



社論：全球化已死？碳稅時代？

「扣件商業生態系」戰略刻不容緩

Editorial-

# End of Globalization? Carbon Tax Era?

## Time is of the Essence for “Fastener Business Ecology Tactic”

From Donald Trump's to Joe Biden's regime, the world enters the era of intense upheaval. We are past the former trade friction between the U.S. and China, the pandemic, and now we arrive at the repercussions of the Russian-Ukrainian war, inflation and US-China tech race. **The past three years are pivotal in mankind history. That is when Hermann Simon, a professor born in Germany who coined the term Hidden Champions, published *Hidden Champions: Ascent and Transformation*— the latest update of his first work. In his updated discourse, he brought up the significance of Taiwan as a resilient nation being a hidden champion. This book devotes two chapters to analyzing Taiwanese hidden champions, showing the importance he attaches to Taiwan's position on the world stage.**

He mentioned Taiwan is highly similar to Germany in terms of hidden champions and industrial structure. Germany tops the world with a number as many as 1,573 hidden champions. Taiwan ranks 8<sup>th</sup> with 105 hidden champions, above China at the 9<sup>th</sup> place with 97 hidden champions. The German hidden champions are nationwide, while in Taiwan, hidden champions exist in multiple industries. Taiwanese fastener industry alone has quite a number of potential hidden champions. Read along as we invite you to look into the present and future of Taiwanese hidden fastener champions in reference of Hermann's perspective.

### Taiwan Has a Strong Economic Engine



According to Hermann's research, the top 3 nations with the highest total export values during 2010 and 2019 are China (USD 20.9 trillion), the U.S. (USD 15.4 trillion) and Germany (USD 13.9 trillion). Taiwan comes in 10<sup>th</sup> with a total export value of USD 3.1 trillion which puts **Taiwan's export momentum in the world's top 10 ranking.** It is even more shocking if we look at the export value per capita, where Taiwan comes in second right after Germany. Based on the statistical data rounded up by Fastener World, **Taiwan exported USD 38.727 billion worth of fasteners from 2010 to 2019 (Figure 1).** It accounted for 1.2% of Taiwan's total export value in the same time range, contributing to a considerable extent to Taiwan's total export value.

### Definition of a Hidden Champion

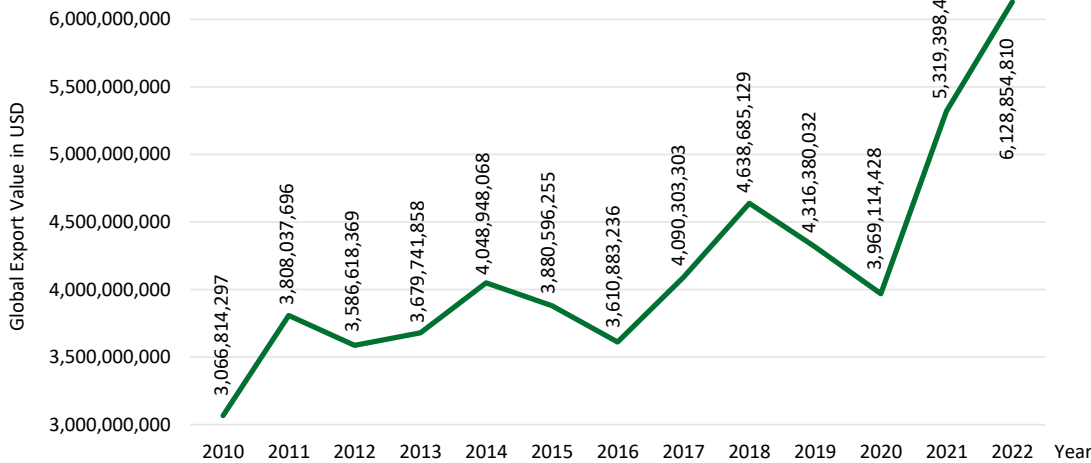


The three requirements that Hermann sets on a hidden champion are:

1. Ranked among the world's top 3 in its market category, or ranked 1<sup>st</sup> on the continent where the champion is located.
2. Revenues below 5 billion euros. (Significantly raised from 900 million euros set in his first book.)
3. Low popularity among the general public.

The top three nations in terms of the number of hidden champions identified by Herman are Germany (1,573), the U.S. (350) and Japan (283). Here, Taiwan comes in 8<sup>th</sup> with 105 and China coming in 9<sup>th</sup> with 97 identified by Hermann. According to *White Paper on Small and Medium Enterprises (SMEs) in Taiwan, 2022*, Taiwan had over 1.59 million SMEs in 2021, accounting for more than 98% of all enterprises. Among them, Taiwan's Ministry of Economic Affairs (MOEA) identified 76 hidden champions. However, by Hermann's definition, the number of potential hidden champions could go beyond the number disclosed by MOEA. **Right in Taiwan's fastener industry there are multiple enterprises with the potential, including Tong Hwei Enterprise (stainless steel fasteners), Jinn Her Enterprise (hexagon bolts), Fang Sheng Screw (hexagon socket screws), QST International (automotive fasteners), Ying Ming Industry (high-strength fasteners), Sheh Kai Precision and Sheh Fung Screws (small construction screws), Bi-Mirth (wood screws), Kwantex Research (wood screws), Jern Yao Enterprises (forming machines) and other dozens of iconic enterprises that I can't all fit into this article.**

Fig. 1. Taiwan's Global Fastener Export Value from 2010 and Onwards



Hermann analyzed and characterized hidden champions into the following features:

1. 80% of them are innovators. Product innovation and process innovation each accounts for half of their business. A corporate culture that encourages innovation, motivating employees to be more committed to innovation and patent applications than other companies do.
2. Low annual employee turnover rate at only 2.7%, with high levels of employee loyalty and satisfaction. Hidden champions do their best to avoid layoffs, which helps gaining international recognition.
3. Putting focus on education and training.
4. Growing persistently but not abruptly or irregularly.
5. The factors driving their growth are globalization, innovation, product pipeline expansion, deepening of value chain, and service expansion.
6. High survival rate.
7. Ambitious and fervent corporate leaders. To them, it's either coming out on top or not starting it at all.
8. Dedication to a specific field. All they think about is productivity. Stable increase in productivity to reduce labor costs per unit.
9. They think globally. Take RATIONAL®, this world leader in commercial kitchen appliance uses 59 languages to spread corporate news.
10. Their market leadership and market shares are earned with excellent performance, not with price-cutting.

Taiwan has quite a number of fastener and related companies with part of the qualities of a hidden champion. One example is Bi-Mirth throwing a large annual budget in innovative R&D, rolling out patent products, renewing certificates that are acquired overseas, and collaborating with Metal Industries Research & Development Centre as well as Industrial Technology Research Institute to enhance metal processing technology. Other than that, Taiwan's fastener industry had its fair share of troubles from domestic price-cutting wars in its early days, and now the majority consensus is to stake on optimized production lines and elevated technology to increase profitability and curb low-price competition.

## The Challenges for Hidden Champions

Last December, former TSMC president Morris Chang declared globalization is dead when he was speaking in a “tool-in ceremony” at Taiwan TSMC’s Arizona plant. According to Hermann’s research, in fact, globalization came to a standstill as early as 2010 in the wake of the Financial Crisis. “This development began long before the presidency of Trump, the BREXIT, increased trade sanctions, and the COVID-incurred disruption of global supply chain. Globalization was following a rocky path,” said Hermann.

One of the challenges for hidden champions is the death sentence on globalization. Hidden champions need free global trade to reach their full potential, and therefore Herman calls out to the world that we need to prop up globalization. However, it is clear that the current international geopolitical and economic landscape has turned global trade into something as “allowing overseas businesses to move across borders to homeland only on condition that such exchanges do not harm current or future national security, technological supremacy and economic leadership” termed by Morris, who continued, “But can this still be considered globalization? Globalization is over and time is up for free trade!”

To that, Hermann put a reminder in his latest book stating that the environment, climate, energy consumption, consumer attitudes, trade frictions, and political tensions may also create new barriers to the growth of hidden champions. He estimates that 1% of hidden champions will be disqualified each year, yet he sees a grand future—digitization, ESG, carbon reduction, and business ecology— that could get them off the hook. I figure fastener readers now coming across these words may be thinking of CBAM in a trial run from this October.

## Tactical Thinking on the Fastener Industry



Sustainability and carbon reduction will be corporates’ ticket into the future international market. The big players are already on it, and that doesn’t spare the small and medium ones as well as hidden champions. The EU has fired the first shot going in on carbon border tax. Will other countries

follow suit to make up for their own financial gaps? No matter how this turns out, it's only a matter of time before the carbon tax era sets in.

Carbon reduction is part of ESG metrics, and therefore sustainability is one of the areas in which Hermann sees great opportunity for hidden champions. He points out that sustainability is mostly hinged on the upstream value chain, raw material sourcing, manufacturing processes, logistics, and the downstream value chain such as recycling, remanufacturing and circular economy also have a significant impact. Each and every process in these two areas is where he believes the hidden champions can bring out their expertise. What does this mean from the fastener industry perspective?

The fastener manufacturing process can be coarsely divided into wire rod processing, head forming, secondary machining, thread rolling, heat treatment, surface treatment, optical sorting, packaging and warehousing, logistics, and it can be broken down into many more processes. Each process has the opportunity to be optimized and reduce carbon emission by introducing digital technology. For example, **Best Quality Wire invented the "Auto Sludge Discharging & Oil Recycling Machine" which separates oil and water sludge from production lines. Their next step is to focus on revolutionary optimization of wire rod manufacturing process by developing a production line that integrates wire drawing, pickling, roughening, finishing, and phosphoric acid coating into a single process. This in a nutshell is process optimization. And if you can even go the extra length to reduce carbon emissions and transportation costs in the logistics process for yourself and your overseas clients, this is what will become a new opportunity in the future.**

Of course, we've also heard voices saying that sustainability upgrade and carbon reduction are costly and resource intensive. It means we need to be more efficient and systematic than ever before to meet the challenge. That's why **Hermann's concept of "business ecology" could be a way out for the hidden champions and even other fastener companies.** To put it into perspective, TSMC has its own huge supply chain that forms a great wall. Suppliers inside the wall follow TSMC on continuous improvement of technology and corporate value. Competitors outside the wall can hardly penetrate or destroy this supply chain. It is what a highly resilient business ecology is.

On a broader perspective, **what if Taiwan's hidden fastener champion is not limited to a single fastener company? What if it can be the entire Taiwanese fastener industry? Even if a Taiwanese fastener company**

**is not a hidden champion just yet, what if it can hop on the trend and jointly contribute to the hidden champion industry?** According to Hermann's definition, an hidden champion's revenue must be less than 5 billion euros. In 2020, Taiwan's fastener industry made a production value of NTD130.9 billion and an export value of NTD121.8 billion, both of which in euro currency meet the definition of a hidden champion in terms of revenue. Furthermore, Taiwan has the most complete fastener supply chain in the world, which meets his first definition of hidden champions. **A small island nation as it is, Taiwan has just gained a lot of media attention on the world stage in recent years due to international political and economic factors. This is the right time for Taiwan fastener industry to promote itself globally while setting out to be a hidden champion.**

This tactic must mobilize all stakeholders, including the government and associations, **to build the Taiwan fastener supply chain into Taiwan Fastener Business Ecology.** The existing fastener supply chain in Taiwan is a different concept from Business Ecology mentioned here. The former is a vertical industry chain, with its own fastener and related enterprises; the latter also includes a horizontal industry chain, with key external industry players that can bring transformational power to the fastener industry, including AI technology, energy-saving technology, smart solution providers, and other providers that you and I don't know now, but they may have revolutionary technologies to help optimize fastener production lines.

This is where fastener associations play the key role as a coordinator. Recently, Taiwan Industrial Fasteners Institute along with Taiwan Fastener Trading Association have been inviting experts to open courses to instruct fastener manufacturers on carbon reduction, an important step in establishing business ecology. We expect the associations to continue to play the role of a bridge to establish contacts from key external industries and introduce high-potential technologies from outside into the fastener industry, thereby accelerating process optimization. In addition, the Taiwanese government has provided subsidies to assist in the transformation, but these measures may not be fast enough. We need the associations and the government to communicate, and **beyond the co-assisting Taiwanese fastener supply chain, they need to collaborate with the outside world on technology exchange and funding. The best long going tactic for Taiwan is deployment from the perspective of fastener business ecology.**

Lastly, I would like to share with you and conclude with a quote from William Liao, president of Fastener World Magazine.



The economy is in a temporary downtrend in recent years. We are very grateful to the government and fastener associations for their support and concern that have enabled us to express the industry's dilemma to the government, but in the end, we have to count on ourselves to survive. I recall a few years ago when I went with a group to a golf course in a southern Japan countryside to play golf. The course used be surrounded by factories and had its heyday, but went down with Japan's 30-year stagnant economy. Now those factories have relocated overseas and the younger population have left their hometown. The golf course is left withering away. I found the youngest staff of the course in their fifties, and others in their eighties still in service. Now the golfers are mostly middle-aged or senior. The young and middle-aged people are mostly out of hometown working and only occasionally return from all over Japan or other countries to this course to play on holidays. That's why business is waning for this golf course. Plus, their equipment is a bit old.

In all fairness, excluding the high-tech industry, Taiwan fastener industry can count as one of the world's top hidden champions, but with major technology parks completed and now in mass production in southern Taiwan, Taiwan fastener industry will be confronted with the issue of talents being drawn to high-tech enterprises, let alone higher green power price and labor costs. Are Taiwan fastener owners truly ready for unmanned manufacturing and an aged population turning up in about 10 years? This'll be for them to answer and act on.

