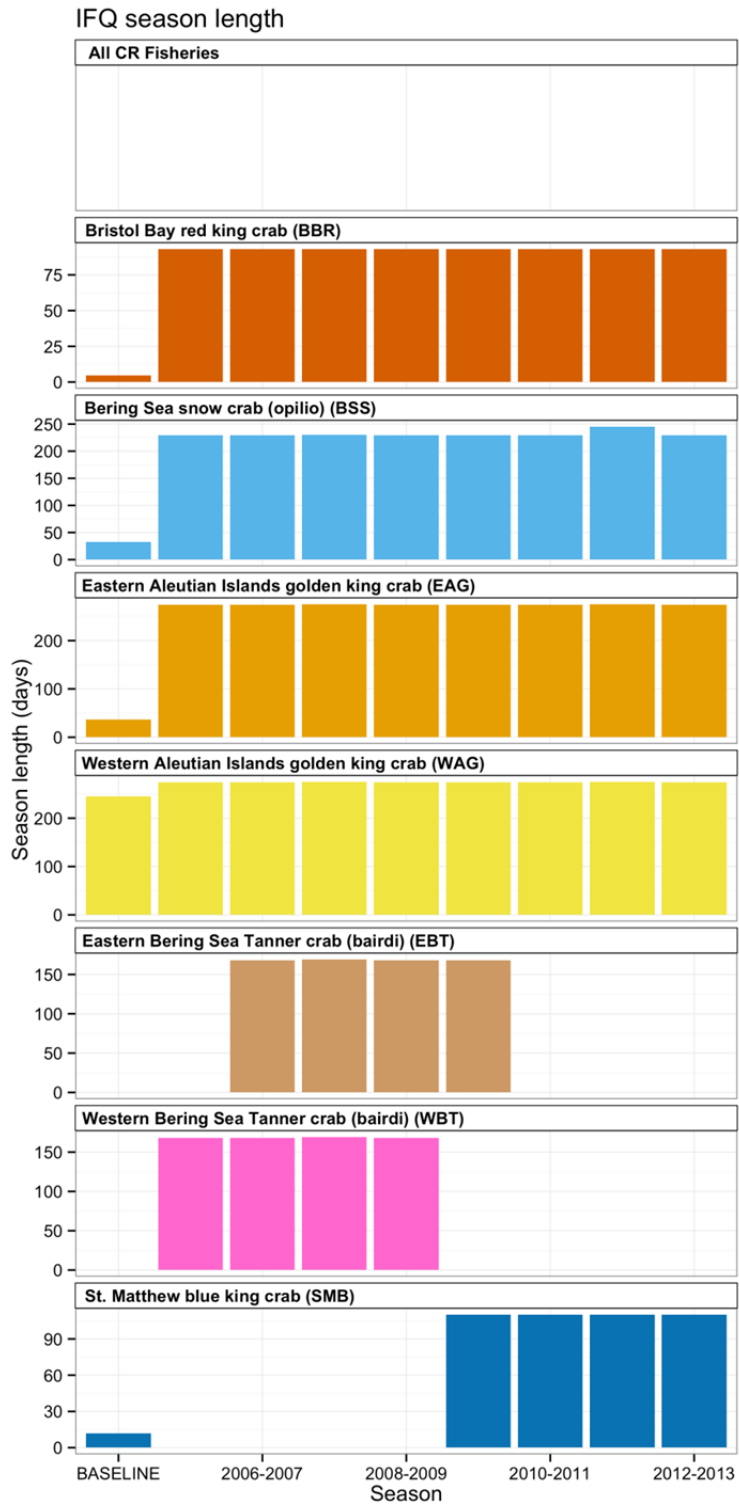


Figure 26: Total IFQ-crab and non-IFQ-crab landings revenue (inflation-adjusted 2010 dollars) by vessels fishing quota in the BSAI Crab Rationalization Program

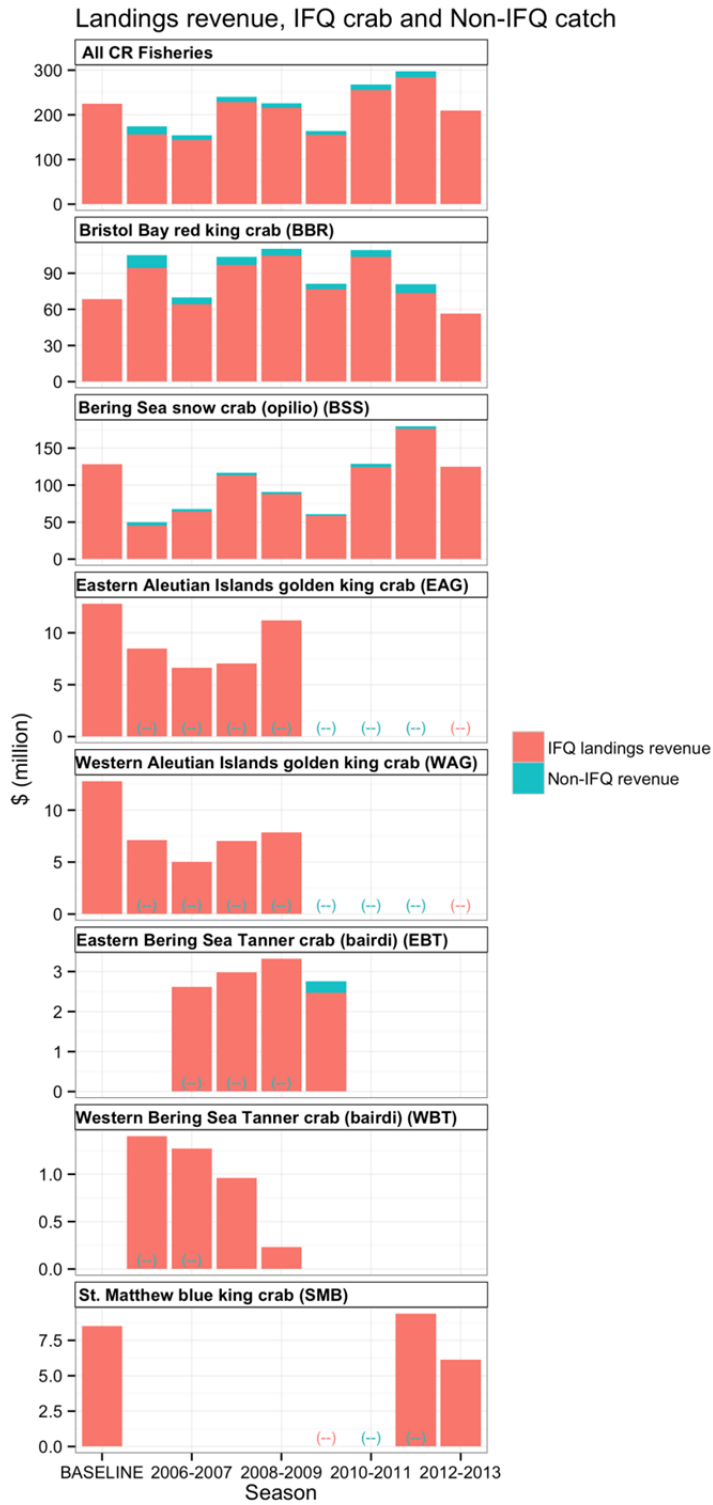


Figure 27: Average combined IFQ crab price per pound (inflation-adjusted 2012 dollars) in the BSAI Crab Rationalization Program

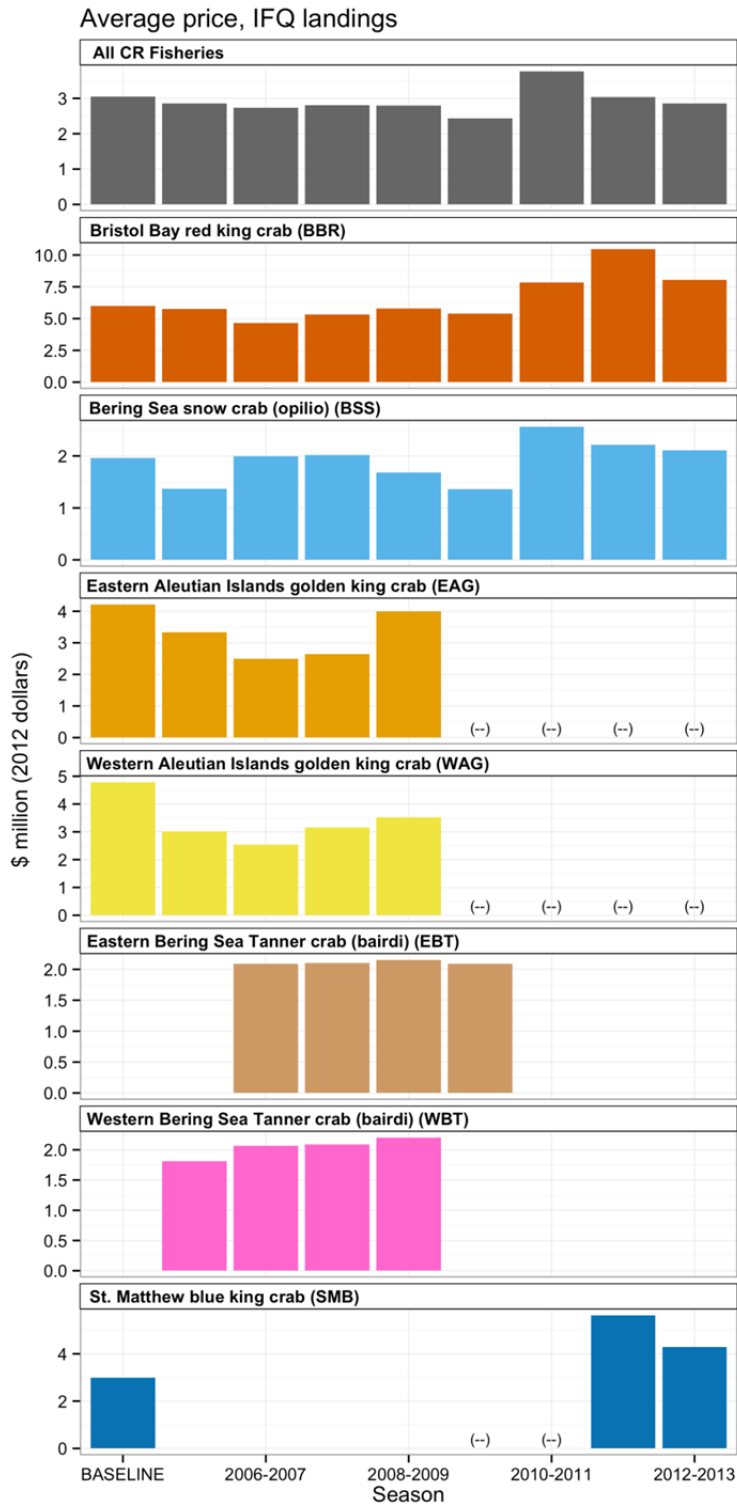


Figure 28: IFQ crab revenue (inflation-adjusted 2010 dollars) per vessel fishing quota in the BSAI Crab Rationalization Program

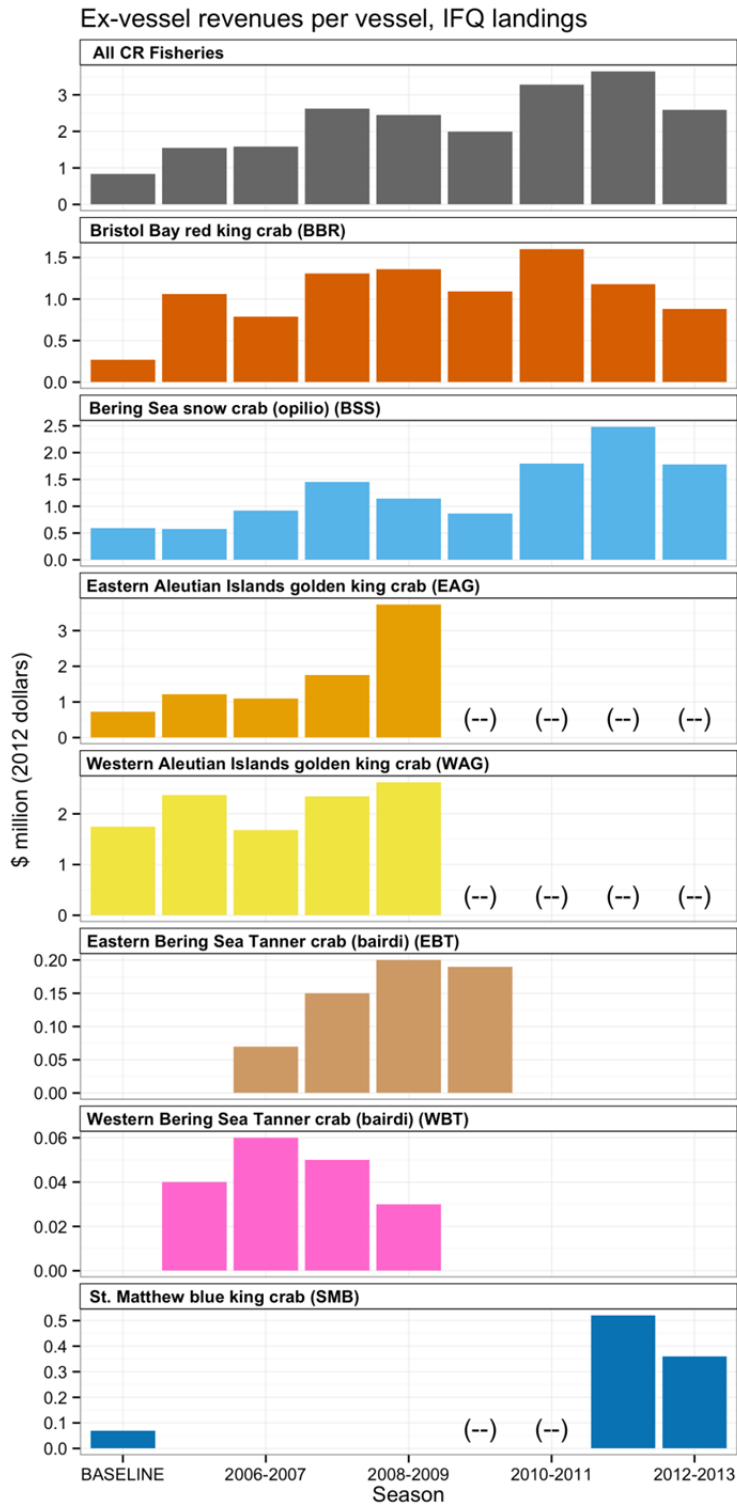


Figure 29: IFQ Crab revenue per trip

