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By: Romain Blachier

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In the event of a Taiwan Strait crisis, the fate of a liquid natural gas (LNG) cargo bound for Taichung, or one of Taiwan's other major ports, could turn into a commercial question: can it still obtain war-risk cover? As naval planning receives most of the attention in relation to a potential blockade, marine insurance is barely covered in either [NATO's maritime strategy](#) or the [European Union's economic security agenda](#).

However, an insurer's decision could affect Taiwan as much as a naval deployment. Events in 2026 have demonstrated this: After the February 28 strikes against Iran, shipping through the Strait of Hormuz halted. No blockade was declared, but insurers canceled, requoted or sharply repriced war-risk cover, and traffic fell by more than 80 percent in a week. [Lloyd's List data](#) showed just 181 vessel transits in March, mostly Iranian-linked, compared with 138 vessel transits a day before the conflict. Six months later, traffic has still not recovered. [Lloyd's List Intelligence counted 117 non-Iranian-linked transits](#) in the week of September 14–20, fewer than on a single day before the conflict.

The consequences also affected Taiwan, since [more than a third](#) of its gas goes through Hormuz, and about [96 percent](#) of its energy resources are imported. While gas-fired plants generate [more than half](#) of Taiwan's electricity, its working LNG stocks can only last for [11 days](#). Currently, the government [requires a security stockpile](#) of 11 days, and will raise it to [14 in 2027](#). Storage capacity is expected to rise from 20 to 24 days over the same period. [All three receiving terminals](#) are on the west coast, facing the People's Republic of China (PRC).

This leaves Taiwan with a very short clock: If LNG deliveries stop, load shedding

The Global Taiwan Brief is a bi-weekly publication released every other Wednesday and provides insight into the latest news on Taiwan.

Editor-in-Chief
John Dotson

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*Image: The Yongan LNG Terminal in Kaohsiung, Taiwan (undated file photo).
(Image source: [Wikimedia Commons](#))*

(i.e., planned rolling blackouts) would begin within days, and the grid would also be needed to support the island's defense.

How Marine Insurance Could Close the Taiwan Strait

A merchant vessel normally has hull and war-risk insurance for the ship, and protection and indemnity (P&I) for liabilities, such as crew injuries, pollution, wreck removal and damage to third parties. Banks will not finance an uninsured ship, and charterers will not hire one.

[The Joint War Committee](#) (JWC), a London-based organization with representatives from the Lloyd's Market Association and the International Underwriting Association, brings together the underwriters who write marine hull war risk. This Committee publishes

a list of geographical areas where vessels are considered at increased risk of war-related perils. Thus, shipowners must notify their insurers before entering the zone, and underwriters may charge an extra risk premium. Moreover, war-risk clauses in charter parties allow owners to refuse a voyage into a listed area, even when cover is available.

The market can move before a crisis fully materializes: in February 2022, before the Russian invasion of Ukraine, the JWC added the Black Sea and the Sea of Azov to its Listed Areas [in response to an anticipated situation](#) that subsequently did materialize. When the Red Sea was listed at the end of 2023, operators diverted around the Cape of Good Hope in South Africa, instead of paying the surcharge.

However, standard war-risk wording carries a larger

consequence: If war, declared or undeclared, breaks out between any two of the five [permanent members of the UN Security Council](#), insurance cover ends automatically. Therefore, a conflict between the People's Republic of China and the United States over Taiwan would fall within the automatic termination clause of the standard Institute War and Strikes Clauses. France and the United Kingdom could also act as contractual triggers rather than distant observers.

Lessons from the Hormuz Strait

The Hormuz conflict shows how quickly this can happen. War-risk rates for Gulf transits were at [0.25 percent](#) of hull value pre-conflict, but rose sharply within days. Marine insurers [Gard, Skuld, NorthStandard, the London P&I Club, and the American Club](#) issued cancellation notices on March 1. Two days later, the JWC [extended](#) the Listed Areas across the Gulf littoral, and maritime traffic collapsed.

Underwriters in London pushed back against the claim that insurance had closed the Strait, claiming that insurance cover remained available. Instead, cancellation notices were deemed a contractual way to renegotiate terms. Owners kept ships in port because they feared for the safety of their crews and vessels, not because insurance could not be bought. However, insurance contracts had a political impact on shipping decisions around the world within 48 hours, even though no closure orders were issued. Changing the price and terms of risk was enough to halt maritime traffic without a naval blockade.

Washington tried to fill the gap: On March 11, the US International Development Finance Corporation named [Chubb as lead underwriter](#) for a USD 20 billion maritime reinsurance facility, [expanded to USD 40 billion](#) on April 3. Despite this, the measure had [limited effects](#): It covered the Strait but not the surrounding waters, and excluded loss of life and environmental damage, liabilities of greatest concern to P&I clubs and shipowners.

Inserting Taiwan into the Marine Insurance Ecosystem

Taiwan lacks institutional channels with key decisionmakers. The JWC works with security advisers, officials and shipping companies, but Taiwan has no standing in the process because it is not formally recognized by most European institutions. Despite this, Taiwanese companies Evergreen, Yang Ming, and Wan Hai rank [among the world's larger carriers](#). However,

in the first week of a crisis, private entities acting in their own commercial interests would decide whether LNG carriers keep sailing, as their choice would be based on Beijing's capacity to exert influence and coercion.

This gap does not necessarily imply bad faith from insurers. Governments have used insurance as a tool of coercion for more than a decade: In 2012, the [European Union banned P&I cover for Iranian oil cargoes](#); and [Security Council Resolution 2321](#) (2016) prohibited insurance for North Korean vessels. Thus, the PRC knows how these mechanisms work.

A permanent forum could close the gap. It should bring American, Taiwanese, British, French and Nordic officials together with the JWC, the International Group, and the main war-risk underwriters. The purpose is to ensure that the committee knows what escort plans, port measures and public guarantees are actually available in the Taiwan Strait, rather than relying on signals Beijing sends. It could be based on the example of [counter-piracy coordination off Somalia](#), where governments and industry representatives met and the London market [adjusted its Listed Areas](#) as conditions changed.

Opportunities for US-Taiwan Collaboration

The US government also needs a public backstop before a crisis. Senator Pete Ricketts's [Taiwan Energy Security and Anti-Embargo Act](#), [reported out of committee](#) in January 2026, and Representative Pat Harrigan's [companion House bill](#) would authorize the US Maritime Administration to insure foreign-flagged vessels carrying critical goods to Taiwan if commercial cover were withdrawn.

Nevertheless, a Taiwan facility would have to cover the approaches, adjacent waters, crew liability, and environmental damage from day one—and not two weeks later, as it happened in Hormuz. This facility would also have to state in advance how public insurance operates when the five-powers clause ends commercial cover, as this cannot be improvised during a quarantine.

Taiwan should be part of those preparations, whether or not it is formally recognized: information about terminal resilience, escort plans, and grid capacity would affect an underwriter's assessment. Taipei could also negotiate in advance with LNG suppliers and their European insurers on the conditions under which deliveries would continue, which is more cost-effective

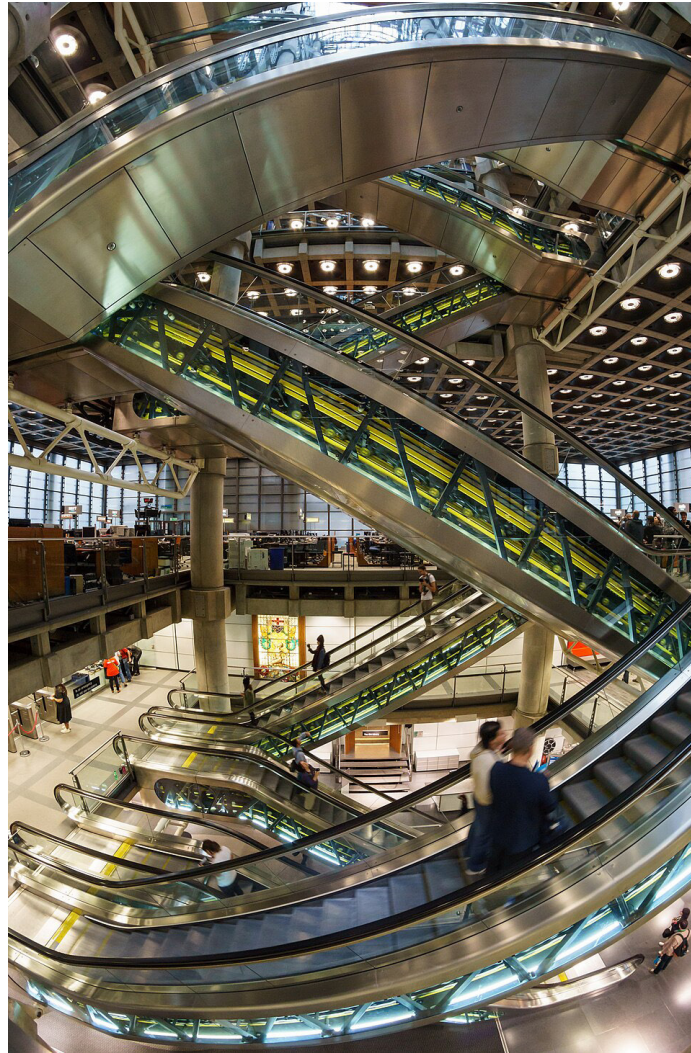


Image: An interior shot of the Lloyd's Building in London, headquarters of the maritime insurance conglomerate Lloyd's of London (Sep. 2014). (Image source: [Wikimedia Commons](#))

before a crisis.

Marine insurance should be part of Taiwan's agenda when engaging with Europe, alongside semiconductors. Even though insurers and shipowners did not formally acknowledge the closure of Hormuz in 2026, the events that followed made the Strait unusable for most commercial traffic. Taiwan should start coordinating with the committee in London now to establish a strategy ahead of any future contingency.

The main point: Decisions by war-risk underwriters in London could halt LNG deliveries to Taiwan before any naval blockade, as the 2026 Hormuz crisis has showed. Taiwan has no channel to the committee that lists high-risk areas, and a war between the United States and the PRC would end commercial cover automatically. Taipei and Washington should open a stand-

ing dialogue with the London market now, and define in advance the public insurance that would take over.



Image: Rescue workers and equipment near the dangerously-leaning Uranus Building on Xuanyuan Road in Hualien City, in the immediate aftermath of the April 3, 2024 Hualien earthquake. (Image source: [ROC Presidential Office / Wikimedia Commons](#))

“Last Year We Needed Volunteers, This Year We Need Tourists”: Reviving Post-Disaster Tourism in Eastern Taiwan

By: Laura Bonsaver

Laura Bonsaver is a Taipei-based foreign policy researcher and consultant. She has been interviewed on the radio and delivered talks in renowned institutions, including UNESCO and the University of Oxford. Her work has focused on EU, US, China, and Taiwan relations, with a particular interest in soft power and geopolitical discourse. She also works as Director of London China Watchers. She is currently working on a short independent documentary on post-disaster recovery in Hualien.

Long after a town rebuilds itself, its image can remain stuck in the past. Potential visitors may view the place

through outdated images and previous disaster headlines. Without enough reassurance or incentives, they steer clear for longer than necessary, forgetting that the place was, and still can be, a holiday destination. This phenomenon results in a delayed, less visible disaster for residents and businesses whose livelihoods depend on tourism.

Hualien County stretches over the northeastern coast and valleys of Taiwan. The area’s economy relies on the tourism industry, which has been set back due to a history of natural disasters. For Hualien, that sector accounts for [around 40 percent](#) of the county’s employment and output value. A township within this county, Guangfu, is grappling with a particularly prolonged downturn in visitors, having weathered both the [tourism fallout of a regional earthquake](#) in 2024 and the physical [devastation of floods](#) in 2025.

Through interviews with locals and first-hand re-



Image: Volunteer EMT workers treat wounds in Guangfu Township (Hualien County) in the wake of massive flooding that caused extensive damage throughout the area. (Image source: [Central News Agency / YouTube](#))

search, this piece explores the experiences of residents struggling to rebuild a town's appeal post-disaster, and examines the government's efforts to support tourism recovery to date. It also details what further steps the government should take to genuinely revive the economy.

This case study reveals the long-term realities of post-disaster reconstruction and the scale of government intervention needed to re-energize a local economy. It also raises wider questions for Taiwan's resilience on the international stage: how can a destination maintain visitor confidence when natural disasters—and broader perceptions of danger—threaten tourism?

A Township Defined by Headlines

Guangfu Township, nestled in the East Rift Valley of Hualien County, Taiwan, was long known for its rural scenery, cycling routes, and indigenous culture. International tourists drawn in by Taroko Gorge, the region's main tourist attraction in north Hualien, would make their way down the valley, stopping by Guangfu to enjoy the view and rest in the nearby hot springs. But in the last two years, the area's tourism industry has been severely tested.

In April 2024, the Hualien earthquake dealt the first

blow. Taroko Gorge was considerably damaged by the earthquake, and the highway connecting Taipei and Hualien was temporarily blocked. Images of a collapsed building in Hualien City were displayed on front pages of [major global news outlets](#). The number of [international visitors to Taiwan plummeted](#) and domestic visitors redirected their holidays away from Hualien. No township south of the gorge was spared the impact of the drop in tourism.

This said, Guangfu was not amongst the most severely damaged areas, being situated one hour south of Hualien City by car. Residents experienced strong tremors and buildings sustained structural impacts, although the extent of the damage was not as severe as in the urban areas to the north. Much of this part of Hualien County is made up of low-rise houses surrounded by rolling farmland and mountains. The region was fortunate to largely avoid the scenes of destruction in Hualien City that dominated the news.

Nevertheless, the widely broadcasted images of the city contributed to a perception that the whole county was devastated and therefore unsafe to visit. This viewpoint remained long after the highway was opened to visitors again.

In 2024, the National Tourism Administration (交通部觀光署) offered [subsidies for six months following the](#)

[earthquake](#), in order to stimulate tourism recovery in Hualien. This included the “Hualien Independent Travel Accommodation Subsidy” (花蓮自由行住宿補助), featuring an NTD 1000 (around USD 30) rebate on the first night, with an additional NTD 1500 (around USD 47) provided on the second. This was combined with discounts on [charter flights](#), [shuttles](#), amusement parks and local products. With Taroko Gorge still shut, the county government diversified regional branding, releasing the video, “[On the Way to Eastern Taiwan: Travel Freely with Peace of Mind](#),” and hosting international marketing shows alongside local spotlight events such as the 2024 World Bicycle Day. These initiatives reportedly helped tourism activities in Hualien [reach pre-earthquake rates from 2025](#), though it is unclear what proportion of these numbers trickled down to townships in the south, such as Guangfu.

However, in September 2025, just as tourists were returning to the region, Guangfu Township faced a second blow which left a more devastating impact to the community. The overflowing of a nearby barrier lake caused flash floods, which sent mud and debris into homes and businesses. The floods also left many stranded after a [lack of comprehensive evacuation notices](#) caught locals off guard.

Fellow citizens arrived in extraordinary numbers to aid in cleanup efforts, with an estimated [30,000 volunteers appearing](#) on September 27, and tens of thousands more in the following weeks. Li Jen-i (李仁義), the owner of breakfast shop Yonghe Doujiang (永和豆漿) in Guangfu, recalls their arrival after his shop’s cooking equipment had been washed away: “It brings tears to my eyes to remember. The warmth of Taiwanese people, you never forget that.” [1]

The government emergency response was swift. The Legislative Yuan (立法院) passed a NTD 27 billion (USD 859 million) [special budget](#) to rebuild parts of the township damaged by the floods, and offered temporary housing, reconstruction loans, and cleanup subsidies to victims. The county government dispatched [790 mud removal trucks](#) and cooperated with the bike rental company YouBike to temporarily [install bike stations](#).

When I visited a year later, the relief efforts of both government and private charities had significantly reduced the physical damage of the floods. Many businesses have reopened and locals await the return of visitors.

But now, a less visible crisis is unfolding in Guangfu. Many tourists still skip the township, deterred by the

lingering perception that conditions there are wet and muddy at best, or dangerous at worst. Ongoing disaster-related reporting continues to dominate the media, re-enforcing the perception of Guangfu as a township still in devastation. Locals are therefore struggling to keep their businesses afloat.

Rebuilding public confidence in the township as a tourist destination is a challenge residents cannot shoulder alone. It will require a different kind of targeted, strategic support from the government.

Tourist Restoration Policies Beyond Physical Recovery

Two challenges remain when it comes to sustainably revitalizing Guangfu’s economy. First, government funding in Guangfu has so far prioritized the concrete efforts of physical restoration over the more abstract needs of tourism recovery. The initial response to the floods by both the central and county governments was remarkable in both speed and scale, with [much of Guangfu’s physical infrastructure restored](#) in under a year. Now, government support should extend beyond emergency relief and employ a strategic approach to sustaining the long-term survival of local industries.

“People might have their homes again, but what can they do with no livelihood? We need further government support to promote the township and help our businesses get back on their feet,” says “Uncle Tien” (田克靚), owner of Uncle Tien’s Guesthouse (見青小築民宿), whose monthly revenue has been down by 50-80 percent since the autumn of 2025. [2]

Second, Guangfu has received limited visibility within Hualien’s wider tourism promotion efforts. The county government has continued since 2024 to launch [tourism marketing campaigns](#) to attract international and domestic visitors to the region. However, initiatives tend to be concentrated on north Hualien County and Hualien City.

A staff member managing tourism affairs at the Guangfu Township Office (光復鄉公所) confirmed to me that while the office is keen to promote Guangfu’s tourism assets, there are currently no county-level initiatives aimed at helping Guangfu boost the industry. Local officials are committed to revitalizing tourism but seemingly lack the resources and funding required to conduct sustained, large-scale promotional efforts. [3]

It is understandable that Hualien’s tourism efforts were focused elsewhere while Guangfu was still undergoing extensive physical restoration. With the



Image: “Laoye” (盧政惠) and “Juju” (陳慧秋), the proprietors of “Breadfruit B&B” (麵包樹舍) in the town of Guangfu (Hualien County) (July 2026). (Image source: Author’s photograph)

township now largely cleared, though, there is a stronger case for requesting additional funding from the county or central governments for campaigns that put Guangfu at the center of tourism promotion.

A Focused Strategy for Restoring Tourist Confidence

With the help of county and central government, a tailored tourism-recovery framework could be coordinated for the township. This could include:

- More accurate, balanced information on conditions and daily life on the ground.
- Coordinated travel campaigns and incentives.
- Investment in tourism infrastructure.

First, more widely publicized information on the township’s recovery and travel conditions will help accelerate the shift in perceptions. Clear, sustained, and positive communication about regional safety and accessibility, as well as regular local government broadcasting of daily life and cultural events will rebuild the public’s trust. This includes both earthquake-related safety assurances and post-flood recovery stories.

“Many people worry that it is unsafe here. But the government has done a great deal to ensure our buildings are secure. Clearer public information on

this would help reassure visitors,” says breakfast shop owner Li Jen-i. [4]

“Guangfu has recovered quickly from the floods, and life has largely returned to normal for many residents. We hope that coverage of the township can better reflect that reality,” say Laoye (盧政惠) and Juju (陳慧秋), guesthouse owners of Breadfruit B&B (麵包樹舍). They add: “People forget how accessible and peaceful this part of Taiwan is as a holiday destination.” [5]

Indeed, despite media coverage focusing primarily on areas under construction, a [notable portion of the township](#) was not touched by the floods. The main tourist attractions remain open here, such as the [Matai’an Xinlǔ Farm \(馬太鞍欣綠農園\)](#), where visitors can learn about the indigenous ecological knowledge of [the Amis indigenous people \(阿美族\)](#); and the [Guangfu Sugar Factory \(光復糖廠\)](#), which dates back to the [Japanese period](#). Without this information to counter negative news coverage, many continue to assume Guangfu is a no-go zone.

Second, to effectively promote the township nation-wide and beyond, Guangfu needs the resources of a coordinated government-backed tourism promotion program. Eye-catching marketing campaigns

showcasing the area's rural charm and scenery could be rolled out on social media and displayed in trains, underground (MRT) stations in cities nationwide, and international airports in both Taiwan and abroad. To provide additional financial incentives for people to visit, subsidized travel packages and discounted transport tickets, akin to Hualien County's post-earthquake discounts, could be reintroduced and adapted for Guangfu.

If the county's existing tourism campaigns elsewhere in Hualien County are indeed proving effective, the wheel does not need to be reinvented. Government officials can build on existing initiatives and direct them where the region requires further support.

Policy lessons can also be taken from abroad. Following the 2019-2020 bushfires in Australia, tourism hotspots across New South Wales struggled with [avalanches of cancellations for months](#). Similarly, following the [2016 Kumamoto earthquakes](#), towns in Japan experienced protracted slumps in tourism. In both cases, [government-funded campaigns and incentives](#) helped boost the recovery of the tourism industry, which encouraged people to travel in an ordinary fashion, rather than to see residents solely as victims needing support.

Third, travel promotion and incentives in Guangfu could be matched with continued investment in tourism infrastructure. While the township is [easy to reach by direct train](#) and car hire is convenient, the government can pursue further investment in a number of transit methods to enhance the township's accessibility. These include expanding bike hire options, improving bus services, and introducing shuttle buses between local attractions. Taiwan already [boasts 84 shuttle bus routes](#) country-wide. Until Guangfu enjoys better transport services, reliance on car travel will create barriers for those who cannot drive or who do not hold driving licenses.

Taiwan has a strong track record of strategic tourism promotion and infrastructure development. A clear tourism roadmap would build on the government's existing strengths, putting its tools to work for a township in need of greater support.

Lessons in Post-Disaster Recovery for Taiwan and the World

Cases of natural disasters in Guangfu have shown that while physical restoration can take place remarkably quickly, the harder task is ensuring that local industries recover long-term. This experience can offer

lessons that extend well beyond Taiwan. As climate change intensifies the frequency and severity of extreme weather worldwide, governments will increasingly be required to consider the protracted effects of these occurrences on local communities. Building strong strategies to ensure long-term recovery is crucial.

Taiwan, meanwhile, has particular reasons to strengthen its capacity for resilience. Its exposure to natural disasters, as well as ongoing concerns over geopolitical tensions in the Taiwan Strait, means that the government is constantly contending with international perceptions of a nation in danger. Taiwan needs to be able not only to rebuild industries after crises, but also to continuously reassure visitors that the country remains a safe and appealing destination. Guangfu offers a smaller-scale opportunity to test how strategic information sharing, combined with promotional tourism campaigns and incentives, can help reshape perceptions of a disaster-affected destination.

The main point: Effectively reviving a local economy post-disaster and rebuilding its appeal to tourists requires a long-term, targeted approach from government. This includes strategic information sharing, promotional tourism campaigns and incentives, and infrastructure building. This case study of Guangfu, Hualien County—one year after devastating floods—sheds light on the necessary scale of government intervention and the pertinence of strengthening Taiwan's tourism resilience both regionally and nationally.

[1] Author's interview with Li Jen-i (李仁義), the owner of breakfast shop Yonghe Doujiang (永和豆漿), July 25, 2026.

[2] Author's interview with Uncle Tien (田克靚), owner of Uncle Tien's Guesthouse (見青小築民宿), July 26, 2026.

[3] Author's informal interview with Guangfu Township local official, July 24, 2026.

[4] Author's with Li Jen-i (李仁義), the owner of breakfast shop Yonghe Doujiang (永和豆漿), July 25, 2026.

[5] Author's interview with Laoye (盧政惠) and Juju (陳慧秋), guesthouse owners of Breadfruit B&B (麵包樹舍), July 25, 2026.

Acknowledgments: The author thanks Uncle Tien (田克靚), owner of Uncle Tien's Guesthouse 見青小築民



Image: Local officials in Pingtung County (southeastern Taiwan) pose with a shipment of various fruits— mangoes, lychees, and dragon fruit—bound for shipment to Europe under the terms of new trade agreements with the European Union (June 2026). (Image source: [Central News Agency](#))

宿; Laoye (盧政惠) and Juju (陳慧秋), owners of 麵包樹舍 Breadfruit B&B; and Li Jen-i (李仁義), owner of a breakfast shop Yonghe Doujiang (永和豆漿) for their time and insights during interviews for this article.

Fruit at the Forefront of a Trade and Diplomatic Push

By: Hope Ngo

Hope Ngo has worked for over two decades as a journalist covering regional politics and business for organizations including Bloomberg Television, CNN International, and NBC Asia. She obtained her Master of Social Sciences in Media, Culture, & Creative Cities (with Distinction) from The University of Hong Kong, and is a Salzburg Global Fellow. Ms. Ngo is currently a news anchor at International Community Radio Taipei and is host of the program Taiwan Talk.

Shoppers in the United Kingdom and France got a treat when supplies of fresh fruit from Taiwan found their way onto their supermarket shelves [for the first time this year](#). The first batch, a mixed shipment of premium Irwin mangoes from Tainan and black-leaf lychees from Taichung, cleared customs in the British city of Manchester in early June. [Taiwan's mangoes also arrived in France shortly thereafter](#), enjoying overwhelming popularity among French consumers despite the astonishing price tag of \$29 USD per fruit. In less than a month, more than four tons of the fruit were sold out.

Getting an official permit to send Taiwan produce into Europe's highly protected customs area is a complicated process. The region's produce-related import regulations are highly restrictive, as they cover everything ranging from labelling and pesticide exposure, to how the produce [can be marketed](#). Therefore, it marked a great achievement when the Taipei Representative Office in the European Union (EU) and Belgium [announced in 2025](#) that it had received [clearance](#)

[for mango and guava imports](#), after “years of negotiations and technical preparations.” Approvals for lychees and dragon fruit followed eight months later.

Europe was not the only challenging destination for Taiwan’s fruit exports. Taiwan’s officials in agricultural sectors also sought to export pineapples to New Zealand. The endeavor began with the signing of the Agreement between New Zealand and the Separate Customs Territory of Taiwan, Penghu, Kinmen, and Matsu on Economic Cooperation (ANZTEC, 紐西蘭與臺澎金馬個別關稅領域經濟合作協定) in 2013. [Eight years of bilateral negotiations](#) on the amendments to ANZTEC finally opened New Zealand’s doors to premium Taiwan pineapples. In May of 2025—two years after the ANZTEC revisions were approved—the first batch of Taiwan’s pineapples arrived in the New Zealand market.

Reducing Dependence on a Single Market

In 2010, around the time of Taiwan’s accession into the World Trade Organization (WTO), the island’s fruit began [losing competitiveness](#) in many of its traditional markets, which [included Japan and the Philippines](#). As Taiwan’s agricultural industry scrambled in the face of new international competition, the Cross Straits Economic Cooperation Framework Agreement (ECFA, 海峽兩岸經濟合作架構協議) created an opportunity for Taiwan’s fruit, resulting in a [huge jump in exports into a single market](#): China.

ECFA was a gift for Taiwanese farmers. Two years after it was promulgated, Taiwan’s total agricultural exports [increased](#) more than eight percent. Particularly, fruit exports to China grew 42 percent; and produce on the early harvest list, such as bananas, hami melons, lemons, and red dragon fruits, surged 42 percent compared to 2007.

Nevertheless, the agricultural trade protected by ECFA did not last. In February and September 2021, [China abruptly ended its imports](#) from Taiwan—first pineapples, then sugar apples and wax apples—claiming that inspections had discovered citrus mealybugs in a number of shipments.

ECFA critics say China was not a viable long-term market to begin with. China started growing and cultivating what used to be Taiwan’s signature fruits, [eroding demand](#) for Taiwan’s exports. Additionally, Beijing began to use fruit imports as a figurative stick to bring Taiwan to heel. Huai-Shing Yen (顏慧欣) of the Chung Hua Institution for Economic Research (中華經濟研究院) had [warned](#) of the need to reduce Taiwan’s re-

liance on the Chinese market, writing that: “The high concentration structure (of exports to China) makes it certain that the import restrictions will have a commercial impact on relevant farmers in Taiwan. As such, China’s actions to restrict imports are loud reminders of the vulnerability that this ‘export dependence’ causes for these agricultural products.”

Yen also warned that even if Taiwan had sought to seek redress for China’s actions through the WTO, China “would not be obliged to enter consultations or negotiations with Taiwan.” Instead, Taiwan should seek alternatives, more reliable markets for its products. Weeks after China’s sugar apple and wax apple ban, the then-Council of Agriculture (COA, 行政院農業委員會) [announced a strategy](#) that sought to capitalize on existing and potential demand for Taiwanese fruit both inside and outside the country.

Cold Chain Logistics: The Unsung Hero

Today, Taiwanese fruit is sold at a premium in super-markets and specialty retailers in numerous countries, such as Japan, South Korea, Australia, Canada, Singapore, Hong Kong, Malaysia, Brunei and Palau—but the produce would not have made it beyond its shores without advancements in Taiwan’s cold chain logistics industry.

The Industrial Technology Research Institute (ITRI, 工業技術研究院), a non-government R&D organization [that incubated Taiwan’s semiconductor industry](#), has been dedicated to the development of [cold chain logistics](#) since the 1990s. Janet Chen (陳慧娟), General Director of ITRI’s Service Systems Technology Center, told this author that there are similarities to transporting fruit and semiconductors, as they both have strict requirements in temperature, humidity, and cleanliness: “Agricultural products must be kept within appropriate temperature and humidity ranges to slow deterioration and preserve freshness and nutritional value. Semiconductor components may also be sensitive to temperature and humidity. Clean storage and transportation environments help prevent cross-contamination and microbial growth in agricultural cold chains. Semiconductor manufacturing requires exceptionally clean environments because even microscopic particles can cause defects.”

Chen adds: “Freshness is a major source of value for agricultural products, making timely delivery essential. Semiconductor supply chains also require fast and reliable transportation because delays may lead to missed business opportunities, inventory shortag-

es, or production disruptions. Agricultural cold chains require traceability from farm to table to support food safety and quality control.” [1]

Government Ensures Taiwan’s Fruit is Compliant

The Ministry of Agriculture (MOA, 農業部) has also ensured that fruit exports comply with regulations that differ from territory to territory. For instance, mangoes heading to Europe must be [subjected to heat treatment](#) to kill off any pests or microbial hitchhikers, while pineapples bound for New Zealand must be harvested [at a specific life stage](#). This is not to mention the various pesticide standards set in overseas markets.

To support Taiwan’s farmers, the MOA and local governments in 2024 [inaugurated a processing park in Yujing District](#) in Tainan, which can process mango and pineapple to meet international standards. Its Produce Processing and Cold Chain Logistics Center (玉井農產加工及冷鏈物流中心) is equipped with pre-cooling, processing, refrigeration, and freezer zones capable of processing as much as 800 tons of mangoes a year.

External uncertainties highlight the significance of transport quality control. Kris Tang, General Manager of fruit exporter Sunray Fresh (昇睿鮮農), revealed to this author that during their first commercial shipment, fruit travelled via Frankfurt in the midst of a staffing shortage and a heat wave. “The mango and lychee could not be placed on the same onward flight to the UK and had to arrive separately. (By then), our priority was not simply to preserve the original schedule, but to protect the quality and integrity of the products.” [2]

Gaining entry into Europe’s market is a good start—but more needs to be done if Taiwanese farmers are to cut their reliance on the Chinese market entirely. [Focus Taiwan](#) has reported that the Taiwan still sold USD 370 million worth of fresh fruit to Hong Kong and China from 2020 to May 2026, while exports to Japan totaled USD 199.4 million during the same period.

But exporters know that getting a foothold is just the first, albeit critical step. Tang told this author: “The first shipment was important, but it was only the beginning. What matters is whether we can create a repeatable and commercially sustainable route that allows more Taiwanese fruit and agricultural products to enter the UK and, eventually, the wider European market.” [3]

The main point: Taiwan’s move away from relying on a handful of traditional export markets like China has opened new doors for its fruit exports. That pivot, which also resulted in new technological innovation within Taiwan’s cold-chain logistics system, opened new markets in Europe for Taiwan’s mangoes and lychees. Developing its fruit market has also paved the way for Taiwan’s exports beyond high-tech products.

[1] Author’s interview, summer 2026.

[2] Author’s interview, summer 2026.

[3] Ibid.

A Taiwanese Youth’s Perspective: TSMC’s US Expansion and the American Dream

By: Aaron Tien

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Producing more than [90 percent](#) of the advanced chips powering AI development, Taiwan Semiconductor Manufacturing Company (TSMC, 台灣積體電路製造公司) has significantly elevated Taiwan’s strategic importance in global affairs. In recent years, cognitive influence operations have nonetheless fueled fears among many older Taiwanese that TSMC’s overseas expansion could cost Taiwan economic benefits, strategic leverage, and talented engineers. Younger Taiwanese like myself, however, may see these concerns as overstated. [TSMC](#) has repeatedly emphasized that its most advanced research and development (R&D) capabilities will remain in Taiwan, and that the island will continue to serve as the heart of the company’s technology development and global production network.

Taiwanese should not be concerned about TSMC expanding its production in the United States for three main reasons. Firstly, this expansion allows TSMC to better serve leading-edge US customers and grow its business opportunities. Secondly, diversifying production away from Taiwan helps reduce environmental strains and geopolitical risks, and strengthens the stability of the semiconductor supply chain. Finally, TSMC’s international development plans enhance Taiwan’s global presence and strengthen connections with partners around the world.



Image: TSMC Fab 21 under construction in Phoenix, Arizona (November 2023).

(Image source: [Wikimedia Commons](#))

Market Access, Government Subsidies, and Downstream Supply Chain Benefits

Although there are valid concerns about the high cost of building and producing semiconductors at TSMC facilities in the United States, it is worth acknowledging the long-term benefit of this activity: providing TSMC with quicker access to customers worldwide. Even though establishing operations abroad entails higher costs, this expansion has proven financially viable, as demonstrated by TSMC Arizona. In 2025 alone, the Arizona fab recorded a net income of [NTD 4.232 billion](#) (USD 135.8 million)—income that, at first glance, may appear to have been full-year data, but was actually made in just one quarter.

One key reason why TSMC Arizona has been successful has been changes in the global market for chips. The United States [relies primarily](#) on Taiwan for the fabrication of leading-edge logic chips. By building more fabs in the United States, TSMC is better able to satisfy the capacity demands of its key customers,

including American companies such as AMD, Apple, Nvidia, and Qualcomm, among others. This enables faster, more personalized customer service, which builds trust and affinity with large companies and encourages them to buy from TSMC in the future.

Beyond customer proximity, the United States government has actively employed legislation to encourage semiconductor companies to build domestically. The US Department of Commerce has awarded [TSMC USD 6.6 billion](#) in direct grant funding under the [CHIPS and Science Act](#), along with access to USD 5 billion in low-interest federal loans. This funding helps offset the higher costs of construction and operation in the US compared to Taiwan. Furthermore, TSMC's American expansion not only builds cross-industry connections, but it also drives a broad chip ecosystem by paving the way for critical Taiwanese suppliers such as the Chang Chun Group and Sunlit Chemical to operate in the United States.

When these anchor fabs move to new land, the entire

material supply network also moves with them, leading to more business opportunities. By empowering these suppliers to expand into global markets, such actions ultimately transfer international investment back into Taiwan's domestic economy. Therefore, continued expansion in the United States represents a strategic investment in TSMC's long-term financial future.

Environmental Risks and Geopolitics

In order to maintain satisfying relationships with customers, TSMC must operate a stable and unbroken semiconductor production line. Some Taiwanese believe that this stability can be maintained at home, yet growing environmental risks and geopolitical realities indicate that relying on production in Taiwan alone is increasingly fragile. Within this context, TSMC's expansion to the United States can help maintain a stable semiconductor production line.

As TSMC continues to expand its production capacity, Taiwan is gradually reaching the limits of its environmental carrying capacity. Semiconductor fabs consume vast amounts of water and electricity. Building more and more fabs in Taiwan will put too much pressure on the power grid. Increasing load will risk energy shortages and infrastructure strain, thus destabilizing production lines not only for TSMC but also for other businesses in Taiwan.

By contrast, locations for TSMC's expansion, such as Arizona, possess far more abundant resources. Arizona has one of the biggest energy grids in the United States, operating [over 6,551 megawatts \(MW\)](#) of installed solar capacity alongside [nearly 3,900 megawatts \(MW\)](#) of battery energy storage systems. Beyond electricity, water is also essential for the semiconductor industry; a single advanced chip factory can consume up to [38 million liters](#) of water per day (an amount approximately equivalent to the daily water usage of a medium-sized city). As a small island with finite resources, Taiwan simply lacks the physical capacity to sustain such immense environmental pressure. Crowding the nation with dozens of new factories would push its fragile water supply to a dangerous breaking point, placing a burden on the everyday lives of Taiwanese citizens.

Moreover, an [earthquake](#) that hit eastern Taiwan in 2024 caused TSMC factories in Tainan to shut down temporarily, as chip fabs are designed to automatically cease production when any tremors occur. For instance, EUV chipmaking machines possess sensors

that detect infinitesimal movements that cannot be noticed by humans; if the EUV machine senses the floor moving, it will shut down completely. Indeed, continuing to print during tremors can blur the circuit lines and potentially result in significant financial losses as wafers must be discarded. Hence, moving factories to locations like Arizona helps mitigate natural disaster risks such as earthquakes and provides a more controllable environment, rendering chip production lines more efficient.

Given the relative availability of land, water, and electrical resources in North America, building factories in the United States may ultimately be beneficial for maintaining the stability of the Taiwanese production lines. By expanding its manufacturing capacity overseas, TSMC can reduce its exposure to geopolitical risks – and, in the event of war, help sustain the industrial capacity of the “arsenal of democracy.” For more than [seven decades](#), Taiwan has faced persistent tensions across the Taiwan Strait, which have intensified in recent years and created significant geopolitical uncertainty. A war in the Taiwan Strait could severely disrupt global semiconductor supply chains, triggering shortages of advanced chips and inflicting [trillions of dollars](#) in economic losses worldwide. If key fabs in Taiwan are damaged or destroyed, rebuilding the lost production capacity could take years. By expanding its manufacturing capacity into the United States, TSMC can help key geopolitical partners like America maintain access to chips during wartime situations.

Soft Power and Continuity

Many Taiwanese argue that TSMC is the “[silicon shield](#)” protecting Taiwan against China. Therefore, they claim that the protection of this shield would be forfeited should TSMC build more factories in the United States. However, I believe TSMC's global expansion can also help Taiwan garner greater international recognition by building stronger connections with local communities overseas. One example is the collaboration between [Japan Advanced Semiconductor Manufacturing](#) (JASM) and the TSMC Education and Culture Foundation, which brought [Taiwan's One-Song Orchestra to Kumamoto for a cultural concert](#). When locals connect with Taiwanese culture through these activities, it transforms Taiwan from an unfamiliar chip supplier into a culturally rich nation that bonds with local communities on a personal level.

Such community bonds naturally encourage local communities to support strong diplomatic ties between their government and that of Taiwan. Addition-

ally, these community investments extend into classrooms, where local universities partner with TSMC to build a new generation of semiconductor professionals who have been trained through Taiwanese resources. In the context of Japan, cultural exchanges between TSMC and the local community not only strengthen the company's ties with Kumamoto residents, but also help build public support for its overseas expansion. In this sense, TSMC's overseas expansion does more than diversify production—it can also expand Taiwan's international presence and strengthen its ties with key partners around the world.

Many Taiwanese refer to TSMC as the nation's "[Guardian Mountain](#)" (護國神山) because of its crucial role in safeguarding Taiwan's economic prosperity and national security. TSMC's global expansion can strengthen the resilience of the semiconductor supply chain, bring production closer to its customers, expand its business opportunities, create new possibilities for young Taiwanese, and enhance Taiwan's international presence. Some Taiwanese elders may worry that sending engineers to the United States represents a loss of human resources for Taiwan. However, these Taiwanese engineers are not abandoning Taiwan. Instead, they are stepping into global leadership roles and establishing important cross-border industry networks. When these professionals eventually return to Taiwan, they will be able to train the next generation of engineers preparing to go overseas and advance Taiwan's economic prosperity. Expanding into the United States, therefore, does not mark the end of TSMC's role as Taiwan's "Guardian Mountain." Rather, it is a pragmatic step toward ensuring that TSMC can continue to fulfill that role in a rapidly changing world.

One Youth's Perspective

As a junior in the International Bilingual School at Hsinchu-Science-Park, many of my classmates' parents are employed at TSMC. Drawing inspiration from their parents, some have also decided to pursue a career at TSMC. The establishment of TSMC Arizona has encouraged even more of them to pursue this track, and many of my peers are excited about the new job opportunities abroad that have been created. Indeed, these new job opportunities appeal to Taiwanese teenagers who had never yet been able to imagine their part in the "American Dream." Ironically, according to a 2024 [ABC News/Ipsos survey](#) of US adults, public confidence in the American Dream has significantly eroded. Yet, new TSMC subsidiaries in the

United States not only stabilize the production chain but also help revive the long-faded "American Dream" for Taiwanese youth.

The main point: While many commentators in Taiwan suggest that TSMC's expansion to the United States weakens Taiwan's economic and national security, the business decisions may actually prove more economically viable, and relieve pressure on Taiwan's grid and water supply. Meanwhile, the opportunities to work in the United States revive the long-faded "American Dream" among Taiwanese youth.
