

BUSINESS SWEDEN



TAIWAN'S TURNING TIDE

EXPLORING THE NEXT HORIZON FOR ASIA'S
HIDDEN MANUFACTURING POWERHOUSE

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EXECUTIVE SUMMARY

Taiwan's manufacturing competence and footprint is often underestimated. This island off the coast of China is where some of the world's most high-tech goods are produced, and it is home to global OEMs and ODMs headquartered here. Taiwan is also a very important investor in both China and Southeast Asia.

Given new realities on the ground in the APAC region – from trade barriers to shifting labour costs, digitalisation and increased demands on sustainability – Swedish suppliers have a new role to play in helping Taiwanese manufacturers manage change.

Sweden has more global manufacturing companies per capita than any other country in the world. These Swedish companies, and the sub-suppliers that enabled them to thrive, are experts at providing innovative and high-tech equipment, solutions and services where productivity and sustainability go hand in hand.

The purpose of this report is to reflect on the impact of recent trade war developments on the APAC supply chain in relation to Taiwan's manufacturing base in Asia. In addition, Business Sweden provides strategic recommendations for how Swedish companies can match their offering to the fast-changing needs of Taiwanese manufacturers.

The report provides analysis and insights into the following topics:

1. Taiwan's key manufacturing sectors
2. Overview of Taiwan's FDI and manufacturing output in China, South East Asia and India
3. The impact of trade wars and the Southbound Policy
4. Purchasing needs and trends among Taiwanese manufacturers in key sectors
5. Opportunities for Swedish companies and recommendations for approaching Taiwanese companies in Asia



VLAD MÅNSSON
Market Manager, Taiwan

TAIWAN: A HIDDEN POWERHOUSE IN ASIA'S SUPPLY CHAIN

Made in Taiwan was once among the most familiar product tags in the world. From the 1960s and onwards, this label would come to represent the island's robust manufacturing capacity and, by 1990, Taiwan had cemented its position as one of the four Asian Tiger economies. While other fast-growing Asian economies went on to attract global attention, Taiwan has remained an influential player and now has a GDP per capita that is among the top 30 in the world.

That said, despite an accelerating tech sector, many of Taiwan's recent achievements have been hidden from view with much progress taking place behind the scenes – particularly in the manufacturing arena. For example, only a minority of people are aware that Taiwan is home to more suppliers of components for the Apple iPhone than any other market or country.

When it comes to the ICT scene, Taiwan offers integrated supply chains and significant manufacturing capabilities for hardware. According to Thomson Reuters,¹ 13 of the top 100 Global Technology Leaders are Taiwanese companies, which is the second highest ranking after the United States.

SEMICONDUCTORS: THE BEDROCK OF TAIWAN'S ICT SCENE

The semiconductor industry is the foundation of Taiwan's ICT value chain where IC (Integrated Circuit) foundries require intensive capital investment. No fewer than 11 of the 13 companies featured in the Thomson Reuters ranking are in the semiconductor business including ASE, Nanya, TSMC, UMC, Powertech and the OEMs/OMDs Pegatron,

Wistron, Lite-On, Qisda, Quanta Computer and Siliconware Precision Industries, as well as the laptop computer brands Acer and Asus.

Taiwan is ahead of other markets in terms of state-of-the-art semiconductor technology. The IC foundry manufacturing sector accounts for almost 70% of the global market share which underpins Taiwan's strong position in the semiconductor market. TSMC – the global leader in IC foundry – has more than 50% of global market share and is an important manufacturing partner for global brands such as Apple, AMD, Nvidia, Qualcomm and Huawei.² In 2019, the company invested USD 1 billion to build the world's first 5 nm semiconductor factory in Taiwan.

For PCs and other laptops, Taiwanese OEM and OMD manufacturers have strong partnerships with global ICT brands such as Dell, HP, Intel and Microsoft. But that's not all. Tech giants including Facebook, Amazon and Google all source from Taiwanese suppliers for servers, power systems, industrial PCs for data centres and smart warehouses.

Moreover, Microsoft, AWS and Google have announced plans to invest in AI and large-scale data centres in Taiwan, as a way of leveraging the benefits of Taiwan's highly skilled talent base and integrated value chain in ICT manufacturing.



TAIWAN A KEY SUPPLIER FOR APPLE'S IPHONE

According to Apple's list of the top 200 suppliers of 2019,³ Taiwanese manufacturers account for 46 of those companies. This is the highest share of all supplying countries surpassing China (41) and USA and Japan (38). Thanks to a broad spectrum of suppliers covering OEM manufacturing, semiconductors and other key components, Taiwan is closely tied to the Apple supply chain.



TAIWAN'S KEY SUPPLIERS FOR IPHONE, 2019

OEM MANUFACTURING	Foxconn, Pegatron, Quanta, Wistron, Compal, Inventec
SEMICONDUCTOR	TSMC, ASE
CAMERA	Largon Optronics, GSEO
COMPONENT	Catcher, TPK, Yageo, Delta, Merry, Foxlink

A DIVERSE LANDSCAPE: FROM FUNCTIONAL TEXTILES AND BICYCLES TO AUTOMOTIVE PARTS

Taiwan's high-tech manufacturing capabilities cover a diverse landscape and functional textiles is a good example. In this field, Taiwan has captured no less than 70% of the fast-expanding global market which, in turn, accounts for 10% of the total textiles market.

Although Taiwan did not have a team competing in the 2018 FIFA World Cup in Russia it was widely represented on the playing fields. The uniforms worn by the athletes from the vast majority of the 32 participating nations were made by Taiwanese companies, most notably for prominent international brands such as Nike and Adidas.

Taiwan has also been a major supplier of fabrics made from recycled materials, mainly PET bottles. About 50% of these materials are now recycled. This share is expected to increase to 60–70% in the next few years as increased environmental awareness continues to drive international demand.

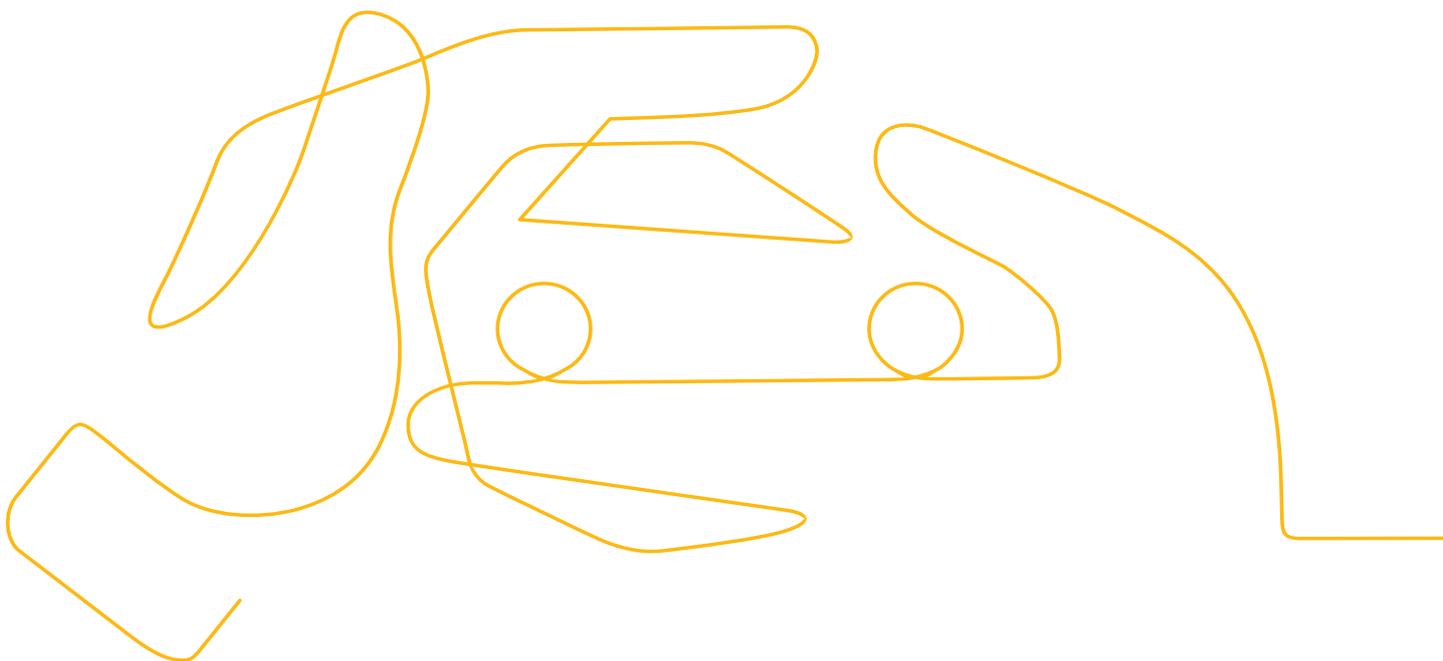
Bicycles is yet another interesting segment. Accounting for over 50% of medium- and high-end bicycle manufacturing globally, it is no coincidence that Taiwan is known as “the bicycle kingdom”. Millions of bikes are built every year either in Taiwan or in Taiwanese-owned factories such as Giant and Merida.

Automotive parts is undoubtedly an important sector for Taiwanese players. Here, globally competitive SMEs export parts to the big car manufacturers worldwide, offering a broad portfolio and high flexibility in their sales approach. Taiwan is also well-positioned in the global shift toward electric vehicles thanks to its robust ICT manufacturing capability. Some 20 Taiwanese companies are key suppliers of components for the Tesla Roadster model.

Taiwan's competitiveness and importance on the world stage is only expected to grow. By forging strong relationships with many of the world's most innovative and valuable brands, Taiwanese companies have staked their claim as frontrunners in the field of high-tech manufacturing.



Giant Manufacturing, the famous bicycle brand, invested USD 17 million in Taiwan to build a new automated production line in Taichung, Taiwan.



HELPING TESLA BREAK GROUND IN E-MOBILITY

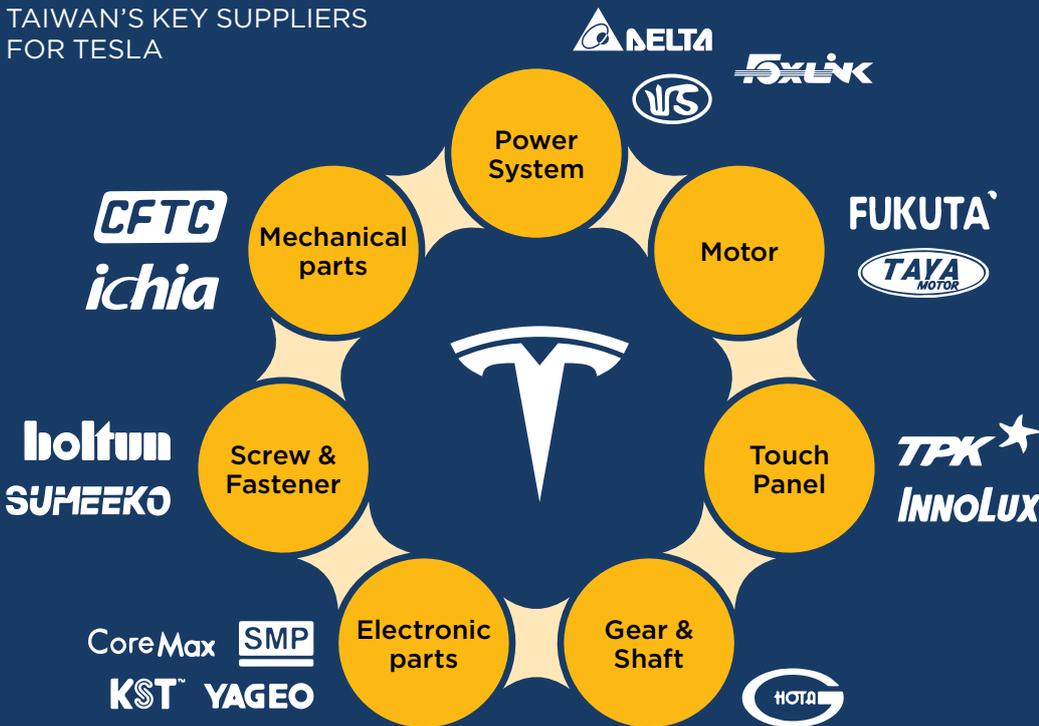
In the days when Tesla was virtually unknown in the automotive industry, the company was struggling to break into the tightly knit automotive supply chain. Tesla then sent a team of engineers to Taiwan to look for parts and components for its first commercial vehicle - the Tesla Roadster.

As Azizi Tucker, CTO of XING Mobility and a former Tesla employee responsible for supply and development in Asia, has pointed out,⁴ Taiwanese auto parts suppliers are mainly small and medium sized family-owned companies. This facilitates a highly flexible supply chain. While China, Thailand and Japan all pride themselves on advanced automotive sectors, Taiwanese suppliers offer important advantages when it comes to engineering development, prototyping and production.

Taiwanese companies are also well-positioned as key suppliers for both electric and smart vehicles of the future. Again, this is due to Taiwan's large and flexible auto parts supply chain and strengths in electronics manufacturing.



TAIWAN'S KEY SUPPLIERS FOR TESLA





GROWING THE FOOTPRINT IN ASIA

TAIWAN IS AN IMPORTANT REGIONAL FDI INVESTOR

Asia is the most popular investment destination for Taiwanese companies. Since 1952, there have been approximately 50,000 investment cases and USD 238 billion of accumulated FDI flowing from Taiwan to other Asian countries. In terms of total investment volume, Taiwan's FDI in Asia is 2.7 times more than the total investment amount for all other regions combined.

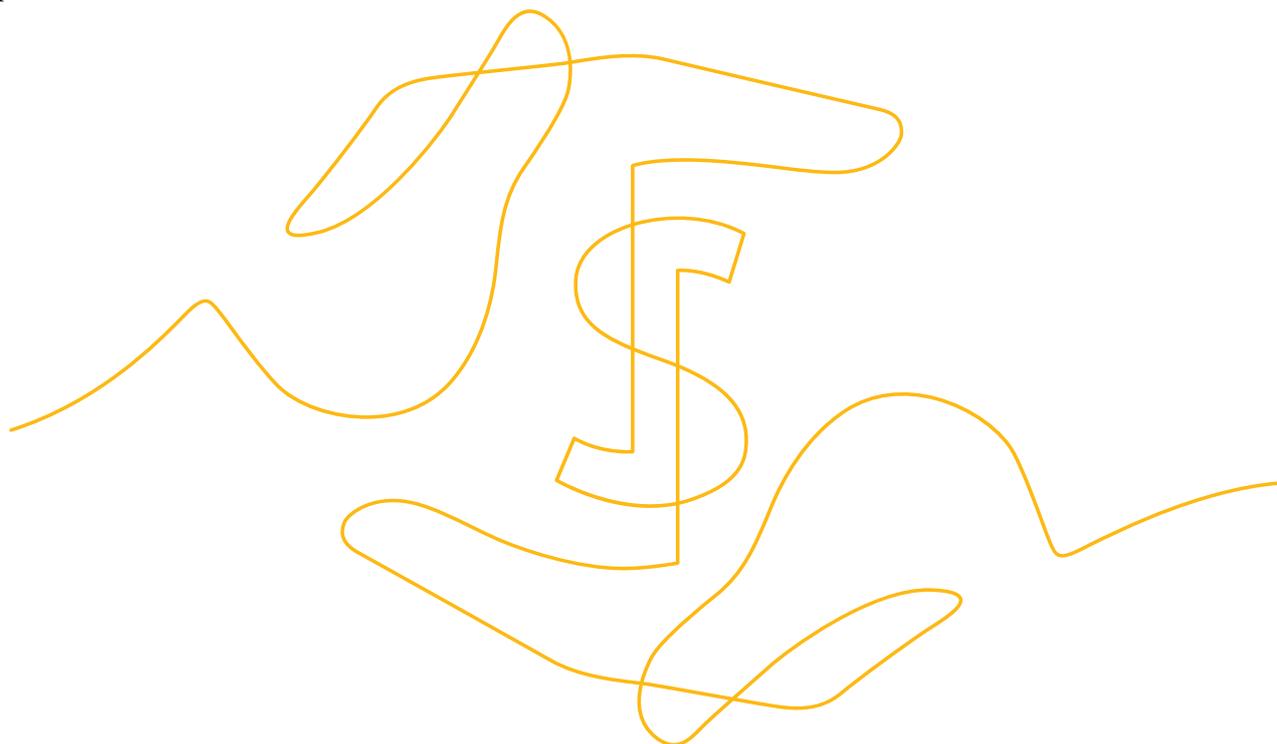
After 1980, due to the significant appreciation of the Taiwanese dollar, high production costs and rising awareness of environmental protection, Taiwanese businessmen began to invest abroad and mainly in Southeast Asia. Since 1990, Taiwan's government has allowed Taiwanese companies to invest in China. As a result, China has gradually become the biggest overseas investment destination for Taiwanese companies.⁵

STRONG PRESENCE THROUGHOUT ASIA

As a way of expanding to global markets and lowering manufacturing costs, Taiwanese manufacturers have proactively penetrated most of Asia's manufacturing sectors. Electronic parts and components, computers, optical products and textiles are typical areas attracting FDI from Taiwan. As much as 72% of Taiwan's FDI in Asia is destined for manufacturing. This is five times more than the capital flows into Asia's finance and insurance industry, which is the second most important sector for Taiwan's FDI. In short, Taiwanese manufacturers have established a firm presence and significant production capacity throughout the Asia region.

Eclat

ECLAT is the market leader in functional fabrics with 1,800 employees in Taiwan and 16,200 people overseas. The company focuses on vertical integration of the textile supply chain. ECLAT has an R&D centre and a fabrics plant in Taiwan with a capacity of 8 million yards per month. Two further plants are located in Vietnam and Cambodia.



FOOTPRINT OF TAIWANESE MANUFACTURERS IN ASIA

FDI >190 USD bn
 FDI 9-15 USD bn
 FDI <5 USD bn

Pegatron
 Inventec
 Giant
 Compal
 Quanta
 Wistron
 Foxconn

CHINA

FDI cases: 45,129
 FDI amount USD bn: 190.5



Taiwan companies hire around 2,600,000 employees in China

Teco
 Asus
 Maxxis
 Msi
 Acer
 Foxconn
 Delta

INDIA

FDI cases: 95
 FDI amount USD bn: 0.7




Electronic Parts and Components Manufacturing



Computers, Electronic and Optical Products Manufacturing



Machinery and Equipment Manufacturing



Rubber Products Manufacturing



Plastic Products Manufacturing



Electrical Equipment Manufacturing



Fabricated Metal Products Manufacturing



Basic Metal Manufacturing



Textile



Manufacturing Not Elsewhere Classified

Elite
 Chinsan Electronic
 Lite-On
 Delta
 Kinpo Electronics

THAILAND

FDI cases: 532
 FDI amount USD bn: 3.8



Benq
 Well
 Region Group

MALAYSIA

FDI cases: 424
 FDI amount USD bn: 3.2



PTI
 Ase Group
 UMC
 TSMC

SINGAPORE

FDI cases: 621
 FDI amount USD bn: 13.9



SOUTH KOREA

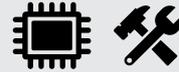
FDI cases: 231
FDI amount USD bn: 1.6



Ardentec
Fair Friend Group
Ase Group

JAPAN

FDI cases: 801
FDI amount USD bn: 9.2



Foxconn
UMC
SAS

VIETNAM

FDI cases: 231
FDI amount USD bn: 1.6



Formosa Plastics
Pou Chen Group
Far Eastern New Century
Compal
VPIC
Eclat

PHILIPPINES

FDI cases: 225
FDI amount USD bn: 2



Acer
New Kinpo Group
Yulon
Teco

INDONESIA

FDI cases: 299
FDI amount USD bn: 1.5



Pou Chen Group
Maxxis
Makalot Industrial
Nan Ya Plastic
Transcolor



Most of our large procurement decisions are taken in Taiwan.

Delta Electronics

CHINA

China is by far Taiwan's largest overseas investment destination. Taiwanese companies have approximately 2.6 million employees in China. Since 1991, Taiwan has invested USD 190.5 billion in China with more than 45,000 investment cases. In 2011, Taiwan's investment in China reached a peak, however, the FDI amount decreased from 2015 to 2018 at a CAGR of -6.51%.

This means that China has become an important production base for Taiwanese OEM/ODM enterprises. Electronic parts, computers and optical products are all key industries attracting investment from Taiwanese companies in China. The top 5 Taiwanese electronic manufacturing giants Foxconn, Quanta, Pegatron, Inventec and Compal produce 90% of laptops exported to the USA from China.

NORTH EAST ASIA

Taiwan has been actively investing in Japan since 2009 with USD 8.2 billion and 801 investment projects to date. Electronic parts and components manufacturing as well as machinery and equipment manufacturing are two leading investment areas. The acquisition of Japan's Sharp by Taiwan's Foxconn is one of the most well-known investment cases. In 2018, UMC acquired all the shares of Mie Fujitsu Semiconductor Limited.

Taiwan and South Korea's products are in a competitive situation. There are only 231 accumulated investment cases resulting in USD 1.6 billion from Taiwan to South Korea. Taiwanese enterprises are investing to a lesser degree in South Korea which only accounts for 1% of Taiwan's total FDI.

SOUTH EAST ASIA

The New Southbound Policy was launched in 2016 to strengthen Taiwan's contacts with countries in the surrounding region. South East Asia is a key consumer market for Taiwanese

companies and Taiwan's government has identified Indonesia, Malaysia, the Philippines, Thailand, Vietnam and India as prioritised markets. Among all the South East Asian countries, Singapore and Vietnam are the top two countries in terms of total investment figures.

Singapore is by far Taiwan's largest trading partner among the 18 New Southbound Policy countries and stands to play a pivotal role as a gateway for Taiwanese enterprises into ASEAN and South Asian markets. The FDI amount is around USD 13.9 billion. The semiconductor-related corporations such as TSMC, ASE, and PTI are the main Taiwanese investors in Singapore.

Taiwanese companies have invested USD 10.4 billion in Vietnam since 1952. Here, textile and basic metals manufacturing are two important industries attracting Taiwanese investments.

ECLAT, FENC and VPIC Group are some of the well-known companies investing in Vietnam. However, petrochemical companies, shoemakers and electronics manufacturers have also built factories in Vietnam as demonstrated by Formosa plastic group, Pou Chen Corporation and Compal. 78% of Taiwanese companies invest in Vietnam due to low labour costs while 60% are attracted by rising demand in Vietnam's domestic market.

Thailand is another major destination for Taiwanese investments with an FDI level of USD 3.8 billion. Electronic parts and components manufacturing as well as computers, electronics and optical products manufacturing are key industries where Taiwanese companies invest. Delta and Taiwan Chinsan Electronic Industrial use Thailand as a production base and then export products worldwide.

Taiwanese companies such as BENQ and Region Group went to Malaysia to invest and expand their production capacity. In Indonesia, rubber and plastics manufacturing are the two main sectors attracting Taiwanese companies.



Delta is the provider for total energy saving solutions. Power electronics accounts for 50% of revenue. It is 16% and 33% for automation product and infrastructure products respectively. Its production bases are in Taiwan, China, India, and Thailand. In 2019, 70% of its products are made in China.

MAXXIS and KENDA both have factories in Indonesia that produce tires for motorcycles and bicycles.

In the Philippines, Taiwanese companies have invested USD 2 billion as a result of 225 investment cases. These investments have increased markedly in recent years primarily due to rising labour costs in China. Acer, TECO and Yulon all have a strong presence in the Philippines. The electronics company Kinpo Electronics Inc. has three factories in the Philippines and is a supplier to Dyson.

INDIA

In the past, the comparatively low level of investments in India by Taiwanese businesses has hinged on significant cultural and language differences. However, India is now booming and, therefore, has become an investment hotspot for Taiwanese companies, particularly in manufacturing.

In 2018, Taiwanese companies submitted applications for 21 investment projects in India. Total investments in that year accounted for more than 50% of Taiwan's accumulated total foreign investment to India between 1952 and 2018.

Taiwanese companies are also forming industrial clusters in India. In Delhi, for example, they are focused on telecommunications, market development, marketing and the service industries. The cluster in Mumbai is mainly engaged in telecommunications, trade, transportation and related services. Chennai and Ahmedabad are focused primarily on manufacturing fields such as shoes and tires.

Taiwanese companies are undoubtedly expanding their presence in India. ASUS, MSI, ACER and Delta are already established in the market and Foxconn announced in 2019 that it would invest an extra USD 200 million in India.



DIVERSIFYING THE APAC SUPPLY CHAIN

RISK MITIGATION: TAIWANESE COMPANIES IN ASIA STEP UP EFFORTS TO DIVERSIFY THE SUPPLY CHAIN

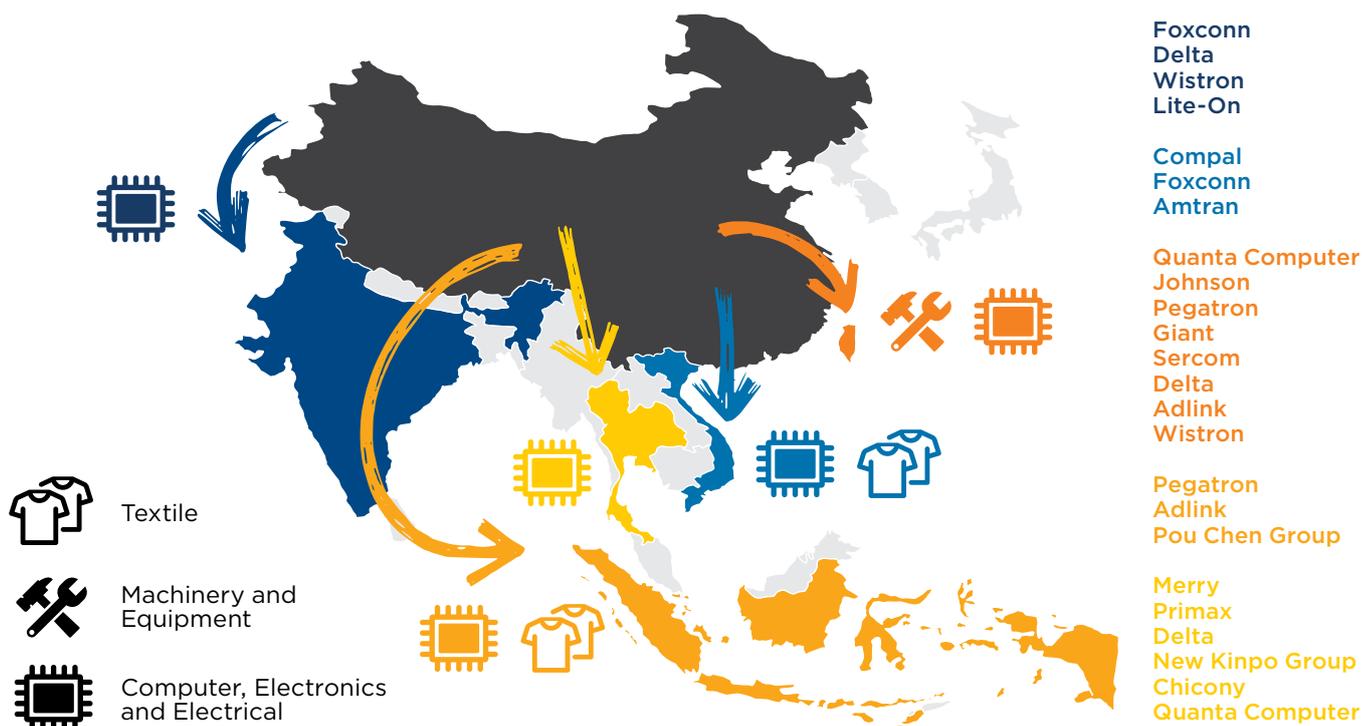
In the wake of rising labour costs and a more uncertain investment environment in China, some Taiwanese companies have moved production in recent years from China to Taiwan, or to Southeast Asia, primarily in textile, machinery and computer electronics-related industries.

US-CHINA TRADE WAR SPEEDS UP THE DIVERSIFYING PROCESS

The US-China Trade war has resulted in the imposition of an additional 10–25 % duty on products from China with an annual trade value of approximately USD 550 billion. Electrical equipment, ICT products and semiconductors are the top segments where Taiwanese companies are most impacted.

As demonstrated by the 2017 list of the top 500 private companies in China by export

EXAMPLES OF TAIWANESE MANUFACTURERS' RELOCATION OF PRODUCTION IN ASIA

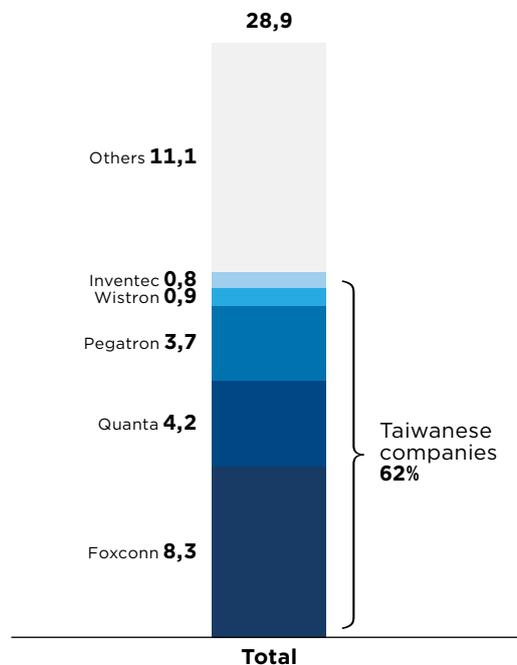


value, no fewer than 10 Taiwanese companies rank among the top 20 exporters. Their total export value is USD 17.8 billion from China, which represents approximately 62% of the total export value from the top 20 exporters, all according to data released by the Ministry of Commerce of China.

As Taiwanese companies have been heavily engaged in Chinese foreign trade, Taiwan is among the economies most affected by the U.S.-China trade war. Bloomberg estimates the trade impact to be 1.6% of Taiwan's output of Gross Value Added, which is tied up in China's exports to the U.S.

Computers, electronics, metals and chemicals will suffer the highest impact.⁶ The trade result of Taiwan and China's exports to the U.S. reflects the negative impact of the US-China trade war. Taiwan's export value to the U.S. has grown in the 12 months since July 2018 with 16% YoY. At the same time, a negative export trend for goods from Taiwan to China developed in the 12 months following July 2018 with -5% YoY.⁷

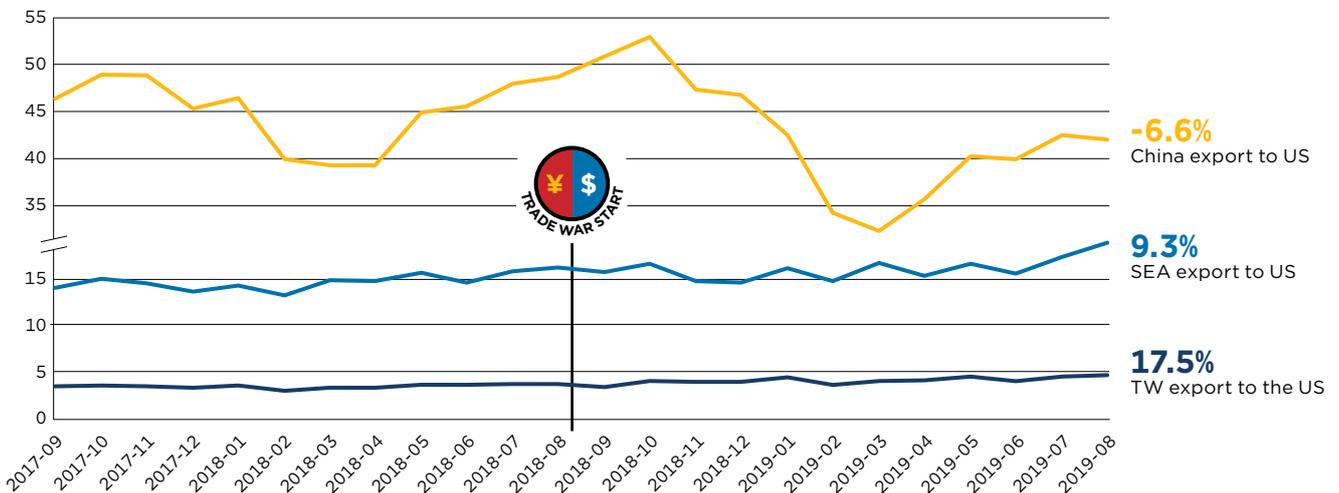
TOP 20 EXPORTERS IN CHINA EXPORT, USD BILLION



62%
of total exports among top 20 private exporters in China are Taiwanese companies

EXPORT VALUE TO THE UNITED STATES, BILLION USD

YoY %
(SUM 201809-201908 / SUM 201709-201808 -1)



TAIWAN'S GOVERNMENT ENCOURAGES MANUFACTURERS TO RESHORE OPERATIONS

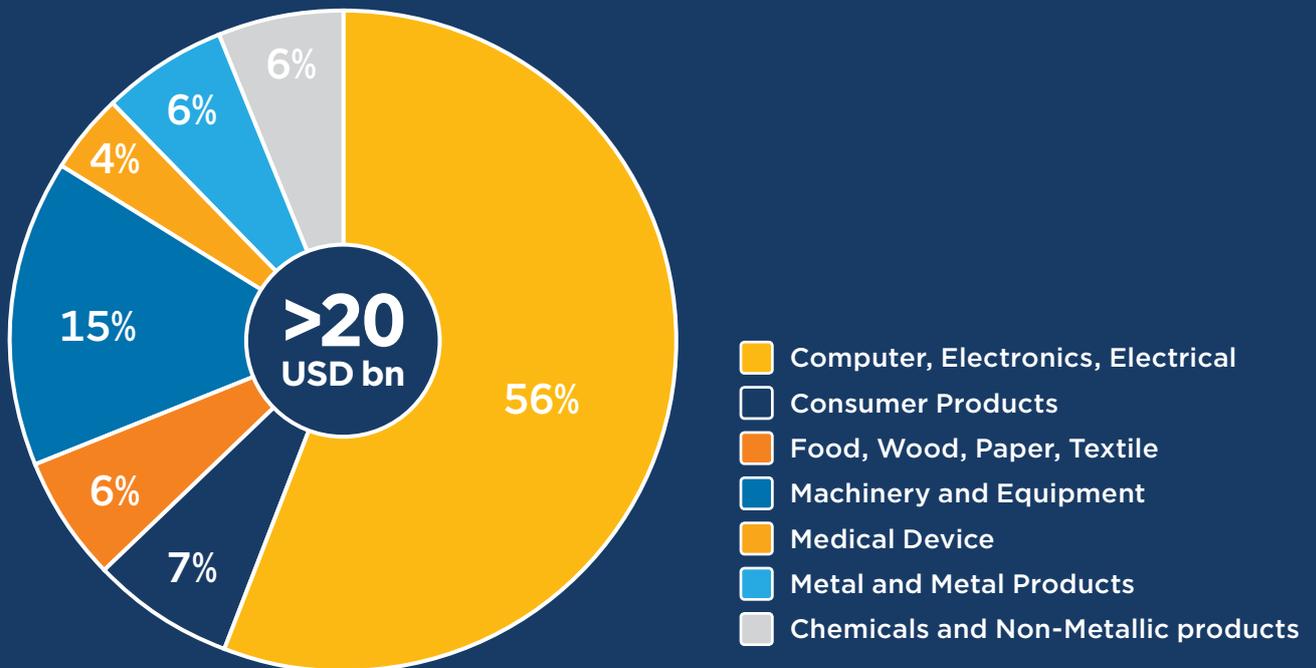
As a way of incentivising Taiwanese companies abroad to repatriate operations to Taiwan, the government has been promoting the three-year (2019–2021) programme “Action Plan for Welcoming Overseas Taiwanese Businesses to Return to Invest in Taiwan”.

The plan is addressed to Taiwanese companies competing in global supply chains with high-value products and components. For

companies returning to Taiwan, it provides customised, one-stop-shop assistance related to land purchasing, water and electricity supply, access to capital, simplified processes for recruiting migrant workers as well as taxation benefits.

According to the Taiwanese government, more than 100 Taiwanese companies are committed to bringing production back to Taiwan with total planned investments approaching USD 20 billion in 2019. More than 80 companies have publicly announced reshoring plans under the incentive programme, of which 56% are computer and electronics suppliers and 15% are machinery and equipment manufacturers.

CONFIRMED NEW INVESTMENTS BY TAIWANESE COMPANIES MOVING BACK PRODUCTION TO TAIWAN, BY INDUSTRY SECTOR. **THE INVESTMENTS TOTAL MORE THAN USD 20 BILLION.**



The investments in reshoring are expected to drive companies to upgrade to automated and smart manufacturing and re-establish the industrial supply chain in Taiwan. This will provide a significant boost to Taiwan's future industrial competitiveness and economic growth.

For the more labour-intensive sectors, the Taiwan government has put forward the New Southbound Policy. Launched in 2016, the policy encourages Taiwanese companies to diversify their supply chains in SEA rather than relying heavily on operations in China. Taiwanese companies in textile machinery, dyeing pigments and dyeing machinery have announced plans to move to Vietnam.

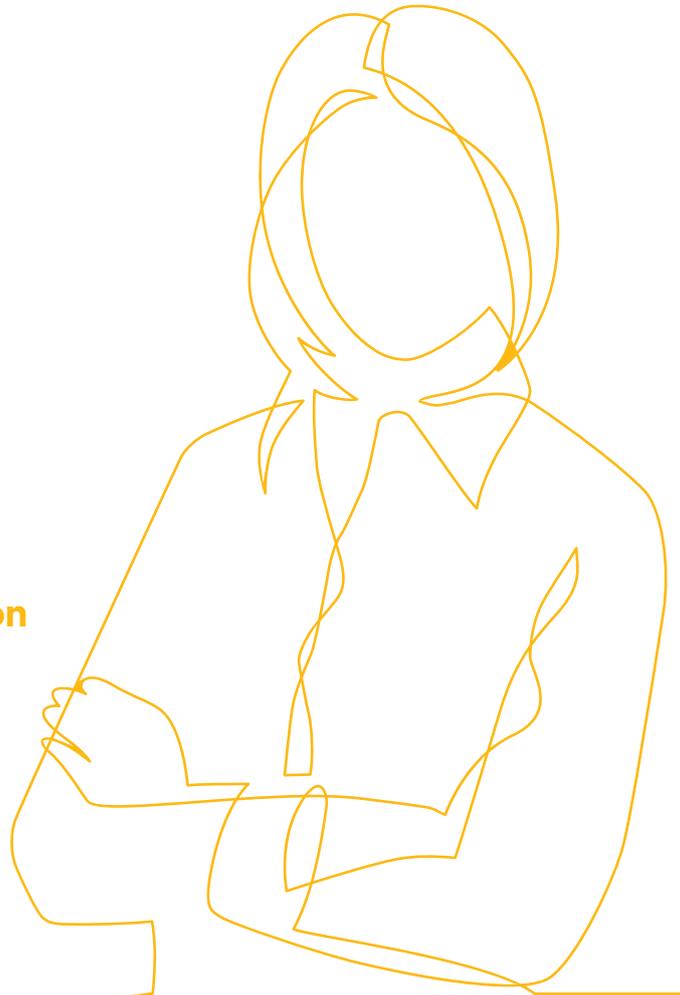
Given Taiwan's political challenges, limited access to Free Trade Agreements will have a bearing on where companies decide to move next. Taiwan has fewer FTAs than other Asian countries and it is not part of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, CPTPP, which is one of the most important FTAs in the region. The 11 member countries of CPTPP account for 13.6 percent of global GDP and 2.4% of Taiwan's foreign trade.

In order to reduce the burden of future tariffs, companies in sectors such as textiles, metals, bicycles, building materials, petrochemicals and rubber may consider establishing production in at least one of the CPTPP member countries. Textiles production in Vietnam is a typical example of this trend.



More companies are moving production from China due to the US-China trade war. The high value added industries tend to come back to Taiwan while low value-add industries tend to go to South East Asia.

Taiwan Ministry of Economic Affairs



HOW CAN SWEDISH COMPANIES ADAPT?

In a dynamic, global and constantly changing manufacturing landscape, setting up operations closer to customers, decision-makers and other key stakeholders is more important than ever. As a first step, Swedish companies need to thoroughly assess how their business will be impacted by ongoing shifts in the APAC supply chain and plan proactively.

How can current business operations in Asia be sustained in the long term? What is the best course of action to safeguard continued growth and strengthened presence in the region? These are questions that must be addressed in order to arrive at tomorrow's winning strategies.

SET THE COURSE, STAY IN THE GAME

In this transformational phase for APAC, Business Sweden's analysis puts an overwhelming emphasis on the first-mover advantage. Global manufacturers are already redrawing the map and change is coming down the road. Working out your next steps – sooner rather than later – is the best way to avoid losing ground to competitors.

If you are a supplier to other manufacturers, for example, what is the likelihood that your customers will relocate manufacturing facilities and headquarters? Where will they be tempted to go? Proactive thinking will not only sustain your presence in Asia but also help you to uncover new opportunities and avenues for business growth.

Reinforcing your presence closer to key manufacturing clients and supporting them through the process of change will be paramount. Identifying and mapping their needs and potential relocation in the market will provide a solid basis for your company's APAC strategy beyond 2020.

WHAT ARE THE NEW BUSINESS OPPORTUNITIES?

In 2019, Taiwanese companies have announced the move of production of high-end and value-added products back to Taiwan at a total investment value of USD 19 billion. In other words, a new horizon is opening up for Swedish suppliers of factory machinery, equipment and software.

In addition to the Taiwanese investments, several multinational companies have announced investments in new manufacturing plants in Taiwan. In mid-2019, the US-based chip maker Micron Technology Inc., which supplies dynamic random-access memory (DRAM) chips, announced a major investment of USD 2.1 billion.

Besides offering machinery and equipment to these new Taiwanese plants, opportunities are emerging for industrial services providers. The same is true of South- and South East Asia where some Taiwanese manufacturers plan to relocate and set up new production plants for making less expensive and less high-value added products.

SMART TECHNOLOGIES FOR SMART FACTORIES

Golden opportunities now await. As Taiwan's global manufacturing brands decide to reshore or relocate, they are likely to upgrade plants and machinery with state-of-the-art technologies and solutions that will boost competitiveness.

Interestingly, the shifting business climate in Asia is paving the way for a smart manufacturing transition that, under any circumstances, will be vital in the future. This is an important window for Swedish equipment suppliers, automation experts, device manufacturers and system integrators. Moreover, Sweden's advanced clean tech solutions and know-how in sustainability will be

PEGATRON

The Taiwanese ICT company Pegatron, one of the top 10 exporters in China and the second biggest EMS/ODM company in the world, is planning to invest USD 500 million in Taiwan to build a new R&D centre and expand output by setting up new production lines for high value products in IoT.

FOXCONN

Foxconn is a leading technology solutions provider with unique manufacturing capabilities. Foxconn's revenue comes from computers, communication and consumer electronics. With a worldwide market share of 40%, it is the no.1 manufacturer of electronics worldwide. 75% of its electronics assembly capacity is based in China, with around 1 million employees.

highly relevant for Taiwanese manufacturers.

Sweden has decades-long experience of leveraging new technologies with a view to optimise industrial operations. Bringing connectivity, digitised processes, world class ICT solutions and automation to Taiwan is an opportunity that shouldn't be missed.

THE SUSTAINABILITY EDGE

Taiwanese manufacturers are facing increased demands on sustainability from more and more customers. Reducing material waste and energy consumption are just two urgent issues that Business Sweden has identified for Taiwan.

In addition, sustainable production materials and tools for optimising overall efficiency will be in high demand. As such, Sweden's tried and tested solutions and technologies that enhance sustainability can play a pivotal role in the next growth phase of Taiwanese manufacturers.

Sweden's early adoption of clean tech solutions provides a template for others to follow and is perfectly aligned with the transformation

of practices need in Asia. New materials, waste reduction, sustainable production methods and lower energy consumption are all critical challenges. Digital tools and support functions to monitor sustainability performance will also be in high demand.

TECH SAVVY TAIWANESE COMPANIES ARE READY TO INVEST

Taiwanese tech companies are showing an increasing willingness to invest in the future in order to strengthen their competitiveness in Asia. Manufacturers in Taiwan, which are often considered to be tech savvy, are investing in core technology and value-added services from IoT providers in everything from smart home solutions to healthcare applications.

This presents another great opportunity for Swedish specialists who can help Taiwanese manufacturers upgrade products and service offerings by supplying new materials, key components, digital solutions and tools for that take efficiency to the next level.

AUO

AUO Electronics, the Taiwanese ICT company and the fourth biggest TFT-LCD in the world plans to invest USD 1.3 billion in Taiwan.

AUO wants to expand and upgrade its current production line with automated and smart manufacturing to produce high-end panels for automotive and gaming applications.

KEY CONSIDERATIONS FOR SWEDISH COMPANIES

MAP SITUATION

1. Where will the production move?
2. How big is the investment?
3. What's the timeline to build new production?
4. What products and functions will be moved?

UNDERSTAND IMPLICATIONS

1. How big is the new opportunity and what's the strategy to approach it?
2. Where to set up the presence in order be close to the decision making?
3. How to adapt your organization in order to fit the diversification and for after market support?

TAKE ACTION!

1. Develop strategy and action plan including meetings with the clients to probe needs, set up local presence and adaption of organization!
2. Be aware of the timeline and act now!

WHAT'S THE BEST WAY FORWARD?

4 Steps for leveraging opportunities in Taiwan:

APPROACH KEY DECISION MAKERS AT TAIWAN HEADQUARTERS



Taiwanese manufacturers are expanding and diversifying their global and Asian manufacturing presence. However, most of them make the majority of their purchasing decisions at their headquarters in Taiwan. This is also where major R&D centres are located. As a Swedish supplier, you should consider setting up or reinforcing existing operations in Taiwan and deploy local staff. Approach Taiwanese customers either in procurement departments for equipment or R&D centres for core technology collaboration.

CONSIDER HIRING CHINESE/TAIWANESE-SPEAKING STAFF



There is a strong likelihood that key stakeholders in the local APAC markets are Taiwanese. Hiring Chinese/Taiwanese (local dialect) speaking staff in Asia makes good business sense. At the very least, this avenue should be considered in order to provide relevant service.

RAMP UP COLLABORATION BETWEEN APAC MARKETS



Although most key procurement stakeholders are based in Taiwan, it is worth keeping in mind that local factories may be end users. This gives Swedish companies a good reason to strategically locate operations in individual Asian markets, and to maximise collaboration between internal divisions. Managing sales leads, project delivery, logistics and aftermarket services should be streamlined across APAC.

TARGET MAJOR DEALS AND BE AWARE OF THE TIMELINE



Keeping a close eye on how clients are shifting their manufacturing footprint in Asia will be critical going forward. Swedish companies need to assess the size and timeline of large new investments, and the business opportunities that arise from new factory facilities and production lines. Mapping these movements will allow you to approach stakeholders and business opportunities at the ideal moment in time.



While most key procurement stakeholders are based in Taiwan, local factories are end-users. Our Taiwanese customers have footprints across APAC. That's why we hire Taiwanese-speaking local sales staff.

Swedish equipment manufacturer

BUSINESS OPPORTUNITIES FOR SWEDISH COMPANIES



Manufacturing equipment & machinery



Smart & automated manufacturing solutions



Sustainable manufacturing solutions



Solutions bundled with hardware to create high-value added products



High tech solutions, new materials and key components for high value products

CONCLUSION

Taiwanese manufacturers are entering a new phase of investment in the APAC region with a view to safeguard competitiveness in the global supply chain. They are boosting capacity and upgrading “smart manufacturing” capabilities. As a result, the Taiwanese value chain across Asia is set to become more diversified than ever.

Companies such as Delta, ASUS and Acer all have production facilities and operations in more than one Asian country. The combined impact of the U.S.-China trade war and government incentives to reshore manufacturing to Taiwan is prompting Taiwanese manufacturers to either 1) move operations for high-value products back to Taiwan, or, 2) move manufacturing to South East Asia for products where access to Free Trade Agreements and affordable wages is critical for future competitiveness.

At the same time, Taiwanese manufacturers are expanding their global presence and

accelerating R&D. Altogether, this new scenario presents promising opportunities for Swedish suppliers of equipment and services in Taiwan. Now is also the opportune moment to engage in new research projects and collaborations.

Standing on the sidelines is not an option. Swedish companies need to plan ahead and prepare for shifting supply chains in APAC or else risk being outrun by global competitors. This requires careful mapping of customer movements and investments in the region and closer relationships than ever with key stakeholders at Taiwanese manufacturing companies.

Machines and equipment, digital infrastructure and technology, intelligent devices and sustainability solutions – all of these items are on the shopping list of Taiwanese manufacturers. The prospects for Swedish suppliers offering any of these are bright, but only if they choose to breathe new life into their APAC strategies without delay.

KEY TAKEAWAY FOR SWEDISH COMPANIES

Standing on the sidelines is not an option. Swedish companies need to plan ahead and prepare for shifting supply chains in APAC or else risk being outrun by global competitors.



ABOUT BUSINESS SWEDEN APAC

Business Sweden's purpose is to help Swedish companies grow global sales and international companies invest and expand in Sweden. Swedish companies can trust us to shorten time to market, find new revenue streams, and minimise risks.

We offer strategic advice and hands-on support in more than 44 markets. Business Sweden is owned by the Swedish Government and industry, a partnership that provides access to contacts and networks at all levels.

Business Sweden has been present in APAC for many decades with 15 local offices throughout the region. Business Sweden has been active in Taiwan since 1991. Over the years we have built a strong and successful network of local business leaders and decision makers in order to promote Swedish competitiveness on the Taiwanese market. Let us help you grow where the markets are growing.



15 OFFICES IN APAC

- | | | |
|-------------|-----------|-----------------|
| 1 Dehli | 6 Taipei | 11 Kuala Lumpur |
| 2 Bangalore | 7 Seoul | 12 Singapore |
| 3 Hong Kong | 8 Tokyo | 13 Jakarta |
| 4 Beijing | 9 Bangkok | 14 Manila |
| 5 Shanghai | 10 Hanoi | 15 Sydney |

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