

How German Corporates Can Harness Emerging Opportunities in Asia

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Foreword

Harnessing Emerging Opportunities in Asia

As a new economic cooperation is inked between Germany and Singapore it is clear a new chapter in the trade relationship between Germany and the Asia Pacific has arrived.

In this white paper, How German Corporates Can Harness Emerging Opportunities in Asia, Commerzbank will highlight the key opportunities for German businesses in this region. It will also examine how a closer engagement with growing markets can be beneficial considering the changing composition of the global economy.

Commerzbank is Germany's leading bank for small and medium sized enterprises (SMEs), financing around 30% of all of Germany's foreign trades. For the third consecutive year (2022), the editors of Global Finance named Commerzbank as Germany's best provider of trade finance services by evaluating industry analysts and interviewing corporate executives and technology experts¹. The bank is in the driver's seat to assist SMEs with its proven track record across the region and around the globe. Whether

utilising its award-winning trade finance capabilities or growing exposure to financing trends on the sustainability front, Commerzbank is well positioned to help German businesses grow and diversify its Asia footprint.

The signing of a bilateral economic cooperation, the Germany-Singapore Framework for Sustainability and Innovation (FSI), on November 13 in Singapore, is the latest milestone in a long history for German corporates in Asia. The nature of this longstanding relationship has naturally evolved over time. The diversification of trade and investment opportunities, particularly with an ever-increasing attention on sustainability, is at the forefront of businesses' agendas the world over and that is no different to what is being seen in Asia.

¹ Commerzbank again "Germany's Best Trade Finance Provider 2022" (Global Finance, 2022)



"This newly signed economic agreement is further evidence that the Asia Pacific region, which is today home to more than half of the world's population, cannot be ignored. Building on our many years of experience in the region, we stand ready to help all corporates explore opportunities in diversification, digitalisation and ESG as well as supporting them in their business with Emerging Asia," says Roland Boehm, Divisional Board Member International Corporates at Commerzbank.

China, considered the engine room of growth in Asia and home to as many as 5,000 German businesses, has in recent years been making sharp moves to transform the way its economy works. It is moving away from an overall reliance on manufacturing and exports and into its dual circulation model, with a heavy focus on the domestic consumption. The implications of this for China's trade partners are far reaching.

As China's economic structure changes, key economic indicators such as gross domestic product (GDP) are expected to slow over the coming years. As such, there will be clear opportunities for German business across other parts of Asia, especially for those with a keen eye on diversification and adopting a China "plus one" strategy, to respond to an evolving Chinese economy.

There is already evidence that German businesses are pursuing more diverse strategies in Asia that do not rely overtly on China, without ignoring its tremendous importance as a trading partner that is likely to always remain the case.

Since 2020, notable German business elite have been imploring a shift in strategic direction in Asia toward other high growth markets including Vietnam, Malaysia and Indonesia to name a few, with the opportunities there expected to grow.

The opportunities too are growing in scope, with the ongoing shift in consumption trends around sustainability, driven by rapid technological advancements in the Asia Pacific region.

The recent passage of the German Supply Chain Act which imposes obligations on German corporates to protect human rights and the environment in the supply chain from as early as next year has provided added impetus for businesses to look closely at diversification in the region.

With sustainability and ESG a growing corporate and regulatory mandate across Asia, German businesses are in an enviable position of already being ahead when it comes to sustainability and are able to lend and implement its vast experience in this field.



"Commerzbank is well placed with its awardwinning trade finance capabilities and expertise across sustainability linked loans to assist Mittelstand in doing business with this rapidly changing region," says Nick Johnston, Regional Board Member Asia at Commerzbank.

The inking of the bilateral economic cooperation provides an extended platform by which German corporates can explore such markets across ASEAN and benefit from the already solid foundation Germany and Singapore have built when it comes to reciprocal benefits impacting commerce, supply chain management and ultimately trade.

As the global economy enters 2023 with a renewed sense of concern related to inflationary pressures and higher rates, the threat of a protracted economic slowdown in developed markets like Europe and North America means diversification is key. Asian growth are expected to outstrip developed economies and the inflationary environment across the region tipped to remain more benign.



"We are already seeing growing numbers of businesses shift focus to look at emerging markets where growth rates are expected to outstrip those of the more well-established economic hubs," Commerzbank's Nick Johnston adds.

All the signs indicate that German corporates have already entered the next chapter in Asia. This presents an entirely new array of opportunities with Commerzbank, the clear banking leader of choice for the Mittelstand, in the box seat to provide those businesses looking to enter this growing market with the expertise they require.



Roland Boehm
Divisional Board Member
International Corporates
at Commerzbank



Nick Johnston Regional Board Member Asia at Commerzbank

Opportunities and Advantages for German Corporates in Asia

The opportunities in Asia are bountiful for German businesses, particularly SMEs, to take advantage of strong growth rates and lower inflation.

Diversifying supply chains out of Asia region	ASEAN is in the box seat to cement itself as a key link in the global supply chain. Following pandemic-induced disruptions manufacturers are working to make supply chains more resilient. This has added impetus as the Chinese economy evolves. If ASEAN can take full advantage of expected trends across the global supply chain, estimates
	suggest that by 2030 the region can generate up to \$600B a year in additional manufacturing output. This could increase annual foreign-direct investment in manufacturing by up to \$22B, and create up to 140,000 new jobs a year, according to a report by BCG. ²
German Supply Chain Act	The recent passage of the German Supply Chain Act, which imposes obligations on German companies to protect human rights and the environment in the supply chain, means German businesses will have an advantage in being able to demonstrate and execute ESG standards across the global supply chain and help facilitate global diversification.
	Given the slow take up of ESG measures across parts of ASEAN, it's inevitable there will be a shift in mindset in the coming years.
Untapped potential across ESG and sustainable or green projects	With Germany's wide experience across the implementation of sustainable initiatives, it places businesses in a good position to tap a market driven by the ESG agenda when we see adoption by countries in ASEAN in the years ahead.
	ESG measures in Asia have a better cost-benefit ratio, since in Germany most measures have already been adopted, thus additional measures require a higher capital outlay for a lower impact on C02 reductions.
Using established markets as a	The signing of the bilateral economic cooperation between Germany and Singapore should encourage more businesses to initiate or expand footprints in the region.
base for ASEAN regional expansion	Many already established German businesses in Singapore use the financial hub as a staging point for further expansion across the ASEAN region. This is a trend Commerzbank sees continuing given the closer economic ties as a result of the economic cooperation agreement.
	Nations like Vietnam are already lauded by German corporates as easy and efficient places to do business where there is a strong work ethic and English is widely spoken.
Similar operating environments for German corporates and SMEs	In Vietnam for instance, the German Business Association was established back in 1995 to support German business on the ground in that country.
	In 2019, the EU and Vietnam signed a trade and investment protection agreement that will see tariffs eliminated by 99%, along with reducing regulatory barriers and red tape. ³
	Parts of ASEAN are more technologically advanced than Europe when it comes to the rollout and integration of 5G mobile technologies.
Improve efficiency through technological advancements	5G momentum continues to accelerate across the region with commercial 5G services now available across 14 markets, with several others including India and Vietnam expected to come on board in the coming years. By 2025, there will be 400 million 5G connections across the region – just over 14% of the population.
	Advancements in technology, especially 5G, mean supply chains and manufacturing can be managed through advanced digitisation and even the use of technology like Artificial Intelligence (AI) and the Internet of Things (IoT).
Infrastructure bottlenecks	Despite the growing prominence of manufacturing hubs across ASEAN regions, many face infrastructure challenges that could impede the rapid transit of goods through ports and roadways. More investment is needed into burgeoning hubs to ease infrastructure bottlenecks.

 $^{^{\}mathbf{2}}$ How ASEAN Can Move Up the Manufacturing Value Chain (Meyers et al., 2021)

³ EU-Vietnam Trade Agreement and Investment Protection Agreement (European Commission, 2019)

Risks and Challenges for German Corporates in Asia

The central risks revolve around swift and rapid regulatory changes that are predominant in parts of the ASEAN region. For the most part, large democracies in Asia are seldom the subject of rapid long lasting regulatory upheaval.

	Many businesses have struggled with the supply chain disruptions as a result of the pandemic and Russia's attack on Ukraine and see this as a major challenge at times.
Producing, selling and sourcing (supply chain management)	With diversification of the global supply chain advancing, these problems are seen to be a near term challenge and, as the supply chain recalibrates with a focus on ASEAN, this in turn could become a strong benefit.
	Regulatory issues around pandemic lockdowns have been another issue. With some businesses fearful contractual obligations could not be met, as a result of lockdowns, and that prearranged sales or sourcing contracts could be retracted.
Rapid regulatory changes	Concerns about rapid changes in regulation also pose a concern, but apart from a few jurisdictions, policies across Asian democracies are seldom the subject of rapid or overnight change.
Higher interest rates and inflation	Concerns about higher rates and inflation as well as subsequent balance sheet erosion also remain key concerns. However, with policy settings lower and inflationary pressures in Asia not as distinct as elsewhere, these concerns are also only seen as a temporary impediment to doing business.
Difficulty in raising funds	Anecdotal evidence suggests some corporates may have experienced challenges in accessing funds to expand operations in ASEAN given the cost of credit is rising amid the current decades' high inflationary environment.



A Timeline of German Business in Asia



1962

The German-Thai Chamber of Commerce (GTCC) was established to promote bilateral economic relations between Germany and Thailand.

<u>About Us page</u> (German-Thai Chamber of Commerce, n.d.)

1990s

Manufacturing firms established headquarters in Singapore. <u>Successful in Singapore: German</u> <u>Mittelstand Companies</u> (Chemanger, 2014)

1993

Kern-Liebers was the first Mittelstand to invest in Taicang on a small scale. <u>Taicang</u>, a base for German Mittelstand in China (Szesny, 2020)

2013

German foreign direct investment (FDI) in ASE-AN hit EUR25.2B. Other key investment countries in Asia include Japan (EUR14.4B), South Korea (EUR7.3B) and India (EUR9.6B). German Mittelstand Champions in Asia - Catching the next wave of growth (Bruche & Venohr, 2015)

2015

A study on German Mittelstand in Asia was published and commissioned by the Singapore Economic Development Board. German Mittelstand Champions in Asia - Catching the next wave of growth (Bruche & Venohr, 2015)

1924

The founding of EKONID - the first German-Indonesian Chamber of Commerce - is established in Batavia but was closed during the WWII. <u>History page</u> (German-Indonesian Chamber of Industry and Commerce, n.d.)

1986

First Asia Pacific Conference of German Business was held. Home page (Asia Pacific Conference of German Business, n.d.)

1991

Malaysian-German Chamber of Commerce and Industry was established in Kuala Lumpur to support German firms in the country. <u>About Us</u> (Malaysian-German Chamber of Commerce and Industry, n.d.)

2000-2010

Expansion of Mittelstand manufacturing firms opening Chinese factories especially in Taicang in the Jiangsu province. <u>China's Mittelstand man</u> (Kracht, 2013)

2015

The Make in India Mittelstand program launched in the world's second most populous country. Between the launch and 2021, the program has helped facilitate over 150 Mittelstand and family-owned companies with a declared investment of more than EUR1.5B.

Introduction of Make in India Mittlestand Programme (Make in India Mittlestand, 2015)

2017

ASEAN-Germany Development Partnership was established to increase the cooperation in several areas including sustainable development, small and medium industries, and renewable energy among others. <u>Asean-Germany Development Partnership</u> (ASEAN, 2021)

2020

First ever German Chamber East China meeting outside of Shanghai took place in Taicang to showcase Sino-German cooperation. <u>Taicang, a base for German Mittelstand in China</u> (Szesny, 2020)

2020

Germany Singapore Business Forum Connect took place as part of the Singapore Week of Innovation and Technology 2020. <u>Singapore and Germany to deepen innovation collaborations at SWITCH 2020</u>
(Global Business Magazine, 2020)

2016

The Germany-Singapore SME Funding Programme was launched, jointly managed by Enterprise Singapore and AiF Projekt GmbH. It aims to promote stronger collaboration between Singapore and Germany. <u>Germany-Singapore SME Funding Programme</u> (Enterprise Singapore, n.d.)

2019

EU and Vietnam signed free trade agreement. <u>EU-Vietnam Trade Agreement and Investment Protection Agreement</u> (European Commission, 2019)

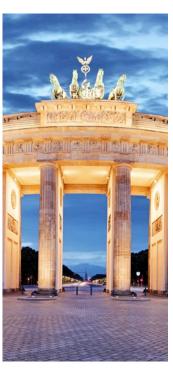
2020

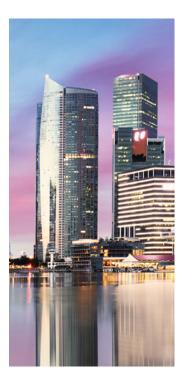
Enterprise Singapore and the Asia-Pacific Committee of German Businesses signed an MOU to support enterprise development in sectors of common interest. <u>Singapore</u>, <u>Germany tie-up to help local and German SMEs transform</u>, <u>deepen business ties</u> (Lai, 2020, Business Times)

2021

German Desk Vietnam established to facilitate financial solutions between German SMEs and local trading partners. <u>German Vietnam Desk</u> (German Industry and Commerce Vietnam, 2021)









German Corporates in Asia:

A Long History Driven by The Mittelstand -Acknowledging and Embracing the Growth Potential of Emerging Asia.

German corporates have a long history in the Asia Pacific region - most notably in China - but over the course of recent decades have seen rapid growth in markets such as Singapore, Vietnam and Indonesia.

Germany's Mittelstand has acknowledged and embraced the growth potential of Emerging Asia. Many firms have built extensive sales and service networks, as well as manufacturing operations and more selective research and development (R&D) functions in the region. Most German Mittelstand businesses have been active in Emerging Asia with their own operations since the mid to late 1990s or early 2000s and as the global economy evolves, Commerzbank believes this interest will continue.

It's no surprise the German corporates feature prominently in Singapore given that it has received the lion's share in stock for foreign direct investment in ASEAN. While China remains the main market for German business, work on developing and strengthening other relationships, like Singapore, has gathered pace in the last almost two decades. Many Asia Pacific regional headquarters for German businesses are found in Singapore, as well as Shanghai, Hong Kong and Beijing. The evolution of SMEs in Asia largely follows the trends of the third and fourth industrial revolutions. The third being computer and automation technology, and the fourth taking digital transformation to the next stage. While future opportunities look to the implementation of sustainable initiatives, Commerzbank expects further adoption of ESG investments and supply chain processes by countries in ASEAN in the years ahead. Although global trends - automation, integration, and

e-commerce – are present throughout Asia, so are the peculiarities of local markets replete with the unique needs of the diverse cultures in the continent. R&D efforts are central to the process of localization. Local researchers look out for key local issues such as air quality and develop innovative solutions in collaboration with their German counterparts. For example, SSI SCHAEFER starts their process of product development in Germany, but its Malaysian manufacturing plant and Singapore headquarters customize solutions for local clients.

Since the 1990s, Singapore has been fertile ground for high-value manufacturing and R&D. It is used as a launching pad for the German Mittelstand in the ASEAN region. Companies establishing a presence in the region at this time were largely electronics or construction based. Following the fourth industrial revolution, the digital sector grew in prominence in places like Singapore for the Mittelstand, further contributing to the already well established markets across high end manufacturing, electronics and chemicals. With the emphasis on smart city development, digitalisation will be a key driving force for both German and Singaporean companies to get innovative' says Singaporean-German Chamber of Industry and Commerce (SGC) executive director, Dr. Tim Philippi. The emphasis is of course different in other economies in ASEAN.



German Asia Trade Partnerships:

An Evolving Collaboration - Spotlight on Emerging Asia.

China remains Germany's top trading partner globally and 2021 marks the sixth consecutive year that the world's second biggest economy has been the largest trading partner for Germany.

The Netherlands were the second most important trading partner with two-way trade at \$174B followed by the United States with trade at \$164B.

According to 2021 data, German trade with China was worth approximately \$208B in terms of imports and exports. Not surprisingly automotives along with vehicle parts and accessories comprised the largest portion of exports. Over the last 25 years exports of Germany to China have increased at an annualized rate of 11.8%, from \$6.6B in 1995 to \$106B in 20204.

Chinese exports to Germany focused on broadcast equipment and computer technology across 2021 but this has been evolving in recent months with a greater share of exports comprising of electric batteries and semiconductors.

China exports to Germany 2020 ⁵	German exports to China 2020 ⁵	China exports to Germany July 2022 ⁵
Broadcasting Equipment	Automobiles	Computers
\$12.6B	\$16.7B	\$947M
Computers	Motor vehicles; parts and accessories	Electric Batteries
\$11.2B	\$10.5B	\$848M
Other Cloth Articles	Packaged Medicaments	Semiconductor devices
\$5.79B	\$3.19B	\$320M

 $^{^{}f 4}$ Historical Data: Bilateral trade between Germany and China (OEC, 2020)

⁵ Ranking of Germany's trading partners in foreign trade (Destatis, 2021)

The changing composition of Chinese exports to Germany and the well documented transition of the Chinese economy have prompted some German companies to revisit their trading relationship with China. The shift from relying on China for raw materials to electrical devices like semiconductors is a clear indication that German businesses are looking to diversify.

According to recent reports, the German Ministry of Economic Affairs is considering measures to diversify the trading relationship with China. Such measures could include reducing or even scrapping investment and export guarantees for China and no longer promoting trade fairs and manager training there. Loans from state lender KfW could be re-directed to projects in other Asian countries, initiatives such as Indonesia, in line with attempts to diversify trade and increase business with other established and burgeoning markets across the ASEAN region.⁶

Such moves began emerging as early as 2020 when former Chancellor Angela Merkel and former Federal Minister for Economic Affairs and Energy Peter Altmaier made in nationwide call for businesses to look beyond China in their Asia investment strategy.⁷

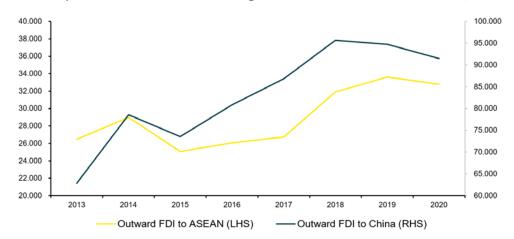
Apart from China, only three Asian nations rank in the top 25 export markets from Germany which include South Korea (number 18) \$22.1B, Japan (20) at \$21.6B and India (23) with \$14.7B in exports.⁸

It is clear that Asia lags the more developed markets in the United States and Europe, apart from China, but growth in key markets has been witnessed in recent years with exports to the ASEAN region now topping \$100B.

Trend Comparison - Germany Exports to Asia (USD bn) 40 140 35 120 30 100 25 80 20 60 15 40 10 20 2018 2000 2002 2008 2010 2012 2016 2020 2006 ASEAN (LHS) India (LHS) -Japan (LHS) -China (RHS) South Korea (LHS) -Taiwan (LHS)

Source: CEIC, Statistisches Bundesamt

Trend Comparison - Outbound Foreign Direct Investment Position (USD mn)



Source: CEIC, OECD

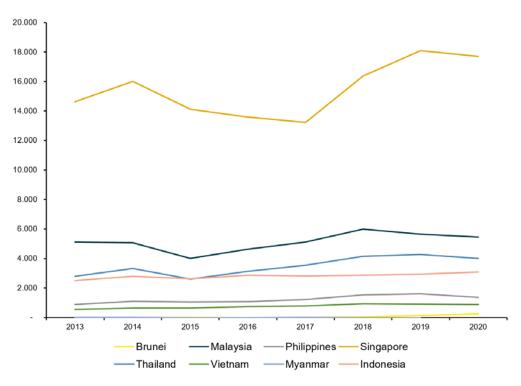
⁶ Exclusive: German economy ministry reviews measures to curb China business (Rinke & Marsh, 2022)

⁷ Why German industry is looking past China to the rest of Asia (Kliem, 2020)

⁸ Germany's Top Trading Partners (Workman, 2021)

Spotlight on key ASEAN nations: There are already strong links between some ASEAN nations identified as potentially untapped markets. Commerzbank has identified the following markets as clear growth areas across the ASEAN region with already well-established footprints and burgeoning opportunities with outbound FDI growing over recent years.

Trend Comparison - Outbound FDI Position by Member Country (USD mn)



Source: CEIC, OECD



German trade with Singapore

Singapore and Germany have well established trade links with more than 2000 German companies operating in Singapore, many using the city-state as a launching pad for further expanding operations in the ASEAN region. Singapore is recognized for its stable government, legal frameworks and the relationship benefits from the EU-Singapore Free Trade Agreement signed in 2018 and implemented in late 2019.9

German Exports to Singapore

Total Exports (2021)	Machinery
\$8.5B	\$1.7B
Electrical and electronics equipment	Optical, photo, technical & medical apparatus
\$1.8B	\$858.2M

German trade with Vietnam

Trade with Vietnam is well established with Germany and they are both engaged in a strategic partnership since 2011. Vietnam and the EU signed a Free Trade Agreement which came into effect in on 1st August 2020. Germany is Vietnam's biggest trading partner in the EU and one of Germany's biggest trading partners with ASEAN, which over the last 25 years has seen German exports to Vietnam increase at an annualized rate of 11.5%, from \$223M in 1995 to \$3.1B in 2021.10

German Exports to Vietnam

Total Exports (2021)	Electric batteries
\$3.1B	\$119M
Packaged medicaments	Gas Turbines
\$250M	\$112M

German trade with Malaysia

Economic ties between Germany and Malaysia have been very close for many years. The Malaysian-German Chamber of Commerce and Industry, which was founded in 1991, is the largest EU chamber in that country. Since 1995, German exports to Malaysia have grown at an annualized rate of 2.5%.

German trade with Indonesia

In Jakarta in July 2012, former Federal Chancellor Angela Merkel concluded a wide-ranging agreement, the Jakarta Declaration, with then Indonesian President Susilo Bambang Yudhoyono. This provides the basis for close and multifaceted cooperation between Germany and Indonesia within the framework of a strategic partnership. Despite this, German exports to Indonesia have remained flat over the past 25 years.¹²

German Exports to Malaysia

Total Exports (2021)	Semiconductor devices
\$4.3B	\$390M
Integrated circuits	Motor vehicles; parts and accessories
\$1.2B	\$217M

German Exports to Indonesia

Total Exports (2021)	Washing and bottling machines
\$2.5B	\$71.4M
Medical instruments	Packaged medicaments
\$86.3M	\$70.6M

⁹ Germany Exports to Singapore (Trading Economics, 2022)

¹⁰ Historical Data: Bilateral Trade between Vietnam and Germany (OEC, 2020)

¹¹ Historical Data: Bilateral Trade between Malaysia and Germany (OEC, 2020)

¹² Historical Data: Bilateral Trade between Indonesia and Germany (OEC, 2020)

China Still a Key Driver;

but Diversification in Asia is Increasingly an Imperative

It is undeniable that the Chinese market remains a key and lucrative trading front for German companies. However, as China's economy evolves and geopolitics becomes more complex, there are clear opportunities for regional diversification.

In recent years, German corporates have begun a process of diversification, examining other opportunities in the ASEAN region as evidenced by the growth in trade across a variety of markets and industries.

Commerzbank has identified Vietnam, Indonesia, and Malaysia as countries where significant footprints for German corporates have already been established but there are clearly more opportunities across these countries where growth rates are expected to outstrip global peers and inflation appears more contained than elsewhere.

Asia growth forecasts

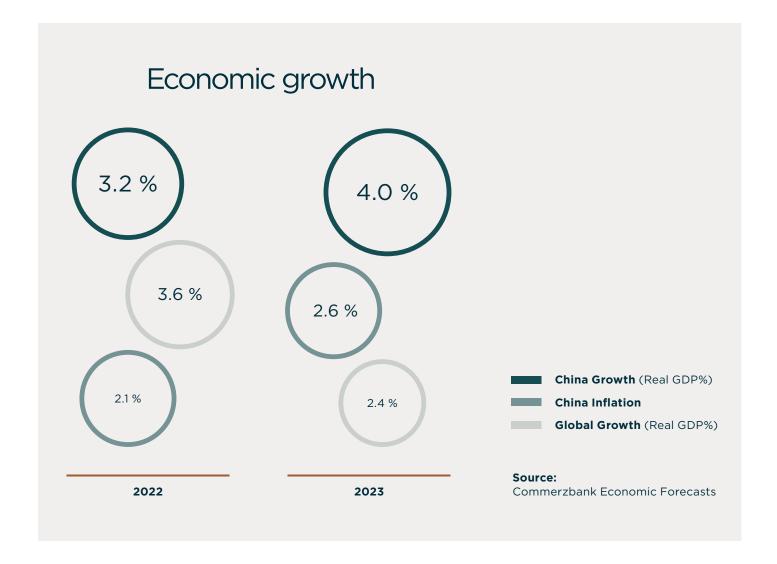


The Changing Face of China

COVID-19 has had a material impact on China's economy.

China is undergoing an economic slowdown amid a continued correction in the property market and weak consumer and investor sentiment due to the Zero-COVID policy. Consumers and investors are less able to make long-term plans

due to uncertainties on when the next lockdown could occur. Commerzbank's economists predict that China is unlikely to meet this year's target of GDP growth at 5.5% and growth is likely to be around the 3% mark.

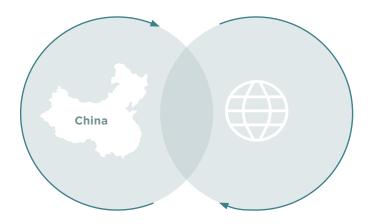


The ongoing evolution of the Chinese economy is not only a direct result of pandemic policies, like the covid-zero strategy or challenges in the property market. The world's second biggest economy is one in transition as China embarks on its own structural transformation.

China is embarking on a "dual circulation" strategy, a plan which places more emphasis on the domestic market or internal circulation, as a hedge against an increasingly complex world. This presents opportunities for German companies looking to take advantage of China's push toward domestic consumption. Corporates may see demand for higher-end manufactured goods but may face increased competition from Chinese small to medium sized businesses that are looking to evolve from lower cost models to take advantage of maturing domestic consumer appetites.

China's Dual Circulation Model

and the Impact on Supply Chains



Internal Circulation

 Pivot towards domestic consumption

Source: Commerzbank

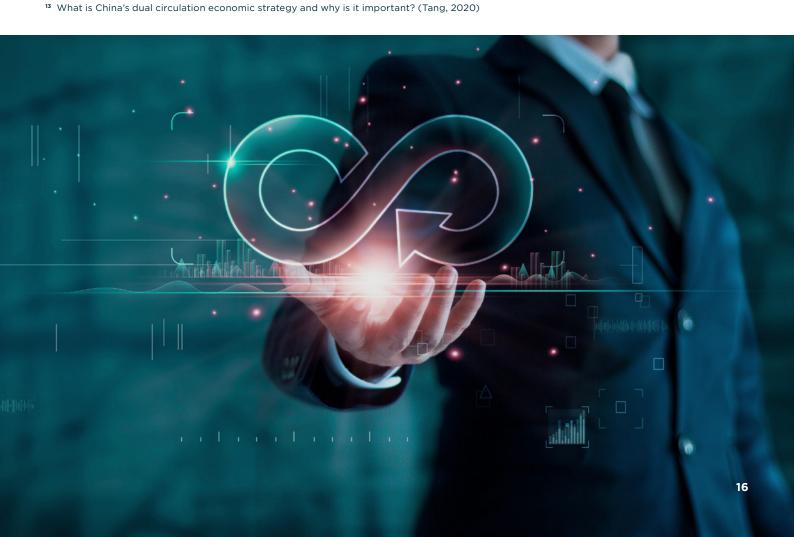
- Enhance home-grown innovation
- · Ensure food and energy security

External Circulation

- Remain as manufacturing powerhouse
- Further opening up to foreign investment
- · Renminbi internationalization

Officially, China will look inward to tap the potential of its huge domestic market and rely on indigenous innovation to fuel growth. Despite the increased emphasis on the domestic market and on self-reliance in some sectors, President Xi Jinping has said repeatedly that China will not completely close itself off from the outside world and will instead open up more.

There are, however, some concerns that China will take an inward-looking approach to its future development since it is difficult to balance self-reliance with opening up.¹³



Changing Supply Chains Models

and the Push for Sustainability

China's dual circulation model will have an impact on global supply chains as the country moves its economic modelling up the value-added chain to focus more on domestic consumption.

China will rely mainly on "internal circulation" – the domestic cycle of production, distribution, and consumption – for its development, supported by innovation and upgrades in the economy, according to China's President Xi.¹⁴

As China's economy matures and moves towards a more consumer concentric model, its manufacturing sector may alter as it sees changes in comparative advantages. Thus, opening the door for other nations to expand manufacturing hubs where labour is more readily available and cheaper.

Despite a shifting economic model China will still be a manufacturing behemoth, albeit with a likely focus on production higher up the value chain. Infrastructure build-outs will take time and businesses will continue to want exposure to the China market. A China plus one model should be adopted.

The diversification of the global supply chain may be a significant opportunity along with the push to make supply chains more sustainable as is being championed by Germany with its German Supply Chain Act which will come into effect as early as next year.

Under the legislation, German companies that use the supply chain will be obligated to protect human rights and the environment in the supply chain. Internationally applicable standards for occupational health and safety and compliance with human rights must be obeyed. All people involved in the production of goods shall be able to work on the basis of acceptable, generally recognized ethical and economic standards.

Such standards will apply to German companies with a workforce of more than 3000 from January 1, 2023 and be expanded to include companies with a staff or more than 1000.

As burgeoning manufacturing hubs across ASEAN grow, Commerzbank determines the implications around a sustainable supply model will gain traction, with an associated renewed focus on global ESG mandates.

The Sustainable Banking and Finance Network (SBFN)

This network was established in 2012 by the World Bank-backed International Finance Corporation (IFC), alongside 10 member countries. It brings together regulators, banking and environmental associations from emerging markets in pursuit of a common goal: Advancing sustainable finance opportunities for emerging economies.

As of March 2022, the network has grown to 72 member institutions – representing 62 countries and accounting for around 86% of total bank assets in emerging markets. In early 2022, the SBFN announced plans to advance the growth of the green bond market among its members. The aim is to help emerging economies tap into the thriving climate-focused investment market, with opportunities worth an estimated \$23 Trillion by 2030, according to the IFC. It has rapidly become a serious player on the global stage, setting a standard for sustainable investment initiatives.

Amid growing pressure on corporates to implement their own ESG and climate-related strategies and adapt to the requirements of the developing economies, Commerzbank believes that for emerging markets, membership of networks such as the SBFN is becoming a growing necessity.

This is particularly important, as government regulation and industry wide ESG commitments made in advanced economies are increasingly having ripple effects across the globe. While the regulatory focus in advanced markets has generally been on a business' own ESG performance, in a globalised economy, the effects of the standards imposed in one market reverberate through the wider supply chain. Indeed, with up to 90% of a business' environmental impact lying in its global value chain, supply chains are of particular relevance in the ESG transition.

As a result, businesses are increasingly evaluating their suppliers' sustainability credentials, and suppliers worldwide will therefore need to demonstrate their ESG score if they are to ensure their continued participation in global supply chains.¹⁵

What we know about China's "dual circulation" economic strategy (Yao, 2020)

¹⁵ ESG on the Agenda in Emerging Markets: Financial Institutions & the Sustainable Transformation (Commerzbank, n.d.)

Taking Advantage of the ESG Push

and Untapped Opportunities in Asia

ASEAN is paying more attention to the ESG agenda but the desire to enact swift action comes with challenges. This is seen as a clear opportunity for German business in the region given the anticipated swift change in corporate mindset and potential looming regulatory change.

Opportunities for German Corporates in ESG across ASEAN



When dealing with the ESG agenda in parts of Southeast Asia, sustainable development presents a fundamental challenge in the context of rapid economic growth.

On the one hand, growth is seen as fundamental to achieving sustainable development goals linked to social issues like eradicating poverty, hunger, gender equality and education. The recent German push to make global supply chains more sustainable is evidence of clear opportunities in the space where German corporates have world leading expertise and hence the ability to help secure the sustainability supply chains well into the future.

This form of thinking is evolving with stock exchanges in the six largest ASEAN member states (the ASEAN-6: Indonesia, Malaysia, the Philippines, Singapore, Thailand and Vietnam) taking the lead by implementing ESG disclosure requirements for listed companies. While voluntary sustainability disclosures in Asia previously focused on social issues, the new ESG disclosure requirements include more than twice as many environmental reporting provisions as social ones.¹⁶

Mindsets are changing with a focus on environmental issues is gaining traction, according to the Economist. It says the vast majority of people living in the three most

biodiverse nations of Southeast Asia – Indonesia, Malaysia and the Philippines – support the proposed global goal of protecting 30% of the world's biodiversity by 2030.¹⁷

The regulatory push for carbon neutrality is also gaining pace across the ASEAN region especially following recent global climate initiatives like the COP summits.

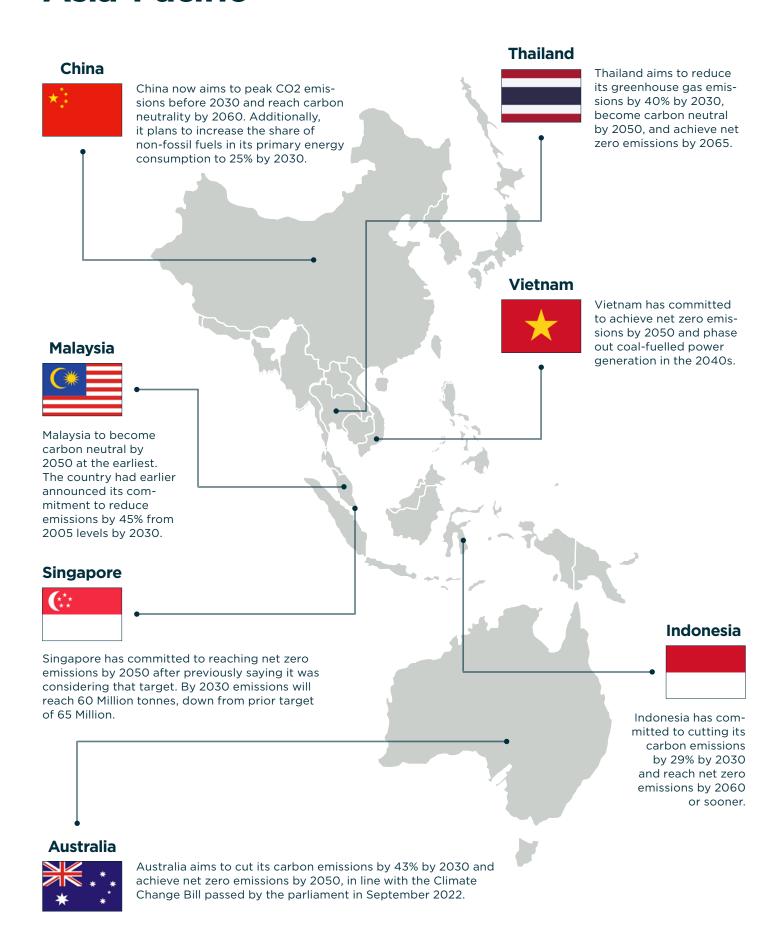
In tandem with initiatives pushing for environmental change, social aspects are equally important and receive increasing focus. As parts of ASEAN experience rapid growth in manufacturing capacity, there remain challenges on the infrastructure side, with increasing bottlenecks across a variety of critical infrastructure. Funding social development and capital investment is critical in any burgeoning manufacturing hub.

Export Credit Agencies (ECA) can provide backstopped finance underwritten by the governments to facilitate such needs. Financing needs in Asian nations like China, Indonesia and Vietnam have already seen a significant take up in such financing methods and this is expected to continue. Indeed Asia now accounts for around 34% of Commerzbank's total current active portfolio in ECA financing.

¹⁶ ESG reporting across the ASEAN economies (RSK, 2022)

¹⁷ Data point: what's driving ESG adoption in ASEAN countries? (Economist Impact, 2022)

Key Climate targets across the Asia-Pacific



Identifying and Implementing Trends

Towards a Sustainable Future

In a 2022 report commissioned by Commerzbank, we discovered that despite multiple crises, sustainability remains highly important. And there is still potential, with 40% of the companies surveyed already having a sustainability strategy, and 33% of those surveyed are planning one.

Commerzbank's commitment to climate neutrality:

Many environmentally orientated targets seek to reduce carbon emissions, but ultimately some are unavoidable. Therefore, to achieve neutrality, carbon offsetting is a mechanism to compensate for residual emissions by supporting projects that absorb or reduce emissions. Commerzbank has been climate neutral since 2015, compensating for residual emissions through the purchase of high-quality CO2 certificates, carefully selecting the offsetting projects we commit to. One such project, offsetting 20,000 tonnes of CO2 in 2021, supports the development of the Jepirachi wind-based generation facility in Colombia, helping to increase renewables capacity.¹⁸

The 21st Entrepreneur Perspectives study from Commerzbank titled "An Economy in Transition Sustainable & Digital" 19, undertaken by market research company Forsa, surveyed 300 companies from the industrial, service and retail sectors with an annual turnover of \$15M. The results confirm the findings of the previous year's study, which examined the importance of sustainability in medium-sized companies.

The effects of the energy crisis are strengthening company efforts to implement further sustainability measures. 91% of those surveyed foresee many opportunities, above all in using resources carefully. Sustainability is also perceived as an opportunity in terms of image cultivation (83%), strengthening social responsibility (81%) and enhancing employer attractiveness (73%).



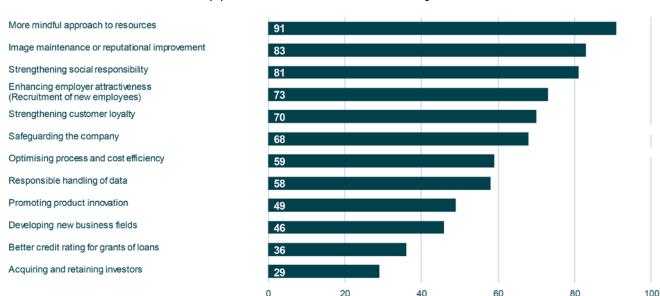
¹⁸ ESG on the Agenda in Emerging Markets: Financial Institutions & the Sustainable Transformation (Commerzbank, n.d.)

¹⁹ Commerzbank report: Mittelstand Sustainability Report: An Economy in Transition Sustainable & Digital (Commerzbank, 2022)

Armed with this research and as parts of developing ASEAN embark on a road to a more sustainable future, Commerzbank can provide clear and industry leading advice and strategies for dealing with the challenges German corporates may face in confronting changes on the ESG front across the Asia Pacific.

21st Entrepreneur Perspectives study from Commerzbank "Economy in transition: sustainable and digital"

Opportunities of sustainability measures*



Figures in percent
Question: A commitment to sustainability or the implementation of sustainability measures can also present opportunities for a company. Please tell me which of the following opportunities you see for your company.

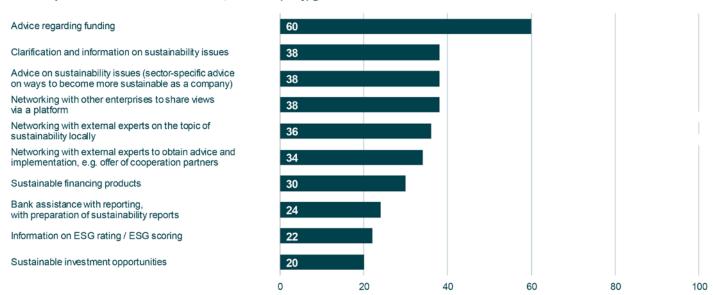
Basis. Respondents in enterprises with annual revenues of € 15 m or more

Multiple mentions possible

Commerzbank AG, Business Owners' Views | Results 2022

Support from Commerzbank

With respect to the services listed below, there is (very) great interest



Figures in percent
Question: 'How can your banking partners help your company implement sustainable corporate governance?'
'How interested are you in the following services or offers from a bank on the topic of sustainability? Very interested, rather interested, not very interested, or not interested at all?'
Basis: Respondents in enterprises with annual revenues of € 15 m or more

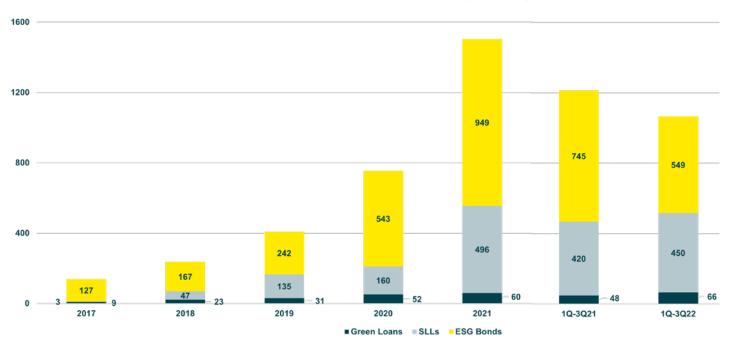
Commerzbank AG, Business Owners' Views | Results 2022

Rapid Growth

in Green and Sustainability Linked Loans

The market for sustainable finance (comprising of Green Loans, Sustainability Linked Loans and ESG Bonds) passed \$1T globally in 2021, marking a high point in the meteoric rise of a sub-sector that didn't exist a decade ago. Sustainable debt issuance achieved record high volumes in 2021, an astonishing 10-fold rise since 2017 and is poised for continued growth into 2023.

Global Sustainable Debt Volume (USDbn)



Source: Bloomberg/Refinitiv Loan Collector

Borrower appetite for Sustainability Linked Loans (SLLs) has driven a more than 300% increase over the past year significantly outpacing Green Loan demand. This is due to the flexibility in SLLs which addresses ESG risks by looking to the borrower to meet KPI targets or achieve a certain sustainability rating and SLLs have the option to be working capital in nature. They are therefore applicable to a wider range of borrowers than Green Loans which need to be aligned to a specific green project. Banks, including Commerzbank, are keen to support our clients in this area as they also need to achieve pre-determined financing targets for ESG purposes. It is estimated that the global market for ESG debt may reach \$15T by 2025.²⁰

Commerzbank has extensive experience within the SLL space. Our dedicated team has executed a number of sustainable term loans and revolving credit facilities, underlining Commerzbank's commitment to promote sustainability in the loan market and proving our deep expertise in delivering such complex products. Commerzbank has also been leading the way in the market for green Schuldschein, a private placement alternative to credit facilities and bonds, including the first ever Schuldschein transaction worth around \$550M for Nordex, a multi-megawatt wind power systems company.

Bloomberg/Refinitiv Loan Collector

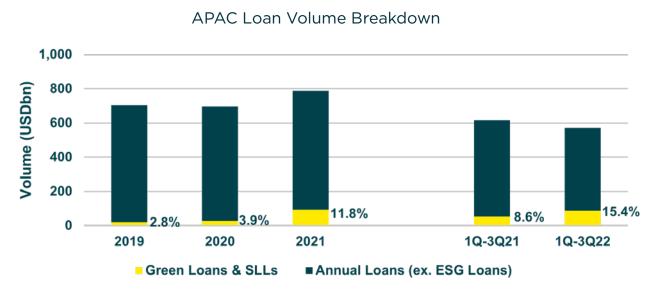
Across Asia, regulators are implementing initiatives to drive access and ESG disclosure. In the first 3 quarters of 2022, Green and Sustainability Linked Loans in Asia Pacific tallied at \$75B, a 75% increase of the\$43bn figure recorded in the same period last year.

Global Green Loans & SLLs Volume 800 1000 Volume (USDbn) 800 600 **Deal Count** 600 400 400 200 200 0 0 2019 2020 2021 1Q-3Q21 1Q-3Q22 **APAC** -Total Deal Count EMEA Americas

Source: Bloomberg/Refinitiv Loan Collector

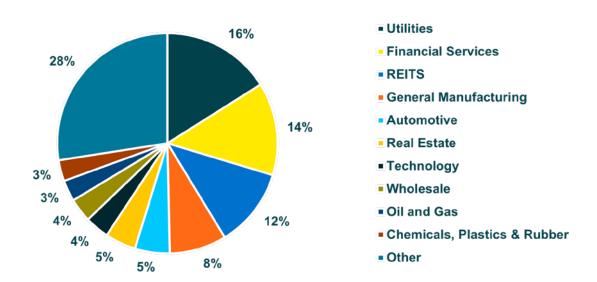
The presence of ESG Loans has grown substantially in recent years, constituting 2.8% of the total loans issued in 2019 versus 15.4% recorded in the first 3 quarters of 2022 alone.

In emerging markets, sustainable loans are typically utilised in the development of waste management, renewable energy, clean transport or research in to future tools for Sustainability.



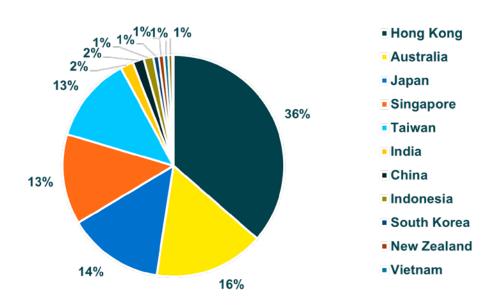
Source: Bloomberg/Refinitiv Loan Collector

Breakdown by Industry - Global 1Q-3Q22



Source: Bloomberg/Refinitiv Loan Collector

Breakdown by Region - APAC 1Q-3Q22



Source: Bloomberg/Refinitiv Loan Collector

DEUTZ AG: Making a difference with Sustainability Linked Loans

German engine manufacturer DEUTZ has taken significant steps to shift some new borrowings to Sustainability Linked Loans. This forms part of its strategy to strive for commercial success while fulfilling its corporate, social, and environmental responsibilities.

DEUTZ's overarching objective is to balance commercial success with its ESG goals. Commerzbank's Sustainability Linked Loan reaffirms that objective.

DEUTZ says that part of its responsibility to society is to help to improve the protection of the environment and climate around the world by developing innovative drive solutions. The company also strives to fulfill its responsibility in this area by continuously optimizing the processes and activities associated with its own business operations with regard to their impact on the environment and society.

As such, it has taken on Sustainability Linked Loans as an alternative general form of funding to finance business objectives, specially achieving the increase in inventory ranges required amid the current supply chain difficulties, and to be able to invest in the company's transformation and growth projects.

DEUTZ has set itself various goals under its Taking Responsibility sustainability strategy, the most important of which include reducing CO_2 emissions.

AROUT.

DEUTZ is one of the world's leading manufacturers of drive systems for off-highway applications. Originally founded as N.A. Otto & Cie. in Cologne, Germany, in 1864, DEUTZ is now the world's oldest engine company. The DEUTZ Group employed around 4,750 people worldwide at the end of 2021

Renewables - Coming to Singapore

Commerzbank has been active in helping finance sustainability linked products. With sustainability as one of our four strategic pillars, our portfolio across the sector is set to grow to \$10B by the end of 2025.

To reinforce our commitment in sustainability and renewable energy, we established our own dedicated Centre of Competence Energy in Hamburg in 2003, which is today one of the biggest financiers of renewable energy in Europe. The centre has been expanding its presence globally, with an established unit in New York and another planned

in Singapore soon to support our clients in the Asia Pacific region.

Commerzbank, specifically the Centre of Competence Energy, has been supporting companies along the renewable energies value chain for decades, thereby developing extensive knowledge of technologies, market participants and financing structures. The centre offers bilateral and syndicated project financing, both onshore and offshore, as well as the entire range of corporate banking services for companies across the renewable energy industry.







Global Economic Outlook Provides

New Opportunities for German Corporates

As supply chains alter and the global economy evolves, the macro-economic outlook is facing headwinds as we see decades high inflation combined with central banks acting aggressively to try and stem rising prices.

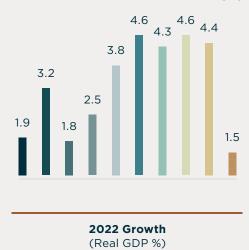
Parts of Asia are not struggling with the same record high inflationary pressures that parts of the European continent and United States are witnessing. A major economic slowdown is not predicted for the region in 2023, unlike in more established markets.

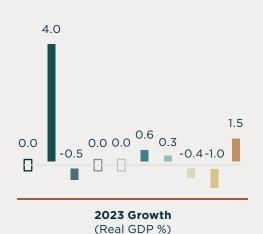
With inflation rates in Asia not as lofty as elsewhere in the world, it opens the ASEAN region as being an advantageous place to do business given the impost of higher input prices will be less than home markets.

Energy prices have put some upward pressure on prices at both a wholesale and consumer level in Asia, but these have been capped as energy prices have subsided somewhat.

The anticipated slowdown in the US, UK and EU over 2023 should provide further impetus for diversification in Asia.

Global Growth Outlook





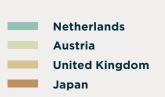
Global inflation for 2023











Source:Commerzbank Economic Forecasts

Conclusion:

German Corporates are well placed to take full advantage of emerging opportunities Asia

As the global economy moves into 2023 with a renewed sense of uncertainty and with challenges on the global growth front, a strategy around diversification and risk management is clearly key.

To hedge against any protracted slowdown in established home markets, German corporates can continue an already well-established growth trajectory that sees them taking advantage of above trend growth in Asia. There are also opportunities to access potentially untapped demand across a variety of sectors.

This whitepaper has identified key areas where German corporates can grow and diversify as follows:

- Diversification across burgeoning ASEAN markets like Vietnam, Malaysia and Indonesia
- Taking advantage of supply chain diversification as the Chinese economy evolves
- Using German expertise to expand the reach of ESG models across developing and emerging markets in the ASEAN region
- Take advantage of the growing push for Sustainability Linked Loans

The rising prevalence of ESG mandates across parts of the Asia Pacific and the German experience across the move towards sustainability mean Commerzbank is well placed to guide business, particularly the Mittelstand on such new developments in the region.

The rise of the German Supply Chain Act and a push towards a sustainable supply chain is evidence a variety of German experiences can be adopted in Asia or other new markets.

Commerzbank, with its established links in the region and vast network of expertise, is able to use its position as a leader in trade finance to promote the interests of German SMEs by growing individually or working more closely with local partners and the private sector in ASEAN.

German business should feel ready to meet the opportunities and challenges in Asia, where diversification across the region is key, while maintaining the strength of the solid relationship with established and trusted trading partners like China. We expect cross border cooperation, sustainability, and best global business practice to remain top of mind for German corporates in Asia for some time.



References

ASEAN. (2021). Asean-Germany Development Partnership. Retrieved from https://asean.org/wp-content/up-loads/2021/11/Overview-of-ASEAN-Germany-Development-Partnership_as-of-November-2021_fin.pdf

Asia Pacific Conference of German Business. (n.d.). Home page. Retrieved from https://www.asiapacificconference.com/

Bruche, G., Venohr, B. (2015). German Mittelstand Champions in Asia - Catching the next wave of growth. Retrieved from https://www.researchgate.net/publication/283568392_German_Mittelstand_Champions_in_Asia_-_Catching_the_next_wave_of_growth

Chemanager. (2014). Successful in Singapore: German Mittelstand Companies. Retrieved from https://www.chemanager-online.com/en/news/successful-singapore-german-mittelstand-companies

Commerzbank. (2022). Commerzbank report: Mittelstand Sustainability Report: An Economy in Transition Sustainable & Digital.

Destatis. (2021). Ranking of Germany's trading partners in foreign trade. Retrieved from https://www.destatis.de/EN/Themes/Economy/Foreign-Trade/Tables/order-rank-germany-trading-partners.pdf?__blob=publicationFile

Economist Impact. (2022). Data point: what's driving ESG adoption in ASEAN countries? Retrieved from https://impact.economist.com/sustainability/resilience-and-adaptation/data-point-whats-driving-esg-adoption-in-asean-countries

Enterprise Singapore. (n.d.). Germany-Singapore SME Funding Programme. Retrieved from https://www.enterprisesg.gov.sg/financial-assistance/grants/for-local-companies/international-co-innovation-programmes/germany-singapore-sme-funding-programme

European Commission. (2019). EU-Vietnam Trade Agreement and Investment Protection Agreement. Retrieved from https://policy.trade.ec.europa.eu/eu-trade-relationships-country-and-region/countries-and-regions/vietnam/eu-vietnam-agreement_en

German-Indonesian Chamber of Industry and Commerce. (n.d.). History page. Retrieved from History (ahk.de)

German Industry and Commerce Vietnam. (2021). German Vietnam Desk. Retrieved from https://vietnam.ahk.de/en/ab-out-us/representative-partner/german-desk-vietnam

German-Thai Chamber of Commerce. (n.d.). About Us page. Retrieved from. https://thailand.ahk.de/en/about-us

Global Business Magazine. (2020). Singapore and Germany to deepen innovation collaborations at SWITCH 2020. Retrieved from https://globalbusiness-magazine.de/en/singapore/

Global Finance. (2022). Commerzbank again "Germany's Best Trade Finance Provider 2022". Retrieved from https://www.firmenkunden.commerzbank.de/portal/en/cb/de/firmenkunden/ueber_uns/unsere-auszeichnungen/unsere_auszeichnungen 1.html

Kliem, F. (2020). Why German industry is looking past China to the rest of Asia. Retrieved from https://asia.nikkei.com/Opinion/Why-German-industry-is-looking-past-China-to-the-rest-of-Asia

Kracht, J. (2013). China's Mittelstand man. Retrieved from https://www.weekinchina.com/2013/02/china%e2%80%99s-mittelstand-man/

Lai, L. (2020). Singapore, Germany tie-up to help local and German SMEs transform, deepen business ties. Retrieved from https://www.businesstimes.com.sg/government-economy/singapore-germany-tie-up-to-help-local-and-german-smestransform-deepen-business

Make in India Mittlestand. (2015). Introduction of Make in India Mittlestand Programme. Retrieved from https://indianem-bassyberlin.gov.in/pdf/menu/miim/MIIM-Programme-Highlights-August-2021.pdf

Malaysian-German Chamber of Commerce and Industry. (n.d.) About Us page. Retrieved from https://www.malaysia.ahk. de/en/about-us

Meyer, M., Tan, M., Vohra, R., McAdoo, M. & Lim, K. M. (2021). How ASEAN Can Move Up the Manufacturing Value Chain. Retrieved from https://www.bcg.com/publications/2021/asean-manufacturing

OEC. (2020). Historical Data: Bilateral trade between Ger-many and China. Retrieved from https://oec.world/en/profile/bilateral-country/chn/partner/deu

OEC. (2020). Historical Data: Bilateral Trade between Indonesia and Germany. Retrieved from https://oec.world/en/profile/bilateral-country/deu/partner/idn#:~:text=The%20main%20products%20that%20Germany%20exported%20to%20Indonesia,from%20%242.59B%20in%201995%20to%20%242.54B%20in%202020.

OEC. (2020). Historical Data: Bilateral Trade between Malaysia and Germany. Retrieved from https://oec.world/en/profile/bilateral-country/deu/partner/mys

OEC. (2020). Historical Data; Bilateral Trade between Vietnam and Germany. Retrieved from https://oec.world/en/profile/bilateral-country/vnm/partner/deu?redirect=true

Rinke, A., Marsh, S. (2022). Exclusive: German economy ministry reviews measures to curb China business. Retrieved from https://www.reuters.com/markets/exclusive-german-economy-ministry-reviews-measures-curb-china-business-2022-09-08/

RSK. (2022). ESG reporting across the ASEAN economies. Retrieved from https://rskgroup.com/insights/esg-reporting-across-the-asean-economies/

Szesny, A. (2020). Taicang, a base for German Mittelstand in China. Retrieved from (17) Taicang, a base for German Mittelstand in China | LinkedIn

Tang, F. (2020). What is China's dual circulation economic strategy and why is it important? Retrieved from https://www.scmp.com/economy/china-economy/article/3110184/what-chinas-dual-circulation-economic-strategy-and-why-it

Trading Economics. (2022). Germany Exports to Singapore. Retrieved from https://tradingeconomics.com/germany/exports/singapore

Workman, D. (2021). Germany's Top Trading Partners. Retrieved from https://www.worldstopexports.com/germanys-top-import-partners/

Yao, K. (2020). What we know about China's ,dual circulation' economic strategy. Retrieved from https://www.reuters.com/article/china-economy-transformation-explainer-idUSKBN2600B5

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