

### Germany Is Reinventing Itself as a Weapons Factory

THE WALL STREET JOURNAL

By Bojan Pancevski

THE WALL STREET JOURNAL

BERLIN—As its export model breaks down, Germany is pivoting from cars to cannons—and trying to turn industrial decline into a defense boom.

After decades as Europe's manufacturing engine, the country is mired in its longest stretch of stagnation since World War II as it wrestles with competition from China and a slump in demand. The response is as stark as the crisis: recasting its industrial base as the West's arsenal.

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### Skimp on Yogurt, Splurge on Skydiving: The Rise of the Frugal Rich

THE WALL STREET JOURNAL

By Rachel Louise Ensign

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Well-heeled shoppers love a deal.

Americans with six-figure salaries are increasingly visiting Walmart for prebiotic soda and Dollar Tree for wrapping paper. They are buying \$1 boxes of pasta at discount grocer Lidl and cheese at Aldi.

The shift down-market is driven by the fact that even the financially comfortable are acutely aware of how much more expensive everything is today. Discounters are successfully appealing to these sticker-shocked customers through improved digital offerings and aggressive expansions into well-off neighborhoods.

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Removal of abandoned fish farming net during an ocean clean-up conducted by Healthy Seas in Ithaca, Greece.

COR. KUYVENHOVEN

TO BHMA International edition

## Fish Farm Waste Is Piling Up Along Greece's Coasts

By Cheryl Novak and Myrto Polymyli

There is a moment, just after you dip your head beneath the surface of the Aegean or the Ionian, when

everything stands still. The noise of the beach disappears. In its place: stillness, and the relentless sun illuminating every corner of the deep blue sea. The slow drift of seagrass, the golden sand, the tiny fish darting away. It is the Greece peo-

ple carry in their minds all winter.

In these same waters, however, divers and clean-up groups are increasingly finding marine debris left behind by abandoned "ghost" fish farms: nets, polystyrene, rubber rings,

rope—most of it plastic. Over the past four years, NGOs and environmental foundations have removed 310 tons of such waste from "ghost farms" around Ithaca, Patras, Menidi, and Methana. Researchers say the debris they have discov-

ered and removed is only a fraction of what remains.

Fish farm waste, like all marine waste, does not stay put. It washes up on beaches, litters the seabed, and drifts into shipping lanes, snagging smaller boats.

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HEATHER RICE SKORPIDEAS

Heather Rice Skorpideas, founder of Gateway to Greek workshops, says the response to her workshops was immediate, with highly engaged participants.

TO BHMA International edition

## Beyond Words: Cracking the Code of Life in Greek Society

By Maria Katopodi

In recent years, Greece has become a destination of choice for people from around the world looking for a new place to call home. Coming from diverse cultural backgrounds, these individuals face the challenge of navigating the process of integrating into their new country of residence. Unfortunately, this process can be long and present its fair share

of obstacles, as Heather and Carol admit as they share their experiences. According to the Berry model, integration occurs when an individual comes into contact with a new culture and adopts certain aspects of the new culture, while still maintaining strong ties to their culture of origin. Researchers also argue that situational determinants—such as traveling with family, familiarity with the host language, and environmental factors—impact the degree of

integration or assimilation. It is commonly believed that if you master the language of your host country, you will de facto achieve integration and societal acceptance. However, while language is certainly a crucial factor, being accepted and truly becoming part of a community requires the newcomer to understand new cultural norms and behaviors that are unfamiliar and may sometimes seem odd.

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A man sitting on a bench in front of the Volkswagen factories in Wolfsburg, northern Germany.

JULIAN STRATENSCHNEIDER

# Germany Is Reinventing Itself as a Weapons Factory

THE WALL STREET JOURNAL.

As autos and heavy manufacturing falter, Berlin is steering factories, workers and capital toward rearming Europe

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A mesh of data points reveal how the old model has cracked. Each month, roughly 15,000 jobs are disappearing from German manufacturing, including the once-dominant auto sector, according to government figures. Mercedes-Benz posted a 49% drop in profit for 2025, while Volkswagen, the world's second-largest carmaker, said its profit dropped 44% in the same period and announced plans to cut 50,000 jobs in Germany by 2030.

Even flagship brands such as Porsche are reporting staggering hits, with operating profit sliding 98% compared with 2024, which was already one of its worst years in modern history. Much of the heavy lifting in the Ger-

man economy is now being done by the services sector, which comprises around 70% of economic output, though manufacturing still accounts for 20%—and up to a fifth of all services are tied to industrial firms such as carmakers.

Now, as American security guarantees look less certain and Europe races to rearm, Berlin is positioning itself to become the backbone of the continent's defense industry.

The car industry is going through a crunch because of the global downturn, geopolitical risks and rising competition from China, said Klaus Rosenfeld, chief executive of Schaeffler, one of the world's leading auto suppliers making everything from powertrains to bearings—and now an emerging player in the defense sector.

At the same time, recent regulatory changes in Germany and the European Union have improved capital-market access for defense companies, while huge government contracts and public financing schemes have unlocked nearly one trillion euros in defense funding, roughly \$1.2 trillion, driven by fears of Russian expansionism and an ever more hostile global environment.

"A great trend in the German economy is that people are asking much more than before 'how can we contribute to what has not been done over the last many years—to regain the ability to defend ourselves'—and this is what we are doing," said Rosenfeld.

Rosenfeld's firm is now making engines for drones, onboard systems for armored vehicles and components for

military aviation. His aim is for 10% of the company's turnover—currently €24 billion, equivalent to roughly \$28 billion—to come from the defense division set up last year, with much of the output provided by its more than 100,000 total employees and 100 factories worldwide, including eight in the U.S.

"In Germany there is a lot of whining—if everyone just complains all the time that things are horrible then nothing will work. We must roll up our sleeves."

Across Germany's industrial belt, factory lines that once powered the country's export miracle are being reworked into the machinery of Europe's rearmament.

The government is on board. Berlin's approach isn't to revive the old economy, but to replace it. Idle factory floors

and a growing pool of laid-off skilled workers are being redirected into the only sector still expanding at scale.

Volkswagen is in talks with Israeli companies with the aim to start producing components for Israel's Iron Dome system by 2027. A swath of companies have added third shifts to churn out weapons and ammunition for Ukraine. Patriot interceptors, long a purely American product, are soon to be manufactured in Germany to meet surging demand.

Nearly 90% of European venture capital invested in defense technology is flowing into German companies, according to government figures.

"Europe must be able to defend itself [and] that also means building a strong security and defense industry we can depend on," said Econo-

my Minister Katherina Reiche.

Reiche, together with cabinet colleagues, including the defense minister, has been pushing to transform ailing manufacturing companies into defense contractors. "Repurposing existing production sites from other industries can reduce the hurdles to scaling up domestic capacity," she said.

The economy ministry is now funding a matchmaking platform, set up by the main defense-industry trade association BDSV, to connect established defense supply chains with companies from other sectors.

The push by nondefense companies into the sector is helping alleviate the pressure on traditional supply chains to scale up, BDSV head Hans Christoph Atzpodien said.

Sebastian C. Schulte

# Skimp on Yogurt, Splurge on Skydiving: The Rise of the Frugal Rich

THE WALL STREET JOURNAL.

Big earners are embracing thriftiness—unless it's for something really fun

*Continued from Page One*

While affluent Americans are getting thriftier on essentials, they are still spending on extras like wellness and travel. Shoppers in households earning \$150,000 or more spent 2% less at grocery stores in the first quarter compared with a year earlier and 15% more at consignment stores, according to Consumer Edge, which tracks credit- and debit-card

spending data. At the same time, the group spent more at luxury jewelry stores and movie theaters.

"These consumers are saying, 'I don't really like buying laundry detergent and shower gels, they're not terribly exciting. How can I save some money on those so there's more money to spend on things I enjoy, like dining out or apparel?'" said Neil Saunders, managing director at GlobalData,

another firm that tracks spending.

A sizable minority of well-off shoppers have always been frugal, perhaps because they grew up modestly and kept those habits when they ascended into the upper middle class. Now their peers are swelling those ranks.

In 2025, 27.5% of high-income shoppers shopped at discount retailers, up from 19.8% in 2021, according to GlobalData, which uses

surveys and card data in its analysis. The firm considers a three-person household earning above \$156,000 to be high income.

"It's a shift that's here to stay," said Ali Furman, PwC's head of U.S. consumer markets. AI tools are making it easier for people to shop around for the lowest prices, she said.

Joshua Halliburton, a 33-year-old who works in information security, started getting fed up with the prices at the Whole Foods near his apartment in Brooklyn, N.Y., in the past few years. When an Aldi opened across the street from his home in November, he was so excited for a cheaper grocery option that he attended the grand opening and received a piece of ribbon from the ribbon-cutting ceremony.

He now visits the discount chain nearly every day for household staples like cheese, eggs, yogurt and snacks. He is willing to wait in long checkout lines for lower prices. Meanwhile, he has continued to spend on travel, taking trips to California and Japan in the past year.

"Paying four dollars for a tub of yogurt feels right," Halliburton said. "Ten dollars for a tub of Chobani just doesn't make sense." Some of his friends are now trekking from different parts of the borough to shop at the store.

Consumer prices are about 25% above where they were five years ago, and affordability is a top concern for people of all income levels. Even though the rate of inflation is far below its 2022



JOE CARROTTA FOR WSJ

Shoppers in households earning \$150,000 or more spent 2% less at grocery stores in the first quarter compared with a year ago.

took over as chief executive at Deutz, the 162-year-old pioneer of the internal-combustion engine, around two weeks before Russia launched its full-scale invasion of Ukraine in 2022. Like many industrial peers, the company had been battered by Germany's weakening economy and the war made matters worse.

"Transforming the company became my job," Schulte said.

Coming from the marine defense industry, his instinct was to turn a crisis accelerated by war into opportunity. "Our USP is stable supply chains: What works for engines and mining equipment will work for the defense industry," he said.

While traditional defense companies often have very long development cycles and take years to expand production, manufacturers steered in the fiercely competitive automotive market are able to scale up quickly, he said.

Indeed, Lockheed Martin, the U.S. defense giant that makes missiles for the Patriot air-defense system, produces only about 620 interceptor missiles a year despite huge demand triggered by the wars involving Russia and Iran.

Deutz, a nimbler business used to the fast-shifting whims of car buyers, moved so quickly that it now supplies power-generation engines for Patriot systems used by Saudi Arabia, as well as various unmanned systems and armored vehicles.

The company acquired defense startups and invested in an entirely new business in which it had no prior experience. "We decided to put our money where our mouth is," Schulte said.

The bet paid off: Unlike many automotive firms, the company has made no mass layoffs as workers shifted into defense production. The company grew 15% in revenue last year.

By Joe Pinsker, Paul Overberg and Drew An-Pham  
THE WALL STREET JOURNAL.

When a recent Wall Street Journal article compared the finances of baby boomers and millennials, the generation born between them wondered: What about us?

"Thanks for remembering Gen X," one commenter wrote.

In a reader poll asking which cohort had it harder, Gen X nearly beat out both of the generations the article was actually about.

So let's see how Gen X stacks up.

Now ages 45 to 61, members of the generation early on saw the dot-com bubble burst and then were hit by the 2007-09 recession as they approached middle age.

From their mid-20s to their mid-30s, their median inflation-adjusted income wasn't sharply higher or lower than boomers' before them or millennials' after them.

The housing crash of the late 2000s was a major obstacle as Gen X started building wealth. Lots of Gen Xers purchased their first homes in the preceding years, whereas boomers generally bought earlier and millennials generally bought later.

"Many were relatively

**Today, many Gen Xers still have remarkably large student-debt burdens as they approach retirement**

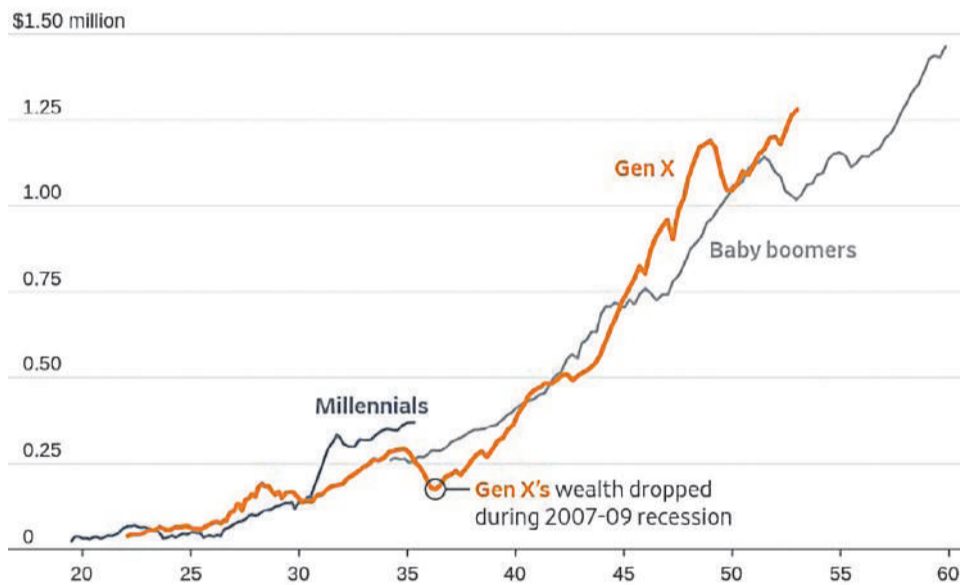
# Sorry, Gen X. We Looked at the Data, and You Had It Rough Too.

THE WALL STREET JOURNAL.

But a generation that weathered the housing crash and the rise of student loans still amassed significant wealth



Average household net worth in 2025 dollars, by each generation's average age



Note: Data for millennials' net worth also includes some members of Generation Z. Historical data for each generation have different starting points.  
Source: Ana Hernández Kent analysis of Federal Reserve data

early in their homeownership journey and more likely to be buying at or near peak prices, which translated into larger wealth losses during the downturn," said Odeta Kushi, a housing economist at First American.

The long, slow recovery from the 2007-09 recession unfolded during Gen X's 30s and 40s, with the national unemployment rate in the high single digits for years.

The housing bust also weighed on Gen X's homeownership rate, as some lost their homes in foreclosures and others opted to rent for fear of another crash. But Kushi said that today, they are closer to boomers when they were similar ages.

Student debt has been another hurdle for many in the generation.

After younger boomers finished college, access to government student loans expanded, tuitions rose and loan balances soared. With fewer safeguards in place, the default rates on federal loans were higher for older Gen Xers than was the case for older millennials years later.

Today, many Gen Xers still have remarkably large student-debt burdens as they approach retirement.

And yet Gen X's average household net worth, which includes student debt, has mostly been growing steadily.

It did sink significantly in the 2007-09 recession, falling about 40% in under two years. But today it is on par with boomers' average wealth when they were similar ages, after adjusting for inflation.

**The housing crash of the late 2000s was a major obstacle as Gen X started building wealth.**



peak, prices aren't going down, and certain household staples like gasoline, coffee and beef have risen markedly in the past year. Americans are also facing high housing costs and utility bills.

Spending by the affluent is powering the economy, helping overall consumer spending hold up. Consumer spending was up 2.5% in February from a year earlier when adjusted for inflation, according to the latest Commerce Department numbers. Business leaders said this week that consumer spending was solid to start the year, helped by bigger-than-expected tax refunds.

Affluent people have long loved Costco, which sells gold bars and vacation packages alongside cut-rate 3-pound tubs of coffee. These customers are now discovering retailers like Walmart and Dollar Tree that were once firmly the province of lower-income shoppers. These retailers are aggressively courting better-off customers at the same

time that their traditional customers are cutting back due to inflation.

Walmart's chief executive said earlier this year that most of the retailer's market share gains were with households earning more than \$100,000 a year.

Megan Bleil, who lives outside of Washington, D.C., and advises wealthy families, spends about \$1,000 a quarter at Walmart buying items like paper towels, cat food and snacks for her elderly parents, who live in Ohio.

She used to buy these kinds of items on Amazon.com but switched late last year largely because of the cheaper annual fee for Walmart's premium service. A free Paramount+ subscription with her Walmart membership sweetened the deal.

The 51-year-old, who

earns between \$150,000 and \$200,000 a year, isn't trying to cut back on spending overall. When a friend visited this month, she spent more than \$250 to treat her and her kids to indoor sky-diving lessons. "I do try and do fun stuff," she said.

(An Amazon spokeswoman said that customers tell the company they love their Prime memberships and streaming benefits.)

About 60% of all new households shopping at Dollar Tree earned more than \$100,000, the retailer said in December. The company is courting these customers with a wider selection of higher-priced items—think \$5—and stores in more affluent areas like Plano, Texas, where the retailer opened its 9,000th store in North America last year. When

CEO Mike Creedon visited that new store, he noticed Range Rovers in the parking lot. "That's a customer we never had," he said in an interview last year.

Ishika Santosh Wade did most of her grocery shopping at Texas supermarket chain Tom Thumb, owned by Albertsons, until inflation soared in 2022. Now she shops around for the best deals, often buying her groceries at Aldi or the Walmart-owned Sam's Club.

The 25-year-old, who works in IT, has also started shopping at dollar stores. She now visits the new Plano Dollar Tree location two or three times a month, spending \$30 to \$50 each time. She buys party supplies and seasonal decorations, and snagged a tennis racket for \$1.50.

"This place is very easy

to find, very nice, clean and surprisingly they have a lot of items," she said.

Paul Apyan, 73, grew up modestly with parents who were wary of debt, and he kept that frugal mindset when he became an orthopaedic surgeon in Chattanooga, Tenn. More discount retailers have opened in his area in the past decade, and he now buys rotisserie chicken from Costco and toothpaste and body wash from Dollar General. When he shops at the regular grocery store, he compares sizes of a product to see which is cheaper per ounce.

Even though Apyan has built up his investment portfolio and a collection of classic cars, he has no plans to spend more freely on essentials. "Why would I do that?" he said.

TO BHMA International edition

# The 'Greek Dream' in 1970s New York

From diner counters to street carts, Greek immigrants built lives in a harsh but vibrant city—captured in rare photos and personal stories that reveal sacrifice, resilience and the enduring pull of home

By Angelos Alexopoulos

In the early 1970s, the neatly kept interior of John's coffee shop, on the corner of 66th Street and Broadway, welcomed a police officer each morning known worldwide for his incorruptible character. Al Pacino had immersed himself so deeply in the role of Serpico that he startled the Greek owner of John's, Evangelos Bourlotos, with the intense look he gave him every time he ordered his coffee. Even today, Bourlotos recalls their frequent—and always fascinating—encounters, at a time when all of New York seemed to feature a little bit of Greece.

Restaurants, diners, grocery stores, bakeries; Greek-owned businesses were everywhere. Bringing a distinct warmth and personality to the Big Apple—as captured in the mid-1970s by photographer Kay Zakariassen on the streets of Manhattan and Queens. These images were recently shared by the New York Public Library in celebration of Greek Heritage Month.

In one of them, a man in a dark blue ushanka and white apron is smiling beside his Sabrett hot dog cart, set against the façade of the Metropolitan Museum of Art on a sunny day in 1976. The man was Anastasios Velis—Fotis's father and Francine's grandfather.

"It is great seeing my father in front of the Metropolitan Museum selling hotdogs. It brings back so many memories" Fotis Velis tells TO BHMA.

## A unique archive of Greek presence

That street portrait is part of a collection donated in 2022 by Zakariassen to the New York Public Library: a remarkable archive of around 400 color slides, negatives, prints, interview transcripts and research material from a 1976 photographic essay on the Greek diaspora in New York. Alongside the images, the voices of the people

**A 1972 survey found that 92% of restaurants across New York City and surrounding areas were either owned or run by Greek immigrants**



A photo of Anastasios Velis with his Sabrett cart, from the personal archive of the Velis family.



A gyro shop on the Coney Island boardwalk in New York City's Brooklyn borough.

themselves survive—transcribed interviews (not yet digitized) with owners and workers, including their names, places of origin in Greece and the businesses where they worked.

Zakariassen, who later became photo editor at the American Museum of Natural History's *Natural History* magazine, had been drawn to immigrant communities in the U.S. since her student years. Her husband, David Hanson, says she was struck by how deeply Greeks had rooted themselves in the world of diners and small businesses. Indeed, a 1972 survey by the Greek American Neighborhood Action Committee found that 92% of restaurants across New

**'A Greek that never left his homeland can never understand this feeling of longing'**

Evangelos Bourlotos, Greek immigrant and retired diner owner

York City and surrounding areas were either owned or run by Greek immigrants.

**From Nafpaktos to the American journey**

Every story was different—many of them extraordinary. Before standing behind his metal cart selling hot dogs year-round at the Metropolitan Museum and other busy spots, Anastasios Velis had tried to build a life in his hometown of Nafpaktos, western Greece. He worked on intercity buses, introduced the town's first taxi—a 1956 Chevrolet Bel-Air—and later opened a kafeineio. None of it, however, provided the stability he needed to raise his family.

Fotis remembers his father's life was structured entirely around work. When they arrived in New York in 1966 aboard the "Olympia"—the famed ocean liner that carried thousands of Greeks to America in the 1950s and '60s—his father was already 35. He traveled with his wife Aglaia, their two children, and a \$150 check. Neither his age nor his responsibilities supported him through the harsh reality of migration.

One episode from his journey borders on the unbelievable. While waiting at the U.S. embassy for his visa, with slim chances of success, a soldier overseeing the crowd singled him out and moved him to the front of the line. Velis did not understand why—until later, when he learned he had once driven the soldier's mother to a hospital in Athens. Migration, it seems, is shaped not only by policy and necessity, but also by virtue and chance.

**'From six in the morning to midnight'**

Velis's first job in New York was in a Greek restaurant. "He worked for six months, from six in the morning until midnight, six days a week," his son recalls. Sunday was his only day off. He earned \$60 a week—barely enough to cover rent.

His break came through a small advertisement in a Greek newspaper: "Be your own boss," it read, next to an image of a hot dog stand. Velis took the leap. He built his own cart and gradually established a small business. The work load never lightened—it simply transformed. He was no longer someone else's employee, but a street vendor with his own income, risk and responsibility. Eventually, he even employed others. For his family, that step marked the beginning of a more stable life, built on relentless effort.

"My grandfather left



A photograph of the interior of John's coffee shop, taken from Bourlotos' personal archive.

Greece, his home that he loved, to step into the unknown," Francine says. "He carried courage and determination to build something for his family." Today, she sees the result not only in his success, but in the opportunities he created for future generations. "My career as an attorney in New York and New Jersey was made possible by the foundation he created. His sacrifice and courage rippled through generations and changed the trajectory of our lives."

Yet America never replaced Greece in his heart. "He missed Greece as soon as he stepped foot on the Olympia," Francine says. Nafpaktos remained a place of beauty and calm—a contrast to the intensity of New York. After three decades of hard work, Velis returned home. This November, the smiling man in the ushanka will turn 97.

**Serpico, Theodorakis and the diner world**  
Evangelos Bourlotos' story offers another glimpse into

Greek Manhattan—the bustling world of diners and coffee shops. He arrived from Piraeus at 15. "I was devastated," he recalls. His family settled in Brooklyn, and he began school, determined to work hard despite knowing little English.

He soon found work at John's coffee shop, located near the Lincoln Center, the Juilliard School and the city's major cultural institutions. From there, he saw New York in a way few ever truly experience. "I saw Luciano Pavarotti, Placido Domingo and Jose Carreras live without paying for a ticket," he says. He also remembers Mikis Theodorakis and the excitement his success sparked among Greek immigrants.

Later, Bourlotos and a friend bought John's coffee shop, which operated 24/7. "We didn't even know where the key was," he says. The place became a crossroads for artists, journalists, workers and celebrities. During the filming of *Serpico*, Al Pacino would regularly stop by for coffee. Names like Anjelica

Huston, John Huston and Carroll O'Connor passed through like fleeting shadows of a city in constant motion.

Yet beneath the glamour lay hardship. Bourlotos recalls the grueling work, exploitation and exhaustion. He even remembers a young Geraldo Rivera visiting the café to document poor working conditions. Rivera donned an apron and grilled burgers alongside him—but the fatigue remained.

**Homesickness beneath the city lights**

He also recalls the infamous blackout of July 1977. "People rushed into the coffee shop for safety. We sold everything we had within hours—serving eggs with donuts instead of bread." Outside, the city burned with looting and fires, a stark reflection of the poverty and desperation during that time.

Through it all, his thoughts always went back to Greece. "A Greek who never left his land can never understand the feeling of longing for the place you were born," Bourlotos says. He reminisced on concerts by Greek singers where audiences got visibly emotional. "It's very vivid in my memory the tears on the faces of the people in the theatre from the pain of missing their land." These were people who had built new lives, but held on to their cultural roots; a part

of which they could never fully regain.

Bourlotos returned to Greece permanently in 2016 and now lives in Volos with his American wife. "Life here wasn't as smooth as I expected," he admits, "but I managed to overcome the difficulties and at this point I can admit to myself that I made the right decision."

**Shedding light on the overlooked**

Today, Kay Zakariassen's photo essay holds special value. It preserves a largely overlooked chapter of Greek immigrant life in 1970s New York, prompting reflection on the character of "ordinary people" who shaped one of the last great waves of Greek migration in the 20th century.

Their stories draw attention to what is often undervalued: dignity, hard work, responsibility and self-respect.

Interest in Zakariassen's photographic essay is no longer limited to its archival significance. The NINETTO Gallery in Athens is preparing an exhibition dedicated to her work for the end of the year, along with a special publication that will draw on the interviews she conducted at that time. Nearly half a century later, Zakariassen's stunning work invites a renewed inquiry into belonging, displacement, diasporic identity, and the shifting meaning of 'home'.



**'My career as an attorney in New York and New Jersey was made possible by the foundation he created.'**

Francine, granddaughter of Sabrett cart vendor Anastasios Velis

# Fish Farm Waste Is Piling Up Along Greece's Coasts

Abandoned aquaculture sites leave behind nets, rings and polystyrene across Greek coastal waters. The hundreds of tons already removed represent only a fraction of what remains to be cleaned up

Continued from Page One

While Greece seems unable to tackle the problem, organizations that have tried to clean it up at their own expense have been sued for their efforts. Veronika Mikos, Director of a global non-profit dedicated to removing marine litter around the world and active in Greece, known as Healthy Seas, says the lack of accountability for fish farming waste in Greece is unlike anything they have encountered.

## From isolated sites to a wider pattern

When Healthy Seas pulled 76 tons of debris out of the waters around Ithaca in 2021, the Netherlands-based foundation thought it had solved an isolated problem. “We thought we’d solved a problem, until a week later, after the cleanup, the phone calls started to come in from Rhodes, from the Peloponnese, from Thessaloniki. People were saying that they also had an abandoned fish farm there,” Mikos tells *To BHMA International Edition*. “That’s when we realized that we had actually found a hornets’ nest.”

Subsequent reporting and fieldwork pointed to a wider pattern. “It’s not regional,” Mikos says. “We have seen the same in Attica, in other areas. It’s a national problem.”

Healthy Seas’ Deputy Director and Diving Manager, Pascal van Erp, describes the scale of the problem in western Greece. “The most comprehensive overview we have is in western Greece, where we surveyed the coastline from Patras to Igoumenitsa. In that zone, we identified 150 sites polluted with aquaculture gear. That does not mean 150 entire fish farms, but 150 separate locations where the pollution originated from aquaculture.”

## Assessing the scale

Greece has no official reporting system to record the extent of fish-farm marine waste. One of the few organizations attempting to systematically document the problem is OZON, a small Greek nonprofit specializing in marine pollution led by Anastasios Filippides, which partners with Healthy Seas.

Funded by a range of Greek foundations, OZON says its findings are unequivocal. “The results of our



Healthy Seas removes a net from an abandoned fish farm off the coast of Ithaca, Greece.

site-restoration projects with Healthy Seas, together with the results of OZON’s impact surveys, demonstrate that the sites of present or former fish farm activity are heavily infested with debris lying on the seabed, washed ashore, or abandoned on the coastline,” says Filippides.

Using satellite imaging, OZON has identified 303 locations of apparently active

fish farm operations and 173 locations that have been abandoned or show signs of former activity with visible or potential environmental impact. These range from facilities that are “currently inactive with all assets still in place,” to those “completely abandoned leaving behind assets and visible debris,” to sites abandoned after relocation where “no visible debris or assets” remain, but

**‘The sites of present or former fish farm activity are heavily infested with debris lying on the seabed, washed ashore, or abandoned on the coastline.’**

Anastasios Filippides, OZON co-founder and executive director

concerns persist about seabed and coastline damage.

Yet even this mapping has limits. “In all cases, our experience from the areas where we have conducted field investigations and surveys reveals that the picture of a location or a facility in the field can be very different from that depicted in satellite images,” Filippides notes. “It is often impossible to evaluate the operating status or condition of a facility without a field audit.” As a result, the true scale of abandoned aquaculture infrastructure remains unclear.

## Decades of neglect

The Ithaca cleanup exposed how long the problem had been allowed to continue unaddressed.

According to Mikos, the local municipality had spent ten years trying to get someone to act. What made it worse, she says, is that the municipality never wanted the fish farm to begin with. The local council had voted against its establishment in the 1980s, only to be overruled at the regional level. The company eventually went bankrupt, abandoned everything, and left the com-

munity with a mess it had never asked for.

“It’s a deeply unfair situation,” Mikos says. “The regional and national government imposed something, and then the local government was left to live with the consequences.”

The environmental damage was significant. The area originally had a thick covering of Posidonia seagrass, a marine plant that absorbs more CO<sub>2</sub> per hectare than many forests. According to Mikos, aquaculture debris had severely degraded it.

“We saw the situation, and it literally broke our hearts,” Mikos says. When Healthy Seas offered to help, it took a year for the Corfu regional environmental office to authorize the cleanup.

“The facility had already been abandoned, the company had gone bankrupt, the license had been revoked,” Mikos says. “Which means the government should have taken responsibility for cleaning it up. But they didn’t have the money, the capacity, the knowledge, and perhaps the will. When we raised our hands and said we wanted to help, it still took a year to get the green light to clean it up—at our own expense.”

Abandoned fish farm locations in Greece



Mapped abandoned fish farm locations across Greece, based on satellite imagery analysis by the NGO OZON.

**Who pays the price? Not the polluters**

Both OZON and Healthy Seas have faced legal obstacles to their cleanup work. Filippides describes the situation plainly: “We clean and restore nature from the mess that fish farms leave behind: abandoned facilities, rotting equipment and debris that the Greek authorities do not want to know about. We perform these difficult, labor-intensive and dangerous tasks as unpaid volunteers, with all the licences and permissions required by the authorities. Yet we are sued by the polluters as vandals and thieves. This unfortunate situation is a result of the state’s profound inability to enforce law and order in the aquaculture sector.”

The case he is referring to began when an abandoned fish farm near Nafpaktia left behind an estimated 50 tons of waste. According to documents seen by *TO BHMA International Edition*, in February 2021, the Decentralized Administration of the Peloponnese, Western Greece and the Ionian revoked the facility’s operating license and gave the owner six months to remove its equipment and restore the site. The deadline passed. The site stayed dirty.

Eventually, Healthy Seas were formally requested to step in. Alongside OZON, the two organizations carried out the cleanup “under the auspices of the Dutch government, with full official authorization from Greek authorities,” according to Mikos.

Six months after the cleanup, the owner reported to the police that his fish farm had been robbed. In the lawsuit that *TO BHMA* has seen, the former owner admits that the fish farm license was revoked in 2021, but claims that it had filed an appeal to this decision, and that at the time of the removal a decision was still pending before Council of State (ΣτΕ).

The former owner is seeking €500,000 in compensation for assets which, according to OZON, were not present at the site at the time of the clean-up. Among those facing charges are Filippides, a Healthy Seas representative, and the deputy mayor of Nafpaktia. The case is ongoing.

“The person illegally storing waste on the seabed, on the surface of the sea, on the coastline, without a valid license, is not being held responsible,” Mikos says. “The people who cleaned it up

**The fines levied on companies in Greece that pollute and abandon their sites range from 3.000 to 30.000€**



Removal of fish farming net off the Ionian Sea, Ithaca, western Greece.

with a permit are. This is beyond absurd.” Healthy Seas has conducted activities in 20 countries and, as Mikos says, “You would never see this anywhere else.”

That being said, the state filed its own case against the fish farm owner in 2021 for allegedly operating without a valid license and degrading public waters in violation of Greek law, as well as a separate charge of unlawful occupation of public property. The preliminary investigation has concluded, and the trial is scheduled for December 2026.

**The impact of ghost farm waste**

For those working underwater, the scale of what has been left behind is not always immediately visible. “Sometimes you see a small shape that looks like part of a net,” van Erp says. “When you start digging and pulling, you find a whole net buried beneath the sand. In one instance, we pulled out a five-ton net.”

Not all of what lies on the seabed got there by accident. At Methana, the Healthy Seas team found the large open net rings half-submerged and stripped of their nets. On the other side of the bay, three or four rings showed clear signs of having been deliberately sunk. “You could see holes cut into them every few meters so the whole structure would go down,” van Erp told us.

The Ithaca site told a different story: one of abandonment rather than concealment. “They went bankrupt and simply walked away,” van Erp says. “Then a storm came and tore the rings apart. Half of it sank, the other half snapped loose and drifted out to sea.”

In some cases, debris floats far afield, drifting into

shipping lines and jeopardizing the safety of passing boats, big and small. “Three years ago, in the Ionian shipping lane near Patras, a speedboat hit a floating fish-farm ring at speed, flew into the air, and landed inside the ring” Mikos tells *TO BHMA*. “The ring was six meters in diameter, the boat ten meters long. When the skipper called the coast guard, he was told to make his way to the nearest shore. He towed the ring behind his boat for four hours.”

“People really underestimate how serious this problem is,” she says. “As long as there is no death or major injury, it seems no one takes it seriously, even though there have already been injuries and vessel accidents.”

**A regulatory vacuum**

Across most of Europe, van Erp says, this situation would be unthinkable.

“If you leave anything behind from your business at sea, you won’t get away with simply abandoning it. Everybody understands that the government will come after you, and if you don’t respond, they’ll clean it up for you and send you the bill.” He pauses: “I’m still shocked by what I see in Greece.”

The gap is not just cultural. It’s structural. A proper marine cleanup can cost up to six figures. The fines levied on companies that pollute and abandon their sites range from €3,000 to €30,000, says Mikos. The arithmetic alone makes it clear there is no incentive to comply. What

Greece also lacks is a mandatory insurance mechanism, whereby fish farms would be required to set aside cleanup funds when they receive their operating license. It’s the same principle as a rental deposit.

“It exists in other countries,” Mikos says. In Spain, she notes, the government issues a cleanup order, opens a tender, and pays for the work itself—recovering costs from insurance or the bankrupt company where possible, but not leaving the problem to nonprofits and local communities.

Mikos argues the issue with marine waste also violates EU law—specifically, the polluter-pays principle enshrined in EU environmental directives. But the burden and cost of cleanup falls on whoever is willing to bear it.

“In Northern Europe and other EU member states, the government takes responsibility and tells the fish farmer: this was your land, you have been irresponsible. You have polluted it, you are not taking care of it, so you no longer get to keep it.” She stops. “I miss that willingness in Greece.”

At Methana, the team encountered a different kind of obstruction. The source of the pollution was not in dispute—there was only one fish farm in the bay, and its disintegrating rings were washing polystyrene along more than ten kilometers of coastline, affecting not just Methana but the nearby island of Poros, too. Yet when Healthy Seas arrived to clean up, the fish farm owner wouldn’t allow them to set

foot on “his land”, the most practical access point for the operation. The team had to bring in additional boats and work entirely from the sea, while the owner watched from the shore. According to Healthy Seas the local mayor declined to provide a letter supporting their request.

“I just can’t believe it,” van Erp says. “These areas depend on tourism. How can they accept their home being polluted because of personal relationships? That defies common sense.”

**Signs of recovery**

There is still some cause for optimism.

“Every time we go back to a site we have cleaned, I am amazed by the diversity of the marine life I see,” van Erp says. “Areas where I personally removed nets are starting to be recolonized by seagrass. It is definitely recovering.”

On Ithaca, locals have reported that water visibility—described as “milky” during the farm’s years of operation—has improved significantly since activity ceased, and that the Posidonia grass is returning.

But recovery depends on removing every source of pollution. On Ithaca, the ghost farm’s land-based infrastructure—buildings, construction materials, equipment—continues to degrade with each winter storm, releasing new debris into the water.

“It is an endless game of cat-and-mouse,” Mikos says. “We clean the sea while the source on land remains untouched.”

**What comes next**

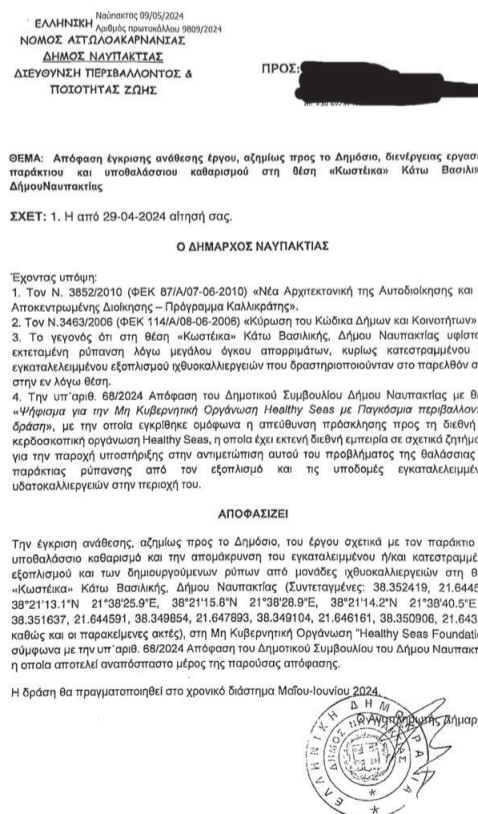
At the European level, aquaculture expansion is framed as both an economic opportunity and a component of food security. EU environmental rules are designed to ensure that growth takes place within ecological limits, with responsibility for implementation resting with member states.

In practice, the effectiveness of these frameworks depends on monitoring and enforcement. As Greece continues to expand its aquaculture sector—the country is the EU’s largest producer of farmed sea bass and sea bream—the question is not only how new farms are approved and managed, but what happens to existing sites, both active and abandoned, over the years and decades that follow.

The answer, so far, has all too often been nothing—until someone else steps in.

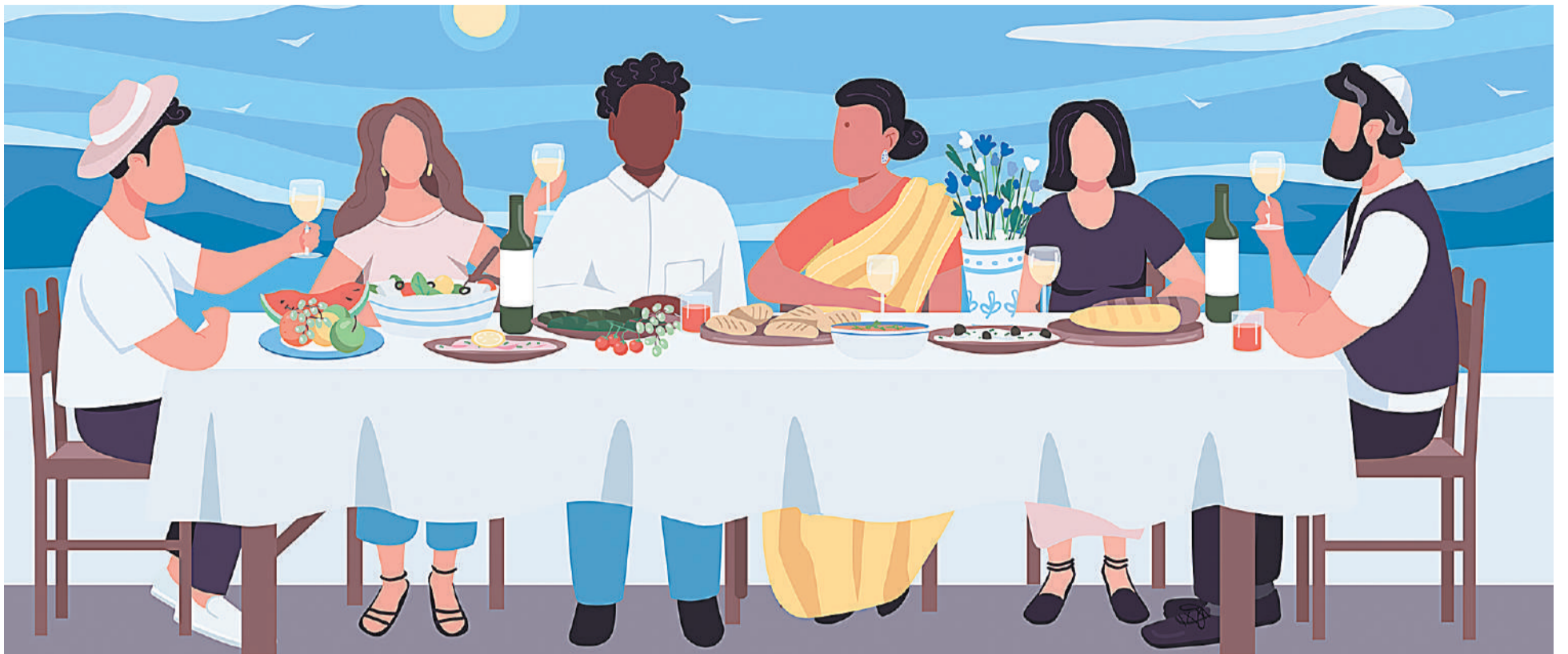
“What is needed,” Mikos says, “is willingness and engagement from government. The solutions are not far away.”

Van Erp puts it more simply: “Common sense. The polluter is responsible for what he polluted. I don’t understand why that is so difficult to comprehend.”



Official notification from the municipality of Nafpaktia granting Healthy Seas permission to conduct a clean-up of an abandoned fish farm. This clean-up eventually led to a legal dispute and accusation that Healthy Seas and OZON stole the equipment.

**On Ithaca, the ghost farm’s land-based infrastructure continues to degrade with each winter storm**



# Beyond Words: Cracking the Code of Life in Greek Society

In Greek society, understanding the language is just the first step—true integration lies in decoding the culture behind the words

*Continued from Page One*

Carol R., an IT programmer who moved to the seaside town of Nafplio with her partner and their child two years ago from Wales, says that a year prior to their move she took an online language course to learn Greek. “I think that when you decide to move abroad, the first thing you have to do is learn the language for practical purposes. Being able to communicate with the locals was very helpful in finding accommodation and setting up our home,” she says. “But language is not enough,” she adds.

Heather Rice-Skorpideas, an American woman who married into a Greek family after meeting her husband while vacationing in Greece, also stresses the importance of language as a tool in her life. “It became a way to connect with my husband, with his family, and with the environment I was now living in,” she notes.

However, when an individual seeks more meaningful interaction with a new cultural group in order to acquire some of its traits—or even to fully identify with it—language, though crucial, cannot guarantee success. In some cases, it can even become a barrier. “There were many moments where language felt like a barrier,” Heather admits. She describes how certain situations and experiences caused her great anxiety. “I could follow the conversation, but it often

felt as if I was being attacked or controlled, which triggered a strong reaction,” she says.

She recalls a specific incident while walking with her child in a stroller and her dog at her side, when a stranger said, “You shouldn’t have a dog with your child.” “To me, it felt abrupt and intrusive, as if someone was stepping into a decision that wasn’t theirs to make. I reacted defensively, and within seconds the situation escalated,” she says.

“What made it difficult was that I couldn’t explain it as a language problem. I knew the words. What I hadn’t yet understood—and what no language course had prepared me for—was that the rules of behavior I had grown up with didn’t apply in the same way here. I had assumed that learning the language would resolve these situations, but in some ways, it made them more confusing,” Heather points out.

Heather later realized that the barrier was not in the language itself, but in the gap between what people meant and what she understood. “The meaning had simply been carried differently than I was used to,” she notes.

Such misunderstandings, however, do not stem solely from language; they are also rooted in cultural differences in behavior, expectations, and social etiquette.

Carol, too, notes that she faced challenges in her efforts to integrate in the local community of



Heather: “Greek became a way to connect with my husband, with his family and the environment I was now living in.”

Nafplio—not because she didn’t understand the language or because people were unwilling to include her family in social activities, but because she struggled to grasp the Greek way of thinking. “It took me some time to realize, for example, that when Greeks say they expect you to be somewhere at 8 p.m., they often mean 8:30 or even 9:00,” she says candidly. “For me, it has to do with deeply rooted cultural differences, which are not evident straight away but

surface during your everyday interactions with the locals,” she adds.

Heather believes that Greece’s long tradition of valuing brevity and directness in social discourse—hence the term “laconic,” associated with the Spartans—reflects the idea that less is more.

But how can individuals become more aware of these hidden cultural nuances? Heather stresses that people must first acknowledge the existence of cultural differences and realize that under-

standing the language does not necessarily mean understanding the interaction.

“What helped me over time was shifting my focus away from the words and starting to pay attention to patterns. When the same type of interaction happens again and again, it becomes clear that it’s not about the individual—it’s about the system you’re both operating in,” she explains. Although this small shift may not solve everything, she adds, it does create the space you need to interpret things more accurately.

Heather soon realized through her social media interactions that this was a widespread issue—not only among non-Greeks, but among Greeks as well. “Both sides were experiencing the same situations, but interpreting them completely differently, often walking away feeling frustrated without understanding why,” she notes. This inspired her to start offering online workshops—*Gateway to Greek*—focused on integration into Greek society.

What has become clear to her, she says, is that this issue had not been addressed before, nor explained in a clear and practical way that offers people guidance on “how to handle it in the moment.”

The response to the workshops was immediate, with participants engaging in a meaningful way with the material, Heather says enthusiastically. “People

tend to recognize themselves in the examples very quickly. There’s often a moment when something that has felt confusing for a long time suddenly makes sense. I’ve had participants say things like, ‘I thought I was failing all the time,’” she explains. In one case, someone described how comments about their child felt like constant criticism, as if they weren’t parenting well enough. What shifted for them was realizing that those same comments were often meant as care and concern, not judgment. “That change in interpretation completely altered how they experienced those interactions,” Heather emphasizes.

According to Heather, it is equally important to realize that this dynamic goes both ways. Greek participants—and Greeks living abroad—often experience English communication as vague or hard to trust, even when it is meant to be polite. What one side sees as considerate can come across as a lack of clarity or commitment to the other.

Recognizing this brings a sense of relief. People begin to see that these misunderstandings aren’t random or personal, but shaped by underlying patterns. At the same time, they gain a clearer view of the other perspective, making interactions feel less frustrating and more understandable—and ultimately changing how conversations unfold.