



Íslandsbanki Research
April 2015

United States Seafood Market Report

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Foreword

Dear reader,

It is a pleasure to present the latest in our series of Seafood Market Reports. Íslandsbanki has served the Icelandic seafood industry for over a century, financing the first Icelandic motorized trawler in 1904. The Bank began its international operations in 1999 by providing financing solutions to the fishery sector on the East Coast of Canada.

In 2013, we published a report covering the North Atlantic Seafood Market, which we defined as Norway, the Faroe Islands, Greenland, Canada and the United States. Last year, we narrowed our focus by writing about the U.S. and Canadian industries. This year's report further sharpens our focus by concentrating on the key regions within the United States - the Atlantic Coast, Gulf of Mexico and Pacific Coast. These distinct regions have different characteristics, species and fisheries management regimes. Through these reports, we strive to provide insights into the key trends and issues shaping the industry.

For additional information about Íslandsbanki's Seafood Industry services, and to access prior reports, please visit our website at www.islandsbanki.is/seafood.

Íslandsbanki Seafood Industry Team

Key Highlights

- The U.S. is the fourth largest fishing country in the world and one of the most important markets for seafood
- During the past 20 years, total landings averaged 4.3 million MT. Landings increased by 5.6% to 4.5 million MT in 2013
- The total value of the U.S. catch has increased steadily since the early 2000s reaching \$5.5 billion in 2013
- The Pacific Coast is the largest U.S. fishery accounting for approximately 70% of total volume and half of total value
- The Atlantic and Gulf Coast regions are smaller when measured by volume, but generally consist of higher value shellfish species
- Key fishing states include Massachusetts, Maine, Virginia, Louisiana and Alaska

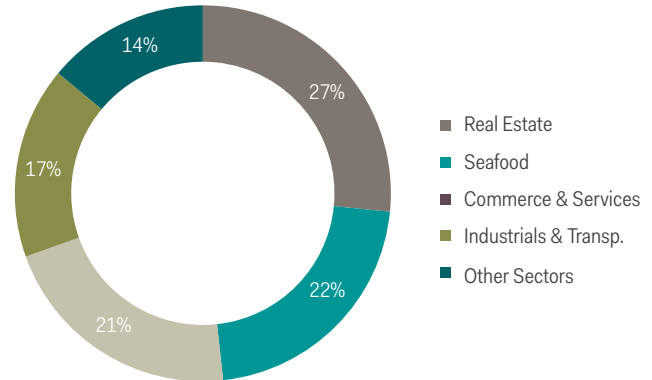
About Íslandsbanki

Íslandsbanki is a universal bank in Iceland with a vision to be #1 for service. With roots extending back to 1875, Íslandsbanki provides a full range of financial services to individuals, corporates and institutions. The Bank is a leader in financial services in Iceland with a 25-50% market share across all domestic franchise areas, including Retail Banking, Corporate Banking, Capital Markets and Wealth Management. Íslandsbanki was named the best bank in Iceland by both Euromoney and The Banker and ranked as the number one bank in the Icelandic Customer Satisfaction Index.

Building on over 135 years of servicing key industries in Iceland, Íslandsbanki has developed specific expertise in the Seafood, Energy and Offshore industries domestically and within the North Atlantic region.

The Bank had total assets of USD 7.2 billion as of December 31, 2014. Seafood accounted for approximately 22% of the Bank's commercial loan portfolio, underscoring the importance of the sector to the Bank.

Íslandsbanki's Commercial Loan Portfolio by Industry



Seafood Industry Team

Íslandsbanki has established a dedicated team within its Corporate Banking Division focusing on the seafood industry. This team of seasoned professionals utilizes its deep industry knowledge to provide a full range of banking services to domestic and foreign seafood companies.

Íslandsbanki's Seafood team members have participated in many of the industry's leading transactions. The Bank also publishes industry research on domestic and international seafood markets. For more information about Íslandsbanki's Seafood team and for access to the industry reports, please visit our website at www.islandsbanki.is/seafood.

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The Global Seafood Industry

Gróttá, Reykjavík, Iceland

Global Seafood Market

Fish and other seafood products are an important source of protein. According to the Food and Agricultural Organization of the United Nations (FAO), seafood accounted for 16.7% of the world population's intake of animal protein in 2010 and 6.5% of all protein consumed. Seafood supply grew at an average rate of 2.5% per year during the period from 1980-2013, outpacing the average annual growth rate in the world population of 1.4%. Increasing demand for seafood has been driven by growth in the world population and increasing per capita consumption, reflecting a shift to healthier eating choices and rising income levels in developing countries.

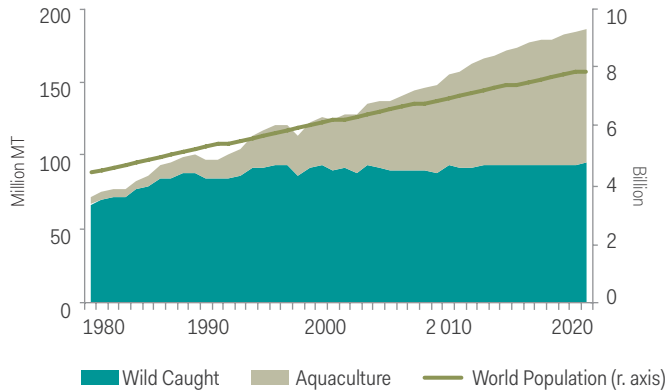
Compared to other sources of animal protein, the seafood industry is extremely diverse. There are almost 2,000 species in FAO's capture production database with many different types of species and products being produced to meet consumer demands which vary based on regional preferences, income levels, supply, distribution infrastructure and other factors. Although there has been a recent trend towards consolidation, the seafood industry remains highly fragmented.

Global Seafood Production

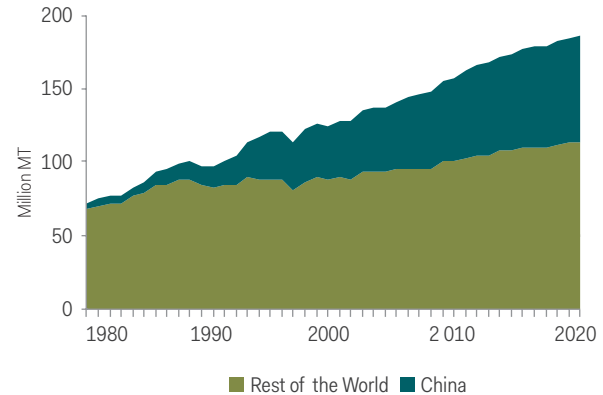
Total global production of seafood increased in 2013, driven by continued growth in aquaculture and an increase in the anchoveta catch in Peru. According to FAO, total production increased by 3.2% from 157.8 million metric tons (MT) in 2012 to 162.8 million MT in 2013, following a 1.4% increase in 2012. According to the OECD-FAO Outlook, global production was projected to increase by 2.3% to 166.5 million MT in 2014. Total production is expected to continue to rise in subsequent periods, reaching 186 million MT by 2023.

China has accounted for the majority of the growth in total seafood production since 1980. China's production increased at an average annual rate of 8.3% from approximately 4.5 million MT in 1980 to 59.8 million MT in 2013. Excluding China, the rest of the world grew at an average annual rate of 1.4%. Approximately 75% (43.5 million MT) of China's production was sourced from aquaculture in 2013.

Wild Caught vs. Aquaculture





China vs. Rest of the World



The volume of fish harvested in wild fisheries has stabilized at approximately 90 million MT while aquaculture production has steadily increased. Aquaculture is one of the fastest growing food producing sectors. Since 1995, aquaculture production has grown at an average annual rate of approximately 6.1% and is expected to surpass wild caught seafood as the main source for human consumption by 2015. This share is expected to rise to 62% by 2030. Wild caught seafood accounted for 57% of total production in 2013 compared to approximately 70% in the early 2000s.

The majority of wild caught seafood is harvested in marine fisheries. The volume of fish caught in inland waters has been increasing, reaching a record 11.7 million MT in 2013, but represents less than 15% of total capture production. In contrast, inland waters account for roughly 60% of total aquaculture production.

Global Seafood Production

(Million MT)		1980	1990	2000	2010	2011	2012	2013	2020F
Wild Caught		67.2	84.7	93.5	89.0	93.7	91.3	92.7	92.8
% of Total		93%	87%	74%	60%	60%	58%	57%	52%
Aquaculture		4.7	13.1	32.4	59.7	62.0	66.5	70.1	86.1
% of Total		7%	13%	26%	40%	40%	42%	43%	48%
Total		71.9	97.8	125.9	148.7	155.7	157.8	162.8	178.9

Asia is by far the largest aquaculture producer accounting for 89% of total production in 2013. America and Europe accounted for 4.4% and 4.0% of total aquaculture production, respectively. Asia is the only region that produces more fish from aquaculture (54% in 2012) than capture fisheries. Despite the large number of farmed species, the majority of total aquaculture production is concentrated in several dozen species.

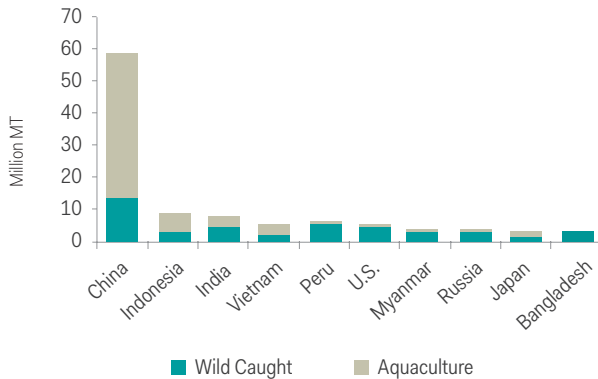
There has been an increasing trend in the proportion of seafood production used for direct human consumption. In 2012, approximately 85% of total production was for direct human consumption with the remaining 15% used for non-food purposes, including the production of fishmeal and fish oil.

China is the world's largest seafood producer with total production of 59.8 million MT in 2013. China accounted for 62% of global aquaculture production and 18% of total capture production. In the last five years, China's production has grown by 11.6 million MT, which is more than the total amount produced by the second largest country.

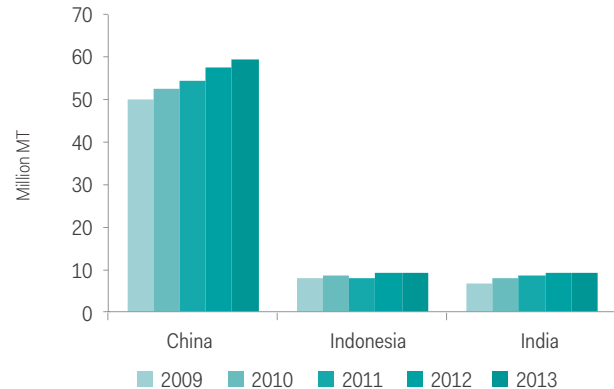
Twenty-five countries had total production in excess of 1.0 million MT in 2013. Together, these countries accounted for 87% of global production.

More than half of the total marine catch was harvested in the Pacific Ocean.

Ten Largest Producing Countries, 2013



Three Largest Producing Countries, 2009-2013

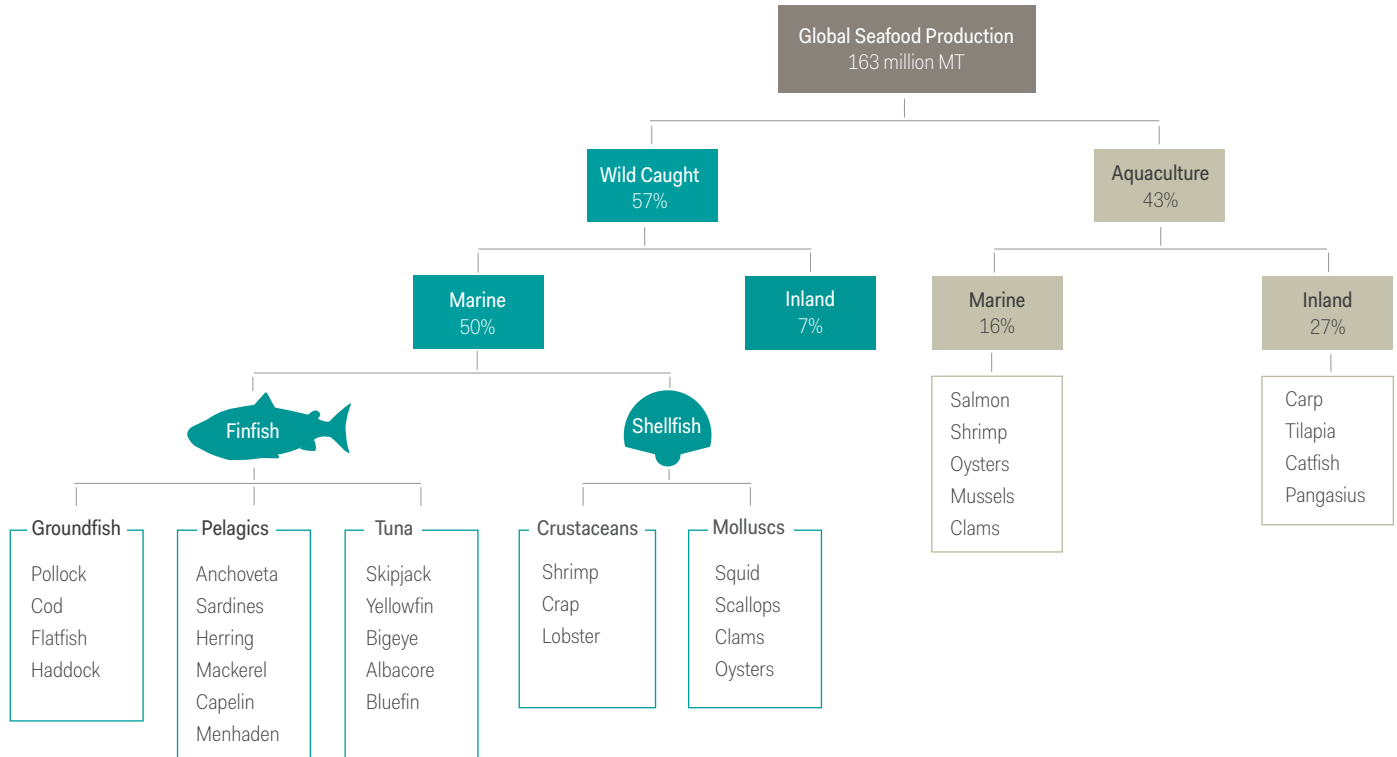


 Top Producing Countries (Thousand MT)

2013 ranking	Country	2012	2013	% change	2013 ranking	Country	2012	2013	% change
1	China	57,276	59,825	4%	14	Chile	3,644	2,804	-23%
2	Indonesia	8,881	9,921	12%	15	South Korea	2,157	2,000	-7%
3	India	9,082	9,195	1%	16	Mexico	1,719	1,796	4%
4	Vietnam	5,791	6,011	4%	17	Malaysia	1,781	1,750	-2%
5	Peru	4,921	5,980	22%	18	Egypt	1,372	1,454	6%
6	United States	5,548	5,672	2%	19	Iceland	1,366	1,374	1%
7	Myanmar	4,464	4,716	6%	20	Taiwan (Province of China)	1,252	1,270	1%
8	Russia	4,476	4,501	1%	21	Spain	1,196	1,258	5%
9	Japan	4,284	4,266	0%	22	Morocco	1,163	1,255	8%
10	Bangladesh	3,262	3,410	5%	23	Brazil	1,323	1,239	-6%
11	Norway	3,472	3,322	-4%	24	Canada	992	1,024	3%
12	Philippines	3,114	3,147	1%	25	Nigeria	923	1,000	8%
13	Thailand	2,992	2,901	-3%					
Total major countries							136,451	141,090	3.4%
World total							157,783	162,762	3.2%
Share of major countries							86.5%	86.7%	

Major Commercial Fisheries

The chart below provides an overview of major commercial fisheries:



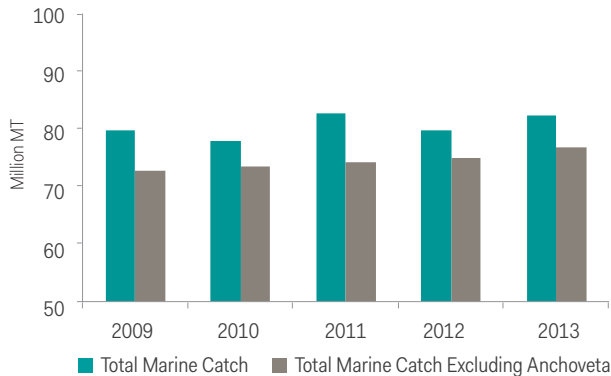
Marine Capture Production

The volume of fish harvested in marine waters increased by 1.4% from 79.7 million MT in 2012 to 80.8 million MT in 2013, primarily due to an increase in the anchoveta catch. Anchoveta is the highest volume species harvested in marine fisheries. The anchoveta fishery is highly variable with catch rates impacted by water temperature and changes in the fishery management regime during the past ten years. The anchoveta catch increased by 21% from 4.7 million MT in 2012 to 5.7 million MT in 2013 following a 44% reduction in 2012.

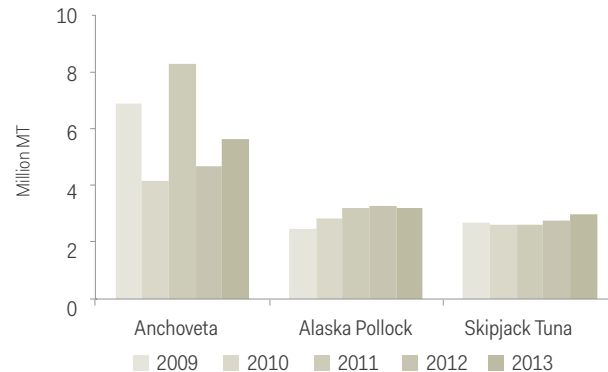
Excluding anchoveta catches, marine capture production reached a new record high of 75.1 million MT in 2013.

After anchoveta, the next highest volume species in marine capture fisheries is Alaska pollock. Overall, there are 11 species with a total harvest in excess of 1.0 million MT. These species accounted for approximately 28% of marine capture fisheries production in 2013.

Marine Capture Production, 2009-2013



Largest Marine Capture Species, 2009-2013



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Top Marine Capture Species (Thousand MT)

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2013 ranking	Species	2012	2013	% change
1	Anchoveta (Peruvian anchovy)	4,693	5,674	21%
2	Alaska pollock (Walleye pollock)	3,271	3,240	-1%
3	Skipjack tuna	2,812	2,995	7%
4	Atlantic herring	1,773	1,817	2%
5	Chub mackerel	1,581	1,654	5%
6	Atlantic cod	1,114	1,360	22%
7	Japanese anchovy	1,296	1,326	2%
8	Yellowfin tuna	1,335	1,302	-2%
9	Largehead hairtail	1,232	1,257	2%
10	Scads nei	1,267	1,229	-3%
11	European pilchard (Sardine)	1,019	1,001	-2%
Total major species		21,396	22,855	6.8%
World total		80,780	82,088	1.6%
Share of major species		26.5%	27.8%	

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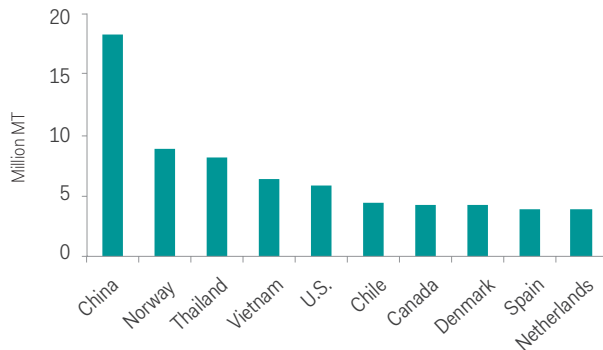
Global Seafood Trade

Fish and seafood products are among the most traded food commodities worldwide, with trade volumes and values reaching a peak in 2011. Seafood trade is closely tied to overall economic conditions. The total value of seafood exports increased by 17% from \$110.7 billion in 2010 to \$129.6 billion in 2011. In 2012, export values were flat at \$129.3 billion as a result of downward pressure on prices. Preliminary estimates for 2013 indicate a resumption of growth with exports expected to increase by approximately 5% to \$136 billion and the longer term trend remains positive. Trade volumes and values are

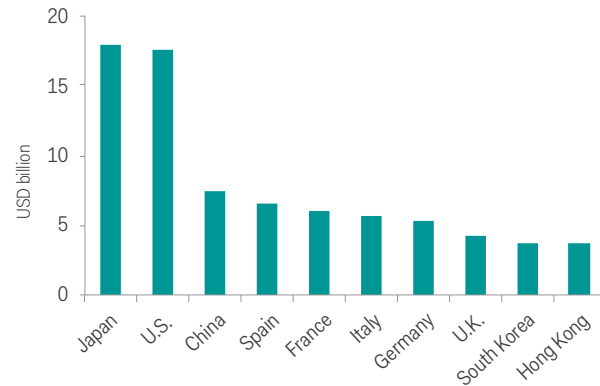
expected to continue to rise with developing countries accounting for the bulk of world exports.

The seafood supply chain is complex, as fish products often cross national borders several times before final consumption, due to the outsourcing of processing to comparatively low wage countries such as China, India, Indonesia, Thailand and Vietnam. In addition to being an important source of protein, the fishery and aquaculture sector provides livelihoods and income, both directly and indirectly, for a significant share of the world's population.

Top Ten Exporting Countries, 2012



Top Ten Importing Countries, 2012



Source: FAO; OECD-FAO

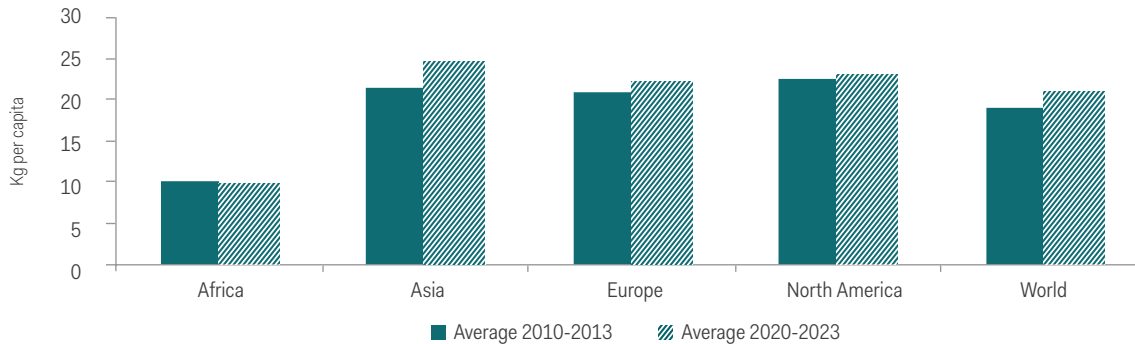
Global Seafood Consumption

Per capita consumption of seafood has increased steadily since the 1960s, reaching an estimated 19.6 kg. in 2013. However, consumption varies widely among regions and countries, reflecting differences in the availability of fish and other foods, traditions, income levels and other factors. Asia accounts for approximately two thirds of total consumption with 89.8 million MT in 2010. China accounted for half of this number with total consumption of 44.4 million MT or approximately 33.1 kg. per capita (per capita consumption in the rest of Asia averaged approximately 16.1 kg). China has been responsible for most of the increase in per

capita fish consumption, owing to a substantial increase in fish production, in particular from aquaculture.

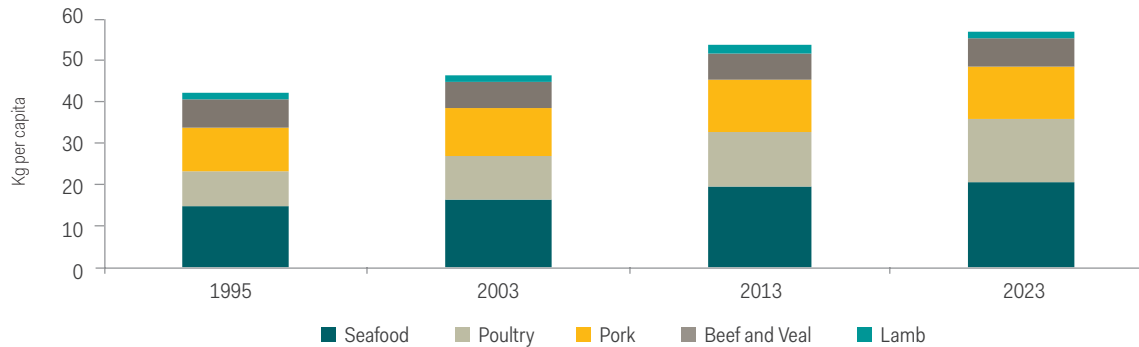
According to the OECD-FAO Outlook, total consumption is expected to increase to approximately 165 million MT in 2023. However, the rate of growth is expected to decline, due to slowing population growth and higher fish prices relative to red meats. Per capita fish consumption is projected to rise on all continents except Africa, where population growth will outstrip supply. The highest growth rates are expected in Asia while many developed countries are expected to show little to no growth.

Average Global Consumption of Seafood



Despite a rapid rise in the consumption of poultry, average per capita consumption of seafood exceeds that of other animal proteins on a global basis. Annual per capita consumption of poultry increased by 55% from 8.5 kg. in 1995 to 13.2 kg. in 2013. Over this same period, the rate of growth of seafood consumption outstripped all other forms of animal protein. Per capita consumption of seafood is projected to grow by 7.0% during the period from 2013-2023.

Per Capita Consumption of Animal Proteins





The United States Seafood Industry

Yaquina Head Lighthouse, Newport, Oregon

Fisheries Management

The Magnuson-Stevens Act is the primary law governing marine fisheries in U.S. federal waters. Enacted in 1976, the Act established eight Regional Fishery Management Councils, which serve as the front line of fisheries management where region specific management measures (such as fishing seasons, quotas and closed areas) are initiated, developed and ultimately adopted in a fully transparent and public process. Under the Act, the Regional Fishery Management Councils are required to:

- Develop and amend fishery management plans
- Convene committees and advisory panels and conduct public meetings
- Develop research priorities in conjunction with a Scientific and Statistical Committee
- Select fishery management options
- Set annual catch limits based on the best available science
- Develop and implement rebuilding plans

Crab



U.S. commercial fishermen harvest several different species of crab, including blue crab, Dungeness crab, Alaska snow crab and Alaska king crab. As a group, crab is the most valuable species in the United States. There are different fishery management regimes in place for the various species of crab. As an example, the Alaska snow crab fishery is managed according to size, sex and season. Only male crabs of a certain size may be harvested, and fishing is not allowed during mating and molting periods. Every year, managers set the harvest limit for the next fishing season using the most recent estimates of crab abundance. Managers allocate harvest shares among harvesters, processors and coastal communities through the Crab Rationalization Program.

Blue crabs are managed by various state jurisdictions, including the Maryland Department of Natural Resources and Virginia Marine Resource Commission in the Chesapeake Bay region and the Louisiana Department of Wildlife and Fisheries in Louisiana state waters.

Lobster



American lobster is one of the most valuable commercial fisheries in North America. There are three stocks of American lobster - Gulf of Maine, Georges Bank and Southern New England. The Gulf of Maine and Southern New England areas are mainly inshore fisheries, while the Georges Bank area is predominantly an offshore fishery. Most of the U.S. harvest is caught in inshore waters.

The American lobster's range is not only divided into three stock areas but also into seven management areas with a separate Lobster Conservation Management Team for each management area. Each area has unique regulations that include size limits, trap limits, gear restrictions, harvesting limits and monitoring and reporting requirements.

Generally, lobster stocks are assessed every 2 to 5 years. Although lobster fisheries are highly regulated and harvests in some areas are at their peak, recent assessments of the lobster resource paint a mixed picture, with record high abundance, reproduction and survival rates throughout most of the Gulf of Maine and Georges Bank, but decreasing abundance, reproduction and survival rates in southern New England.

Menhaden



Menhaden is the largest species by volume along the U.S. Atlantic coast and Gulf of Mexico and the second highest volume species in the country, behind only pollock. Menhaden fisheries are among the oldest fisheries in the U.S. The commercial menhaden fishery consists of a reduction fishery and a bait fishery. The reduction fishery processes whole fish into fishmeal and fish oil, while the bait fishery supplies fisherman with bait for popular commercial and sport fish.

The Atlantic menhaden fishery is managed by the Atlantic States Marine Fisheries Commission, which tracks and regulates harvest under Amendment 2 to the Interstate Fishery Management Plan for Atlantic menhaden. Amendment 2 established a TAC of 170,800 MT from 2013 through the next benchmark stock assessment, which was scheduled for peer review in December 2014. The TAC represents a 20% reduction from average landings in 2009-2011 and an approximately 25% reduction from 2011 landings. The TAC allocates a catch limit to each state. Management of the Gulf menhaden stock is coordinated by the Gulf States Marine Fisheries Commission.

Pollock



The Eastern Bering Sea Alaska pollock fishery is one of the largest, most valuable fisheries in the world. It is one of the first U.S. fisheries to be managed with catch shares or “quotas” and is considered to be one of the best managed fisheries in the world. The two primary global pollock resources are the U.S. Bering Sea fishery and the Russian fishery in the sea of Okhotsk.

During the 20 year period from 1995-2014, the TAC for Eastern Bering Sea pollock averaged 1.23 million MT. The TAC dipped to historic lows of approximately 815,000 MT in 2009 and 2010 due to poor recruitment in the mid-2000s before returning to average levels in the subsequent years. During this period, the average catch rate was in excess of 99% of the TAC. The TAC for 2015 was set at 1,325,000 MT, a 4.6% increase compared to 2014.

The Bering Sea and Aleutian Islands pollock fishery was certified as sustainable by the Marine Stewardship Council (MSC) in February 2005 and re-certified in December 2010. The fishery has entered full reassessment for a second time.

Salmon



Pacific salmon species include pink, sockeye, chum, coho and Chinook. Pacific salmon are harvested in fisheries operating along North America's West Coast, from Alaska to California. In 2013, Pacific salmon surpassed crab as the most valuable species in the U.S. Pacific salmon are managed by the Pacific and North Pacific Fishery Management Councils and the Alaska Department of Fish and Game. In Alaska, management of salmon fisheries in federal waters is deferred to the State.

Salmon fishery management largely relies on in-season assessment of how many salmon return to freshwater to spawn. Management measures include size limits, season length, quotas and gear restrictions.

Commercial fishing for Atlantic salmon is currently prohibited by law. Only farm raised Atlantic salmon can be found in the market.

Scallop



The U.S. Atlantic sea scallop fishery is the most valuable wild scallop fishery in the world. The principal U.S. commercial scallop fisheries are in the Mid-Atlantic from Virginia to New York and on Georges Bank and neighboring areas. Most scallops are landed in Massachusetts, Virginia and New Jersey. Atlantic sea scallops are harvested year round, primarily using scallop dredges.

The fishery has grown considerably since the early-1990s when overfishing reduced scallop populations. Since 1994, management measures allowed the scallop population to increase to near record highs and the fishery currently operates at sustainable levels.

Managers determine a TAC for the scallop fishery based on estimates of the population. The TAC is allocated to different groups of the fishery, depending on their permit type and historical catch, through days at sea and number of trips to closed access areas. Other management measures include gear restrictions and limits on crew size. The U.S. sea scallop fishery now supports the largest harvests in its history averaging 24,000 MT from 2003-2010, about twice the long-term average.

Shrimp

Shrimp are one of the most valuable commercial fisheries across the U.S. and have a wide range of sizes, flavors and textures. The most important shrimp species in the U.S. are brown shrimp and white shrimp, which are harvested in the South Atlantic and Gulf of Mexico (although shrimp are among the highest value species harvested in the U.S., farm raised imports make up the majority of the supply).

Shrimp are short lived and heavily influenced by environmental factors. Therefore, although scientists monitor shrimp abundance to ensure the stock is healthy, managers primarily consider historic harvest amounts and fishing rates to set catch levels.

NOAA Fisheries and the South Atlantic and Gulf of Mexico Fishery Management Councils manage shrimp fisheries in offshore waters; state resource management agencies are responsible for inshore state waters. In general, fishermen must have a permit to harvest shrimp in federal waters and submit reports on catch and fishing effort for each trip.

U.S. Main Fishing Areas

Pacific Ocean

Major Fishing States

Alaska, California, Washington

Main Species

Pollock, salmon, cod, crab

Total Landings

Volume
3.2 million MT

Value
\$2.8 billion

Atlantic Ocean

Major Fishing States

Virginia, Massachusetts, Maine

Major Species

Menhaden, scallops, lobster, crab

Total Landings

Volume
595,000 MT

Value
\$1.8 billion

Gulf of Mexico

Major Fishing States

Louisiana, Mississippi, Texas, Florida (West Coast)

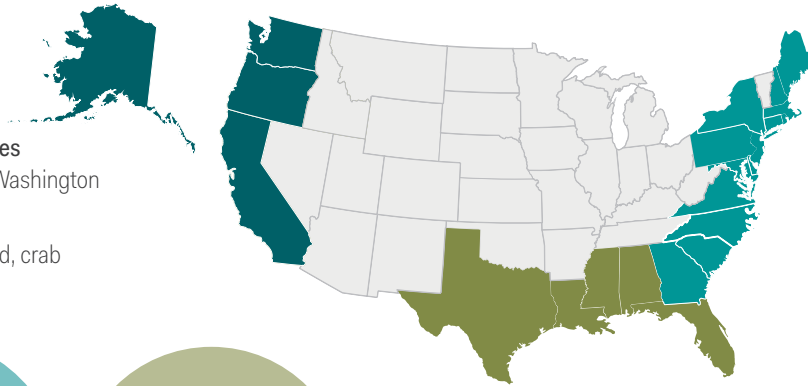
Major Species

Menhaden, shrimp, crab

Total Landings

Volume
632,000 MT

Value
\$940 million





Overview of U.S. Seafood Industry

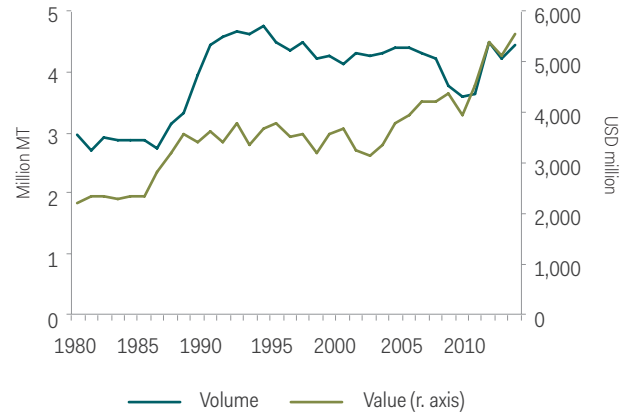
West Point Lighthouse, Seattle, Washington

Overview of U.S. Seafood Industry

The U.S. was the fourth largest harvester of wild caught seafood in the world in 2013 and is one of the most important markets for seafood. During the past 20 years, total commercial landings have averaged 4.3 million MT. In the last four years, total volume recovered from the low reached in 2009 as the pollock TAC returned to average levels. Total landings increased by 5.6% from 4.2 million MT in 2012 to 4.5 million MT in 2013 and were level with 2011.

After remaining relatively stable during much of the 1990s, the total value of U.S. landings increased by 75% from \$3.2 billion in 2002 to \$5.5 billion in 2013. The total value rose by 8.1% compared to 2012.

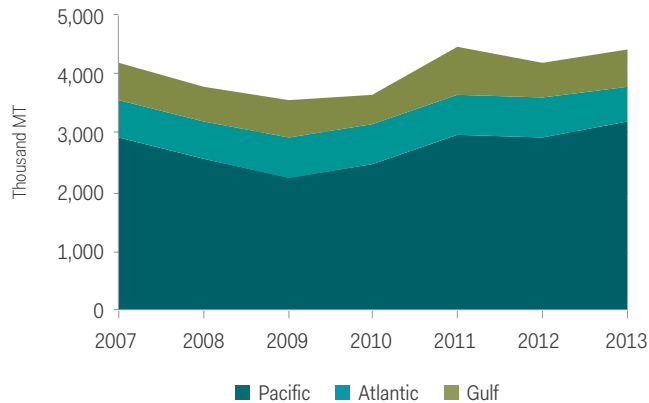
U.S. Seafood Production



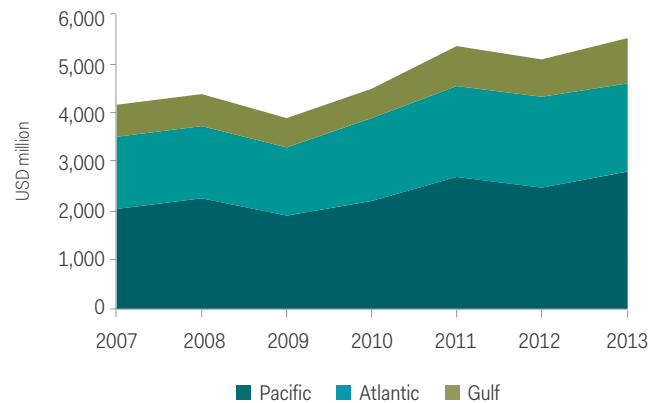
The U.S. has large commercial fishing areas in the Atlantic Ocean, Pacific Ocean and Gulf of Mexico. The Pacific is the largest U.S. fishery accounting for approximately 70% of the country's total volume and half of total value. Total landings off the Pacific coast of the U.S. increased from approximately 2.3 million MT in 2009 to 3.2 million MT in 2013 due to the increase in the pollock TAC. Total landings in the Atlantic region have been relatively stable at approximately 630,000 MT while the volume in the Gulf fluctuates with the menhaden catch.

The total value of the fish harvested off the U.S. Pacific coast has been increasing in line with higher volumes. While the fisheries off the Atlantic and Gulf coasts are smaller when measured by volume, they generally consist of higher value species. The value of the Atlantic and Gulf catches has been rising due to higher prices for shellfish.

U.S. Seafood Production by Volume



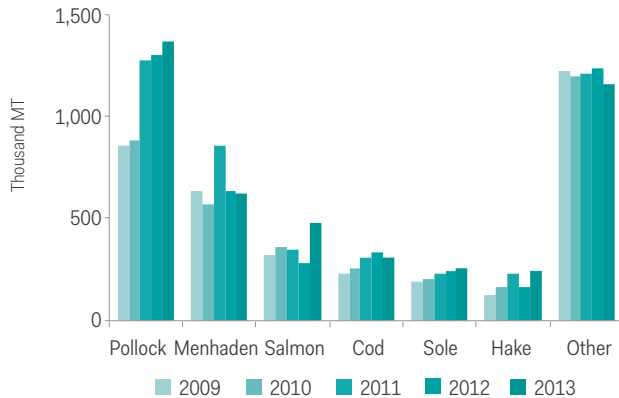
U.S. Seafood Production by Value



Alaska pollock is the highest volume species with total landings of 1.4 million MT in 2013, which represents approximately 30% of total volume. The next largest species by volume are menhaden and salmon. Together, these three species account for more than half of the country's total volume.

The highest value species generally consist of shellfish species, such as crab, shrimp, lobster and scallops. Together, these species accounted for approximately 40% of the total value of all fish harvested in the U.S. Salmon surpassed crab as the country's most valuable species in 2013, due to a spike in total landings. The salmon catch encompasses several different species, including pink, sockeye, chum, coho and Chinook.

Largest Species by Volume



Largest Species by Value



Source: NOAA Fisheries



U.S. Atlantic Coast

Portland Head Light, Portland, Maine



U.S. Atlantic Coast

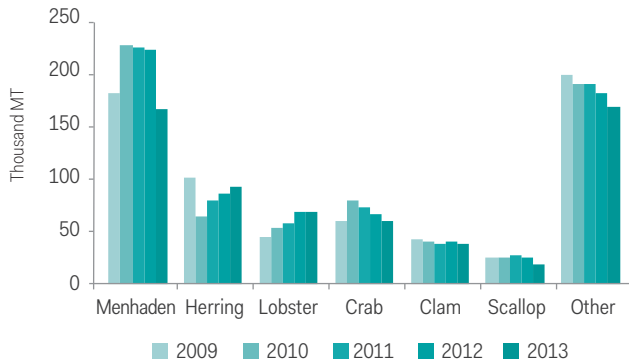
The total volume of fish harvested off the U.S. Atlantic coast averaged approximately 670,000 MT during the last five years. The largest species by volume was menhaden, which accounted for approximately 30% of the total catch during this period. Herring was the second largest species by volume (average of 86,000 MT or approximately 13% of the total) followed by crab and lobster.

Total landings were relatively stable at approximately 690,000 MT during the period from 2010-2012. However, volume fell by 14.5% from 695,800 MT in 2012 to 594,800 MT in 2013 due

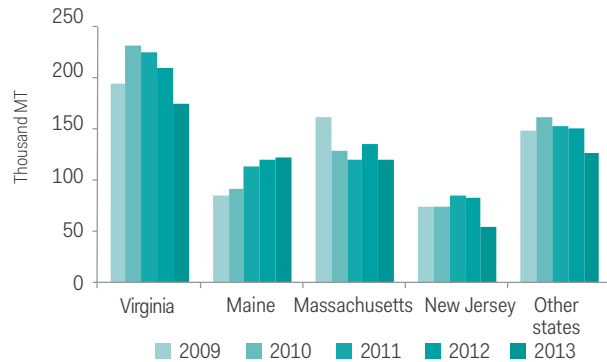
to a 25% reduction in the menhaden catch from 224,500 MT to 167,600 MT, resulting from a decrease in the TAC to 170,800 MT beginning in 2013. The new TAC represents a 20% reduction from the average landings for 2009-2011 and an approximate 25% reduction from 2011 landings.

The largest fishing state by volume is Virginia, accounting for 173,100 MT or 29% of the 2013 catch. The next largest states by volume are Maine and Massachusetts, each with approximately 120,000 MT.

Largest Species by Volume



Largest States by Volume



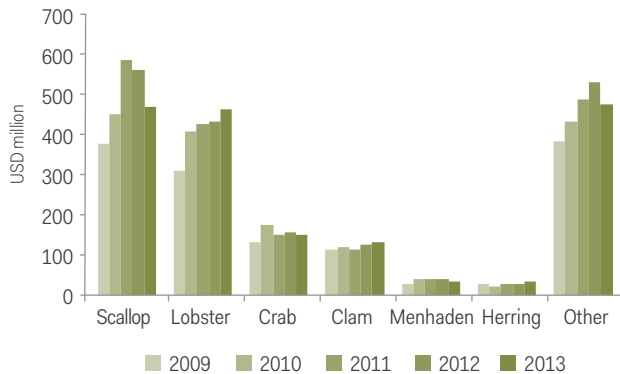
Despite relatively stable volumes, the total value of the U.S. Atlantic harvest rose by 37% from approximately \$1.4 billion in 2009 to \$1.9 billion in 2012. The increase in value during this period was attributable to rising scallop prices and an increase in the lobster catch.

The total value declined by 6.0% in 2013 to approximately \$1.8 billion, primarily due to a decline in scallop landings.

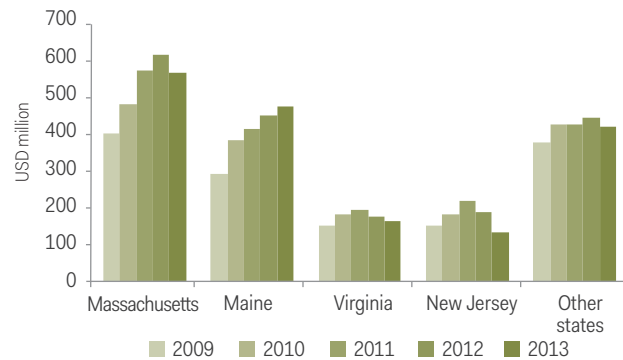
The most valuable species are scallops and lobster, which together account for more than half of the total value of the Atlantic fishery. The U.S. Atlantic sea scallop fishery is the most valuable wild scallop fishery in the world.

The most important states in terms of value are Massachusetts and Maine, highlighting the importance of the scallop and lobster fisheries. Together, these two states account for approximately 60% of the value of U.S. East Coast landings.

Largest Species by Value



Largest States by Value



Source: NOAA Fisheries



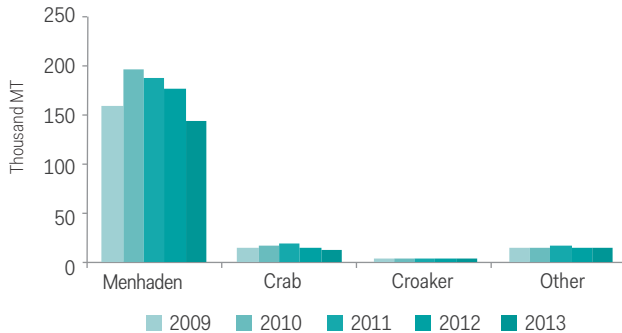
Virginia

Virginia is the largest fishing state by volume along the U.S. Atlantic coast. However, Viriginias landings are concentrated in menhaden, which is primarily used for the production of fishmeal and fish oil and has a low value per pound compared to other major Atlantic coast species. During the past ten years, total landings have averaged approximately 206,000 MT ranging from a low of 173,000 MT to a high of 232,000 MT. Menhaden is the state's highest volume species accounting for more than 80% of the total catch. The next largest species (crab) accounts for only 7% of total volume. Therefore, fluctuations in the menhaden catch explain variations in total volume.

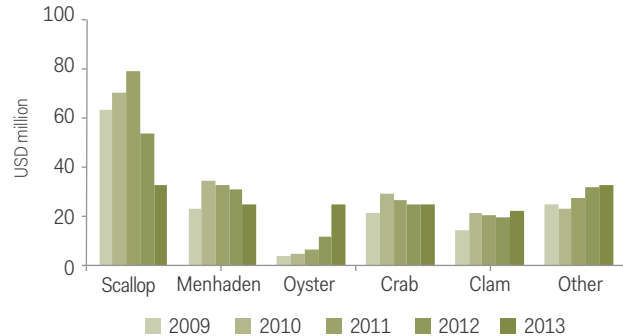
The total value of fish landed in Virginia increased by 76% from \$110 million in 2006 to \$194 million in 2011 before declining in the last two years. The increase from 2006-2011 was driven by increases in the value of scallops and clams. Total value fell by 16% from \$194 million in 2011 to \$163 million in 2013 due to a sharp decrease in scallop landings.

Scallops account for 20% of the total value of all fish harvested in Virginia. Menhaden, oysters, crab and clams are all important species in terms of value, each accounting for more than 10% of the state's total.

Largest Species by Volume



Largest Species by Value



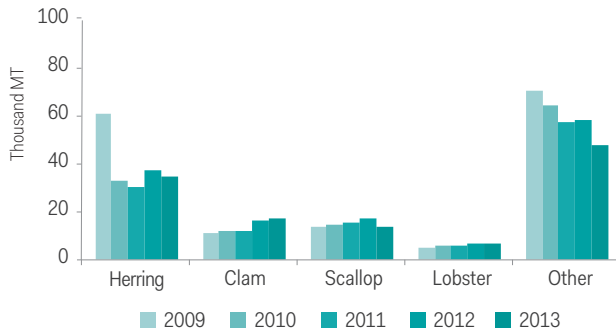


Massachusetts

The total volume of fish harvested in Massachusetts has generally been decreasing since 2006 with annual fluctuations accentuated by changes in the herring catch. Total volume declined by 33% from approximately 180,000 MT in 2006 to 120,000 MT in 2013, primarily due to a decrease in the mackerel catch, which fell from 40,600 MT to 3,300 MT during this period. Herring is Massachusetts's largest volume species accounting for 29% of the total catch in 2013. The next largest species by volume are clams and scallops. Together, these three species represent more than half of Massachusetts's annual harvest.

In contrast to the declining volumes, the total value of fish landed in Massachusetts has been increasing since the late 2000s.

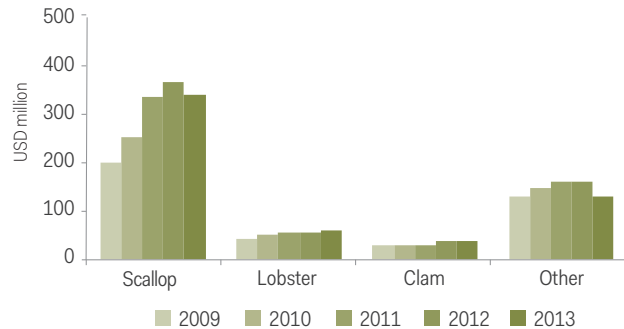
Largest Species by Volume



Total value increased by 54% from approximately \$400 million in 2009 to \$616 million in 2012 due to an increase in scallop landings and prices. Total value fell by 8% in 2013 due to a reduction in the scallop TAC.

Scallops are the State's most valuable species accounting for approximately 60% of the total value. Lobster is Massachusetts's second most valuable species. New Bedford is the leading U.S. port in terms of value with total landings of \$379 million. New Bedford and the Hampton Roads Area of Virginia are the only two ports on the Atlantic coast that rank in the top 20 in terms of value.

Largest Species by Value





Maine

The total volume of fish harvested in Maine has been increasing since the late 2000s.

Total landings increased by 41% from approximately 85,000 MT in 2009 to 120,000 MT in 2013 primarily due to increases in the State's two largest species lobster and herring. The total volume of lobster and herring each increased by more than 50% during this period. Maine has led the nation in total lobster landings for more than 30 years.

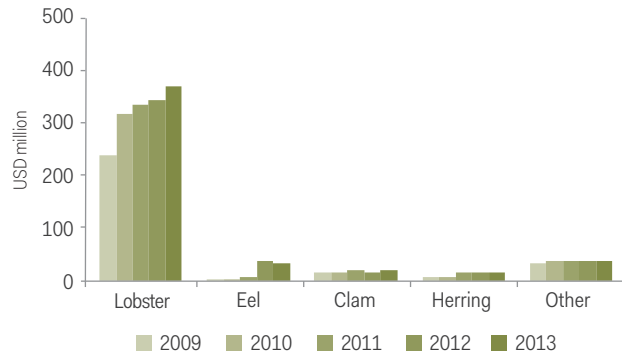
The increase in the lobster catch drove a steady increase in the value of seafood harvested in Maine. Total value increased by 63% from approximately \$290 million in 2009 to \$475 million in 2013.

While still accounting for less than 10% of the State's total value (and less than 1% of total landings), there has been notable increase in the value of American eel harvested in Maine driven by increased demand from foreign markets.

Largest Species by Volume



Largest Species by Value





U.S. Gulf Coast

New Canal Lighthouse, New Orleans, Louisiana



U.S. Gulf Coast

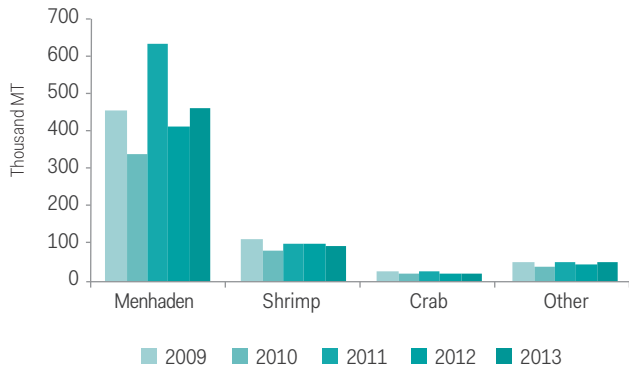
The total volume of fish harvested off the U.S. Gulf coast varied widely during the last five years due to fluctuations in the Menhaden catch. Total landings averaged approximately 634,000 MT from 2009-2013, but ranged from a low of 486,000 MT in 2010 to a high of 813,000 MT in 2011. During this period, the menhaden catch fluctuated from a low of 342,000 MT in 2010 to a high of 634,000 MT in 2011. Excluding Menhaden, total volume declined by 14% from 196,000 MT in 2009 to 169,000 MT in 2013. The

entire Gulf region was impacted by the Deep Horizon oil spill, which lowered harvest volumes in 2010.

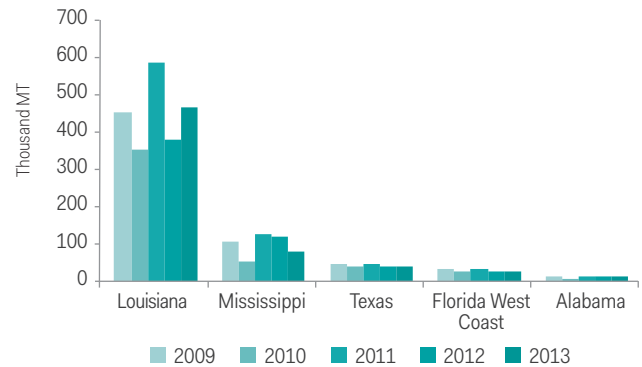
Menhaden is the largest species by volume accounting for approximately 73% of the total catch. The next largest species by volume is shrimp, which accounted for 15% of total volume.

The largest fishing state by volume is Louisiana, accounting for approximately 70% of the total catch. The next largest state by volume is Mississippi at roughly 15% of total volume.

Largest Species by Volume



Largest States by Volume



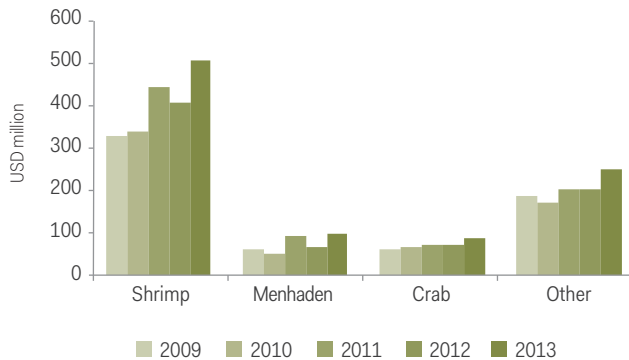
Despite the fluctuations in total landings, the value of fish harvested in the Gulf of Mexico has generally been increasing. Total value increased by 48% from \$636 million in 2009 to \$940 million in 2013, primarily due to increases in the prices of shrimp.

Shrimp is the Gulf region's most valuable species accounting for more than half of total value. Menhaden and crab are the next most valuable species, each accounting for approximately 10% of the total. As previously mentioned, menhaden is primarily used in the

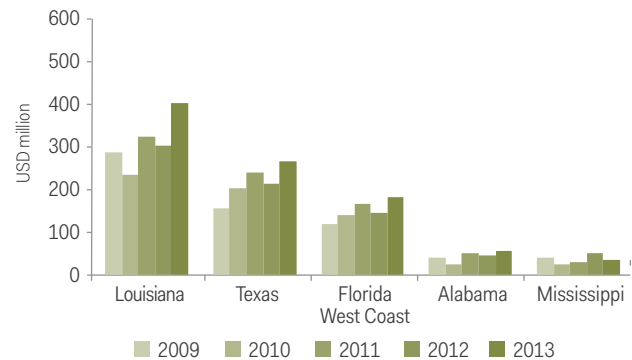
production of fishmeal and fish oil and has a low price per pound compared to other species. However, the total volume caught makes menhaden an important species in the Gulf region.

The most important states in terms of value are Louisiana, Texas and the west coast of Florida, which together account for approximately 90% of the region's total value.

Largest Species by Value



Largest States by Value



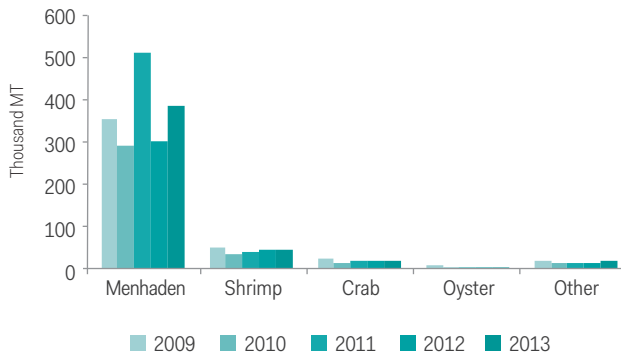


Louisiana

As the largest state in the region by volume, Louisiana mirrors the overall trends for the Gulf coast. Total landings have fluctuated widely during the past five years, from a low of 360,000 MT (reflecting the impact of the Deep Horizon oil spill) to a high of 595,000 MT in 2011, primarily due to variations in the Menhaden catch.

Menhaden is Louisiana's largest species by volume accounting for more than 80% of the state's total volume. Excluding menhaden, total volume has been increasing since 2010 and is approaching

Largest Species by Volume

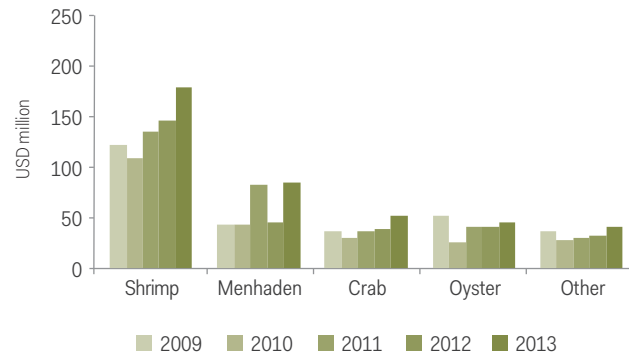


pre-spill levels. The second largest species by volume is shrimp, which accounts for approximately 10% of the total catch.

The total value of fish landed in Louisiana was relatively flat at approximately \$285 million from 2007-2009. Total value dipped by 19% in 2010, but has been increasing since, rising by 71% from \$234 million in 2010 to just under \$400 million in 2013.

Shrimp is the State's most important species by value accounting for approximately 44% of total value. Menhaden, crab and oyster are also important species by value.

Largest Species by Value





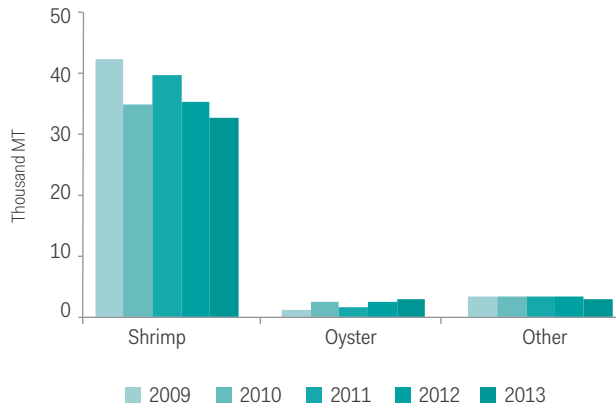
Texas

The total volume of fish landed in Texas has generally been decreasing in the past five years. Total landings declined by 17% from approximately 46,000 MT in 2009 to 38,000 MT in 2013.

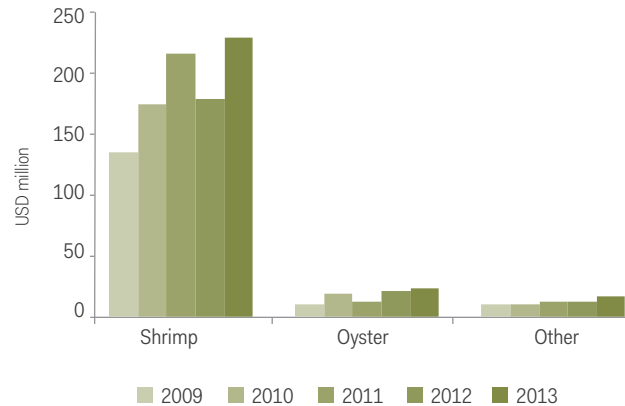
Despite the decline in volume, the value of fish harvested in Texas has increased. Total value rose by 73% from \$155 million in 2009 to \$268 million in 2013, primarily due to an increase in the price of shrimp.

Shrimp is the State's most important species accounting for more than 85% of the total volume and value.

Largest Species by Volume



Largest Species by Value





U.S. Pacific Coast

Inland Passage, Alaska



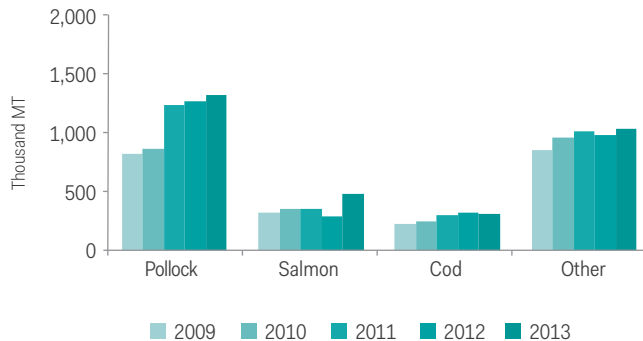
U.S. Pacific Coast

The Pacific region is the largest fishing area in the U.S. and one of the largest in the world. The total volume of fish harvested off the U.S. Pacific coast averaged approximately 2.8 million MT during the past five years. Total volume has generally been increasing during this period, primarily due to an increase in the pollock TAC. Total landings rose by 42% from 2.3 million MT in 2009 to 3.2 million MT in 2013 as the pollock TAC recovered from historic lows in 2009-2010.

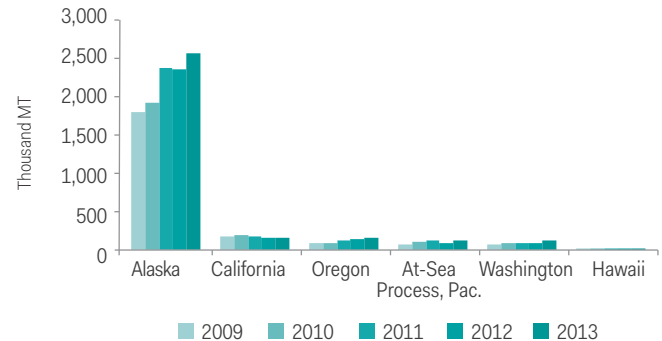
Pollock is the largest species by volume accounting for approximately 40% of total landings. The next largest species by volume are salmon and Pacific cod.

Alaska is the largest fishing state in the U.S. accounting for almost 60% of total landings and more than a third of total value in 2013. The next largest states in the region by volume are California and Oregon, with less than 200,000 MT of production each.

Largest Species by Volume



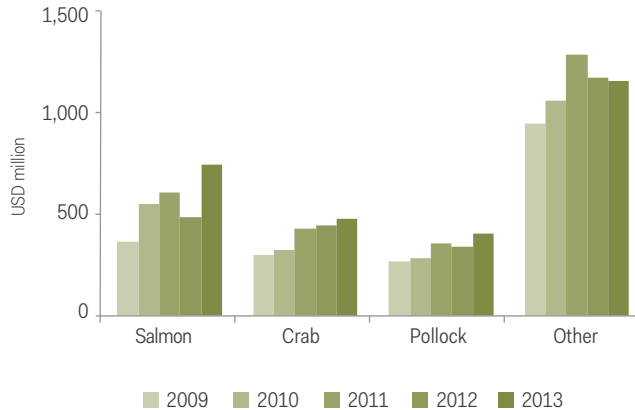
Largest States by Volume



The total value of fish harvested off the U.S. Pacific coast has been increasing, in line with the higher volumes. Total value rose by 48% from \$1.9 billion in 2009 to \$2.8 billion in 2013.

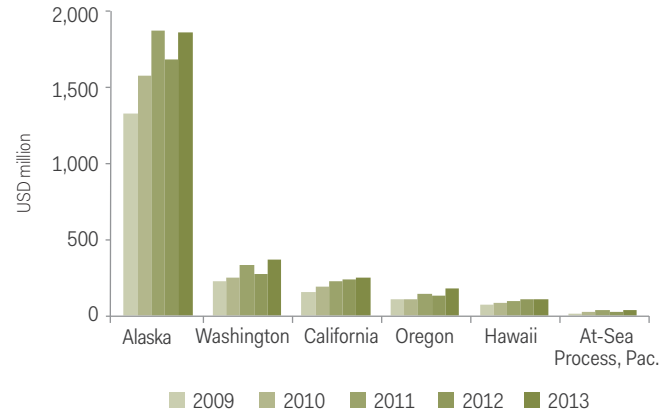
Salmon is the Pacific region's most valuable species accounting for approximately 25% of total value. The next most valuable species are crab and pollock each with approximately 15% of total value.

Largest Species by Value



The total value of the salmon fishery increased by more than 100% from \$370 million in 2009 to \$757 million in 2013 due to rising prices and higher volumes in 2013. The total value of crab landings rose by 58% from \$304 million in 2009 to \$480 million in 2013. These two species accounted for 60% of the increase in total value.

Largest States by Value





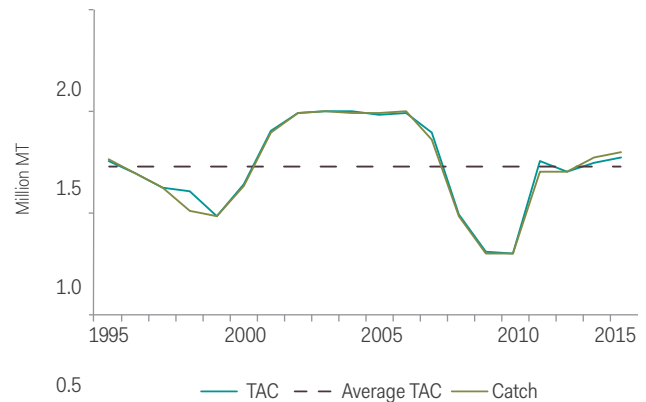
Alaska

Alaska is the largest fishing state in the U.S. If Alaska was a country, it would be among the top ten producers in the world measured by wild caught production. The total volume of fish harvested in Alaska has increased in the last five years due to the recovery in the pollock TAC. Total landings rose by 43% from 1.8 million MT in 2009 to 2.6 million MT in 2013.

Pollock is Alaska's largest species by volume accounting for half of total production. The next largest species by volume are salmon and Pacific cod. Together, these three species accounted for approximately 80% of total volume in 2013.

During the 20 year period from 1995-2014, the TAC for Eastern Bering Sea pollock averaged 1.23 million MT. The TAC dipped to historic lows of approximately 815,000 MT in 2009 and 2010 before returning to average levels in the subsequent years. The average catch rate is approximately 99.2% of the TAC, so the level of the pollock TAC is an important driver of overall harvest volumes in Alaska.

Eastern Bering Sea Pollock TAC



Salmon volume averaged approximately 315,000 MT from 2009-2012. Salmon landings rose to 459,000 MT in 2013, up 46% compared to the average for 2009-2012 and 66% from 2012.

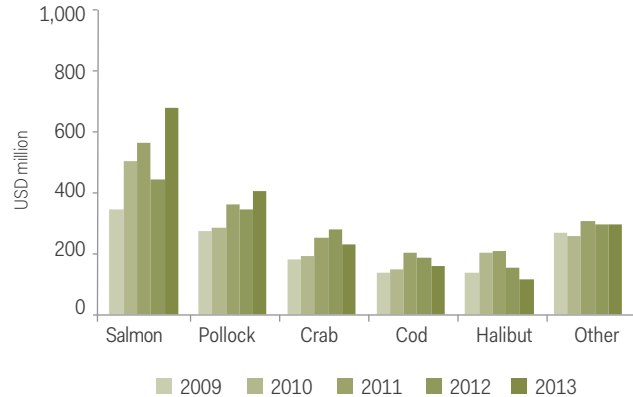
The total value of fish harvested in Alaska has been increasing in line with volume. Total value rose by 41% from \$1.3 billion in 2009 to \$1.9 billion in 2013, due to an increase in pollock and salmon landings along with higher salmon prices.

Salmon is Alaska's most valuable species accounting for approximately 30% of the total value of the State's harvest. The next most valuable species are pollock (driven by huge volumes) and crab. These three species represent approximately 65% of total value of the Alaska fishery.

Largest Species by Volume



Largest Species by Value





U.S. Seafood Trade

Montauk Point Light, Montauk, New York

U.S. Seafood Trade

The U.S. is the fifth largest exporting country and the second largest importer of seafood. The U.S. imports approximately 90 percent of its seafood, about half of which is from aquaculture. Total seafood imports rose by 81% from \$11.4 billion in 2004 to \$20.6 billion in 2014.

The rate of growth in U.S. imports has accelerated in recent years. Imports grew at an average annual rate of approximately 3.4% from 2005-2009. In the last five years, the average growth rate increased to approximately 9.3%. Seafood exports have grown at a slower rate resulting in a large and growing annual trade deficit. The U.S. seafood trade deficit reached \$14.3 billion in 2014 and is among the country's largest commodity trade deficits.

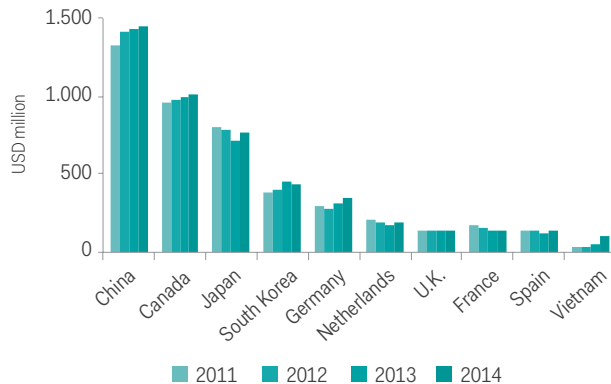
U.S. Seafood Trade Balance



U.S. Seafood Exports

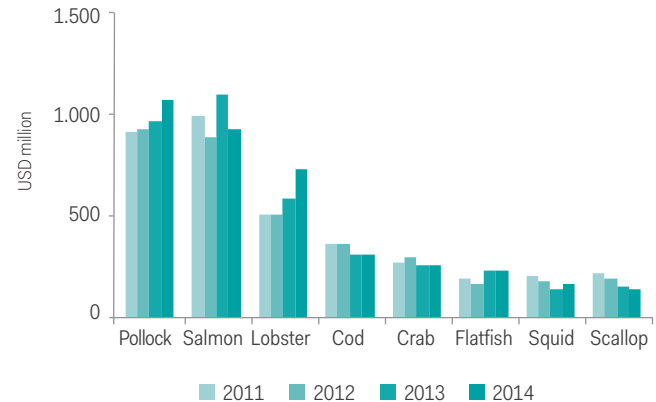
In the last ten years, exports have grown at an average annual rate of approximately 5.0% from \$3.7 billion in 2004 to \$5.9 billion in 2014. China surpassed Japan as the United States' largest export destination in 2010 and currently accounts for approximately 25% of total export value. Exports to China have increased at an average annual rate of about 15% from \$390 million in 2004 to \$1.5 billion in 2014. Canada is the second largest export country followed by Japan. Together, these three countries accounted for approximately 55% of the total value of seafood exports in 2014.

Largest Export Markets



Pollock surpassed salmon as the most valuable export species in 2014. The total value of pollock exports increased by 12% from approximately \$970 million in 2013 to \$1,1 billion in 2014. Germany is the largest market for pollock flesh products. China is the largest market for exported salmon.

Exports by Species



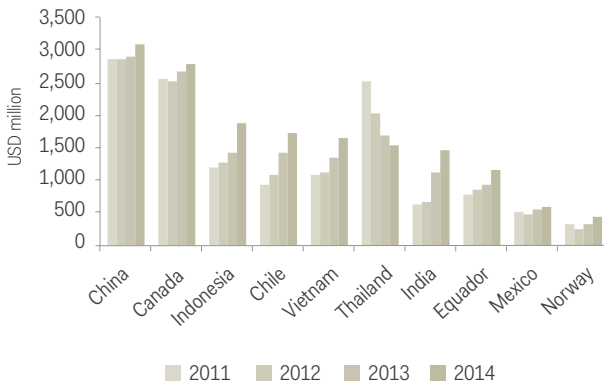
U.S. Seafood Imports

As previously mentioned, the growth rate in seafood imports has accelerated in the past five years. Total imports increased by 55% from \$13.3 billion in 2009 to \$20.6 billion in 2014. China surpassed Canada as the United States' largest import market in 2008. The total value of imported seafood from China increased by 40% from \$2.2 billion in 2009 to \$3.1 billion in 2014. During this period, imports from Canada increased by 36% to \$2.8 billion, and together these two countries account for almost 30% of total seafood imported into the U.S. Imports from India have been

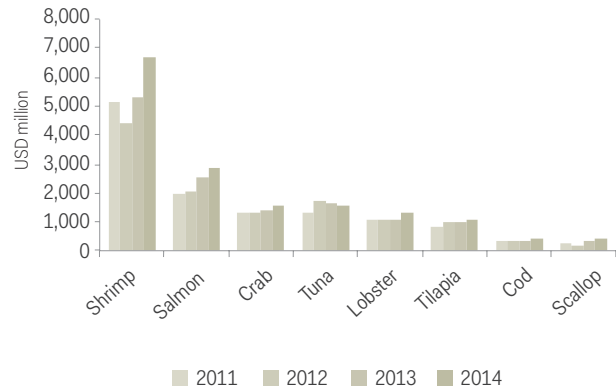
growing significantly (more than sixfold since 2009) while imports from Indonesia, Chile and Vietnam have doubled during this period.

Shrimp is by far the largest import species. The total value of shrimp imported into the U.S. increased by 50% in the last two years from \$4.5 billion in 2012 to \$6.7 billion in 2014. Salmon is the second most valuable import species at approximately \$2.9 billion. These two species account for 47% of the total value of U.S. seafood imports. Most shrimp is imported from Asia. Around half of the imported salmon is from Chile.

Largest Import Markets



Imports by Species



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