

Global Economics & Markets Research

Email: GlobalEcoMktResearch@uobgroup.com

URL: www.uob.com.sg/research

Macro Note

China: Opportunities From Guangdong-Hong Kong-Macao Greater Bay Area

Friday, 29 March 2019

Suan Teck Kin, CFA Head of Research Suan.TeckKin@uobgroup.com

Ho Woei Chen Economist Ho.WoeiChen@uobgroup.com



- On 18 February 2019, China unveiled the outline plan for the Guangdong-Hong Kong-Macao Greater Bay Area (GBA) to be developed into a vibrant world-class cluster and amongst others, a globally influential innovation and technology hub.
- The economies of Guangdong, Hong Kong and Macao are significantly different from one another and this allows value to be created by leveraging on their diverse strengths. In addition, the generally more mature economies of Hong Kong and Macao will not only be set as benchmarks but also stand to gain from faster growth rate of its mainland peers in the combined entity of GBA.
- Comparing to other "Bay Areas" around the world, there is much potential for GBA given the specializations of various cities within GBA and the tightened connectivity will help to further synergize these cities' capabilities.
- At US\$1.6 trillion in 2018, we expect the nominal GDP of the GBA to rise to US\$2.7 trillion by 2025 (assuming a conservative nominal growth of 7.5% per annum) to become the largest Bay Area in the world and further rise to US\$4.0 trillion in 2030.
- As the GBA will remain at the planning stage in the immediate period with focus on improving integration, there will be substantial leeway given to local governments over how they will pursue these goals. We think the vague targets are in recognition of the challenges in integrating the region which covers three different customs, legal systems and currencies.





The Guangdong-Hong Kong-Macao Greater Bay Area (GBA) consists of Hong Kong SAR, Macao SAR and nine cities in Guangdong (Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing). Boasting a population of 70 million and land area of nearly 55,907 sq km, it accounts for 12.5% of China's GDP. The nine Mainland cities account for nearly a quarter of Mainland's total trade while the region accounts for 39.2% of trade in China, Hong Kong and Macao combined.

Greater Bay Area Plan: Moving Into Acceleration Phase

China unveiled the outline plan for the Guangdong-Hong Kong-Macau Greater Bay Area (GBA) on 18 February 2019, with the aim to develop the region into a vibrant world-class cluster.

The key targets include:

- 1. developing the region into a globally influential innovation and technology hub,
- nurturing a dynamic economic region with a cluster of cities that complement each other in terms of people, capital, goods, services and information,
- deepening cooperation between mainland China, Hong Kong and Macao,
- establishing a quality living circle for living, working and travelling and
- 5. acting as a catalyst for the Belt and Road Initiative (BRI)

The 11 cities in the GBA are situated along the Maritime Silk Road of the BRI and share the same goal to further open up China's trade and investment, through enhancement in infrastructural connectivity, economic and trade cooperation as well as people-to-people exchanges with different regions. Hong Kong and Macao will thus become important platforms for joint participation in the BRI.

The plan identifies Hong Kong SAR, Macao SAR, Guangzhou and Shenzhen as the core cities to lead the GBA development. This is important because the plan will lift the status of the Special Administrative Regions (SARs) of Hong Kong and Macao in China's economic development.

Through the "one country, two systems" model, investors will be able to leverage on Hong Kong's advantages as the most internationalised city within the GBA with developed financial/legal infrastructure, to participate in the GBA growth. It is conceivable that Hong Kong's status as an international financial hub will be further strengthened in this current GBA framework, including its role in further internationalisation of the RMB while it will continue to serve the GBA in other areas such as shipping, trade, aviation, financial services, and as a magnet for attracting international talent.

In the immediate period to 2022, the GBA plan aims to achieve coordinated regional development where the framework for an international first-class bay area and world-class city cluster should be essentially formed. By 2035, the GBA is envisioned to become an innovation-driven economic system. As the GBA will remain at the planning stage in the immediate period with focus on improving integration, there will be substantial leeway given to local governments over how they will pursue these goals. We think the vague targets are in recognition of the challenges in integrating a region which covers three different customs, legal systems and currencies.

Greater Bay Area: Key Milestones

The GBA has received much attention since last year (2018). Spun off from the earlier mainland-focused Pearl River Delta (PRD) economic zone (which did not include SARs of Hong Kong and Macao in its earliest configuration), the GBA was set as a national strategy in 2016. In July 2017, the National Development and Reform Commission (NDRC) and the governments of Guangdong, Hong Kong and Macao signed the "Framework Agreement on Deepening Guangdong-Hong Kong-Macao Cooperation in the Development of the Bay Area".

The increasing interest on GBA came along with the opening of the 55 km Hong Kong-Zhuhai-Macao Bridge (HZMB) in October 2018 and the final 26 km phase Hong Kong section of the Guangzhou-Shenzhen-Hong Kong Express Rail Link (XRL) in September 2018. The Guangzhou-Shenzhen and Guangzhou-Zhuhai sections of the XRL were completed in 2011-12. The HZMB cuts travelling time between Zhuhai and Hong Kong to under an hour from four hours previously while the completion of the final 26km of the Hong Kong section in the XRL integrates commuters in Hong Kong into China's national rail network. This

will realise the GBA target of 'one-hour living circle' i.e. bringing all major cities within the GBA in a travel radius of one hour, in order to speed up regional development.

These two major cross-boundary infrastructure projects are a huge boost to the physical connectivity in the GBA. This will be further strengthened by two more bridges over the Pearl River which are currently under construction. 1) The second Humen Bridge that will link Guangzhou and Dongguan is scheduled for completion in 2019, and 2) the Shenzhen-Zhongshan Bridge to connect these two major cities on the eastern and western sides of the PRD is expected to come into operation in 2024.

The recently proposed Zhuhai-Shenzhen bridge and highspeed rail project will add further to the list of plans to link up the various economic nodes of the GBA and hence its attractiveness as well as its upside potential.





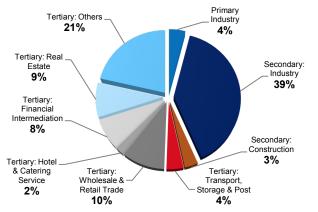
Creating Synergies Through The Strengths Of The Diverse GBA Cities

The economies of Guangdong, Hong Kong and Macao are significantly different from one another and therein lie their complementarity nature and potential: Guangdong province is primarily manufacturing-based (secondary industry is 39% of GDP) with diverse capabilities among its cities; Hong Kong on the other hand, has always been predominantly services-driven; and Macao's economy is mainly driven by tourism and related services. The integration of these varied cities through enlarged and integrated connectivity, regulation etc will create value and synergies by leveraging on their diverse strengths.

Guangdong's Large Manufacturing Sector Is The Key Driver Of Its Economy

Source: CEIC, UOB Global Economics & Markets Research

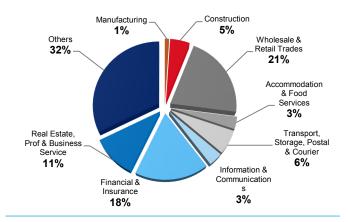
Guangdong Economic Structure (% Share of GDP, 2017)



Hong Kong Is A Services-Driven Economy With Deep Specialisation In Trade And Finance

Source: CEIC, UOB Global Economics & Markets Research

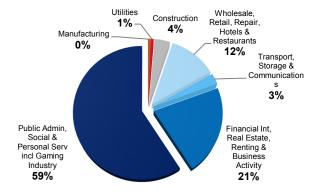
Hong Kong Economic Structure (% Share of GDP, 2017)



Tourism And Gaming Accounts For The Bulk Of Macao's Economy

Source: CEIC, UOB Global Economics & Markets Research

Macao Economic Structure (% Share of GDP, 2017)



Guangdong: Large Diverse Manufacturing Base And A Driver Of Innovation And Technology

Technology will continue to be a major driver of the GBA growth. Harnessing Guangdong's position as one of the fastest growing provinces in China and a leader in advanced manufacturing and innovation in the country, the GBA plan aims to turn the region into an international innovation and technology hub, cementing its status as one of the major high-tech manufacturing centers of the world.

The large and diverse manufacturing base in the Guangdong cities ranges from high-tech manufacturing in Shenzhen, white goods in Zhongshan and Foshan, and automobiles in Jiangmen. The GBA will be able to capitalize on the various supply chains

to create more value for the manufacturing industries and has the potential to propel China's high-tech export share in the coming years (from current 30%).

By province, Guangdong has the highest R&D expenditure which accounted for 13.3% share of total R&D expenditure in China in 2017. The R&D expenditure in the province has continued to rise over the years to reach 2.5% of Guangdong's GDP in 2017. Guangdong is also ranked highly in urban fixed asset investment with US\$553.6 bn (39.6% of Guangdong's GDP) recorded in 2017. By sector, around 28% of the urban FAI in Guangdong is in manufacturing while real estate accounted for 36%.

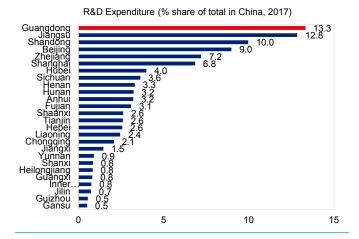




The Guangzhou-Shenzhen (GZ-SZ) Science & Technology Innovation Corridor sits within the GBA. The official go-ahead for the corridor was given in 2017 to develop the economic belt connecting the cities of Guangzhou, Dongguan and Shenzhen into China's "Silicon Valley" by 2030. Total investments in R&D is targeted to account for more than 3.5% of GDP by 2020 and more than 4% of GDP by 2030 for this region (we estimate this to be 2.5% for Guangdong in 2017).

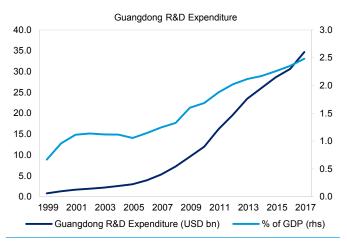
Guangdong Tops Provinces In R&D Expenditure

Source: CEIC, UOB Global Economics & Markets Research



Rising R&D Expenditure in Guangdong

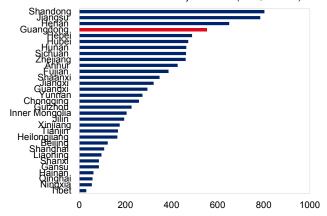
Source: CEIC, UOB Global Economics & Markets Research



Urban Fixed Asset Investment (FAI) By Provinces

Source: CEIC, UOB Global Economics & Markets Research

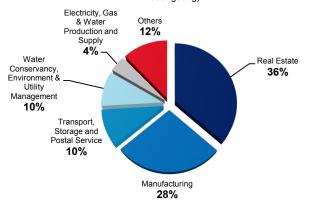
Urban Fixed Asset Investment By Provinces (2017, USD bn)



Guangdong Fixed Asset Investment Is Largely In Real Estate And Manufacturing

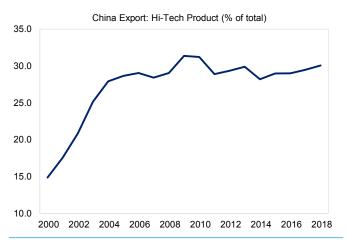
Source: CEIC, UOB Global Economics & Markets Research

Urban Fixed Asset Investment By Sector (% Share of Total In Guangdong)



China's High-Tech Exports Held Up At 30%

Source: CEIC, UOB Global Economics & Markets Research







Hong Kong SAR: Window To The World

Hong Kong's role as an international financial hub and leader in shipping, trade and aviation, as well as a hub for offshore RMB, management of global assets and risk management will be strengthened under the GBA plan.

Hong Kong acts as a platform for foreign investments into the mainland and is also an investment channel for Chinese outward direct investment (ODI) to the rest of the world. In 2017, more than a third of Hong Kong's ODI was bound for the mainland, of which around 30% went to the Guangdong province.

On the other direction, Hong Kong received close to 60% of China's total ODI. Given the strong two-way investment flows and Hong Kong's traditional role as an Asian financial center, there will be further opportunities to use Hong Kong for fund raising and investment in the GBA projects, particularly if Hong Kong financial firms are given more freedom to operate in the region.

Hong Kong Receives Close To 60% of Mainland China's ODI

Source: CEIC, UOB Global Economics & Markets Research

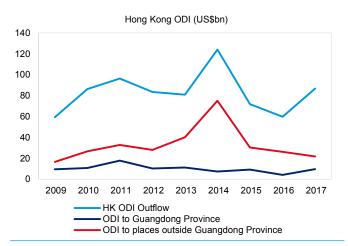


Macao SAR: International Tourism Hub

The GBA plan targets to strengthen Macao's role as an international tourist hub and a trading platform of China with Portuguese-speaking countries. As a relatively small part of the GBA in terms of both GDP and land size, Macau will nevertheless have a significant role to play in driving tourism growth for the entire region, as connectivity is enhanced with the major infrastructure projects. Like Hong Kong, Macao will be able to enjoy a larger and outsized multiplier effect from this enhanced connectivity due to the relatively small size of its economy.

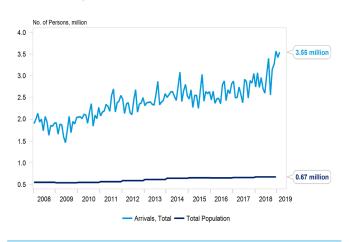
More Than A Third Of Hong Kong's ODI Goes To Mainland China

Source: CEIC, UOB Global Economics & Markets Research



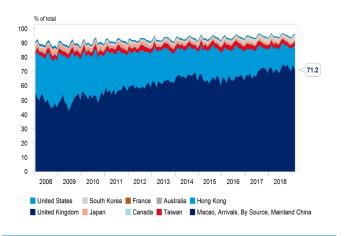
Macao: Monthly Visitor Arrivals Far Outweigh Local Population

Source: Macrobond, UOB Global Economics & Markets Research



China Accounts For Largest Share Of Overnight Visitors To Macao

Source: Macrobond, UOB Global Economics & Markets Research







Comparison With Major Bay Areas Around The World

Hong Kong, Macao and Guangdong province have very diverse strengths and specialization that puts the GBA in a different sphere compared to other bay areas such as the Greater Tokyo Area, San Francisco Bay Area and the New York Metropolitan Area.

Compared against the other bay areas, the GDP size of the Guangdong-Hong Kong-Macau GBA is double of San Francisco Bay Area and catching up with Greater Tokyo Area and the New York Metropolitan Area.

On a per capita GDP basis, Greater Tokyo Area is ranked third while GBA wraps up at the bottom. The relatively low GDP per capita for the Guangdong-Hong Kong-Macao GBA – which is just about half that of Greater Tokyo area in 2017 – suggests large upside potential for the GBA.

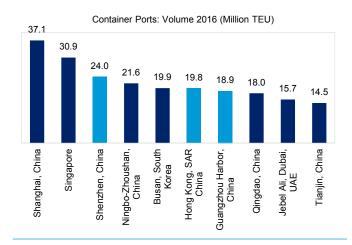
The Guangdong-Hong Kong-Macao GBA accounts for 12.5% of China's GDP though having a population share and land area share of only 5.0% and 1.2% respectively. The nine Mainland cities account for nearly a quarter of Mainland's total trade while the region accounts for 39.2% of trade in China, Hong Kong and Macao combined.

Given the focus of the GBA plan on trade and logistics, financial services, technology industries and R&D, there will be benefits for the finance, manufacturing and trade activities from the city cluster development.

We also see huge potential for trade development given that three of the top ten container ports in the world are located within the GBA, including the ports in Shenzhen, Hong Kong and Guangzhou and having a combined tonnage of 62.6 million TEU (in 2016). This is comparable with the combined tonnage of the world's two largest ports which are in Shanghai and Singapore.

World Top 10 Container Ports

Source: World Shipping Council, UOB Global Economics & Markets Research



While GBA is ranked at near the bottom of the list in terms of GDP size and per capita GDP, it has the advantages of having the largest ports within its vicinity, largest population base (more than 50% larger than the nearest comparable, Greater Tokyo Bay) and land area (which is only 1.2% of the land space in mainland but is already more than 50% larger than the largest Bay Area in the world, Greater Tokyo Area).

Combined with the ingenuity and resilience of the local population and determination of the various levels of governments, these factors all but assure that GBA will be on track to become the world's largest Bay Area and a globally influential innovation and technology hub, in time. Provided that the plan is implemented properly and no major disruptions erupt along the way, income levels, standard of living, and the size of the GBA economy will be further elevated in the coming decades.

BAY AREAS COMPARISON	POPULATION (million)	NOMINAL GDP (USD billion)	GDP PER CAPITA (USD)	LAND AREA (square km)
The Guangdong-Hong Kong-Macao GBA	69.6 (5.0% of Mainland China)	\$1,513 (12.5% of Mainland China, 2017)	21,742	55,907 (1.2% of Mainland China)
Greater Tokyo Area (Tokyo, Chiba, Saitama and Kanagawa)	44.0 (34.6% of Japan)	\$1,774 (35.8% of Japan)	40,360	36,898 (10.1% of Japan)
San Francisco Bay Area (San Jose, San Francisco and Oakland)	7.6 (2.3% of US)	\$781 (4.2% of US)	102,230	17,886 (0.2% of US)
New York Metropolitan Area (New York City and surrounding counties of New York, New Jersey, Connecticut, and Pennsylvania)	20.2 (6.2% of US)	\$1,658 (8.9% of US)	82,050	21,479 (0.2% of US)

Sources: HKTDC, World Bank, UOB Global Economics & Markets Research





GBA: Synergizing The Diverse Cities With Different Specializations

The Guangdong-Hong Kong-Macao Greater Bay Area (GBA) consists of 9 cities in Guangdong province on the mainland, and the islands of Hong Kong and Macao on the other side of the mainland.

Listed below are a list of specializations of these various cities in the GBA which showcase how these various strengths will come into play as connectivity is being strengthened.

Hong Kong SAR	International finance center, leading in shipping, trade and aviation, and is a hub for offshore RMB, management of global assets and risk management.
Macao SAR	International tourist hub and a trading platform of China with Portuguese-speaking countries such as Brazil.
Shenzhen	Technology hub focusing on manufacturing and R&D with presence of major tech companies. Shenzhen is the key node of the GZ-SZ Science & Technology Innovation Corridor and will act as a special economic zone. It is third largest city in China.
Guangzhou	Provincial leader. It is the fourth largest city in China and is the political, economic, tech, education and cultural hub of southern China.
Dongguan	Its large number of manufacturing enterprises and industrial parks form an important node of the GZ-SZ Science & Technology Innovation Corridor.
Huizhou	Petrochemicals and electronic information are the pillar industries. It is one of Guangdong's primary clean energy production centre.
Zhuhai	Tourism hub. The key industries include electrical & electronics and bio-pharmaceutical products.
Jiangmen	Motorcycle manufacturing is a key industry. It is proactively developing five key industry clusters, including rail transport, heavy trucks and commercial vehicles, new materials, new energy and equipment, educational equipment as well as health.
Zhongshan	A leader in white goods manufacturing and is also known for its garments and furniture industries.
Foshan	White goods production and sales. Manufacturing industries cover machinery and equipment, electronic information, food and beverages, fine chemicals, pharmaceuticals and homeware.
Zhaoqing	Manufacturing centre for textiles and garments, food and beverages, furniture, building materials, metal products and home appliances. Increasing focus on advanced equipment manufacturing and new materials industries amongst others.

Source: Newswires, HKTDC, UOB Global Economics & Markets Research

Conclusion

The Guangdong-Hong Kong-Macau Greater Bay Area (GBA) which consists of Hong Kong, Macau and nine cities in Guangdong (Guangzhou, Shenzhen, Zhuhai, Foshan, Huizhou, Dongguan, Zhongshan, Jiangmen and Zhaoqing), is connected via various physical infrastructures that are already in place or soon to be completed.

The diverse nature and specializations of these GBA cities will be synergized further by the tighter connectivity to create higher value add in the economy. One aim of the plan is to develop GBA as a globally influential innovation and technology hub. This

aim is within reach, given GBA's current advantages in terms of trade volumes, physical size and population base. Combined with the ingenuity and resilience of the local population and determination of the various levels of governments, these factors all but assure that GBA will be on track to become the world's largest Bay Area.

At US\$1.6 trillion in 2018, we expect the nominal GDP of the GBA to rise to US\$2.7 trillion by 2025 (assuming a conservative nominal growth of 7.5% per annum) to become the largest Bay Area in the world and further rise to US\$4.0 trillion in 2030.





È Ö China: Opportu	LAND AREA (SQ KM)	POPULATION (MN) 2017	NOM GDP (USD BN) 2018	GDP PER CAPITA (USD) 2017	GDP GROWTH (%) AVE 2014-18	TERTIARY INDUSTRY (% OF GDP) 2017	% OF TOTAL REGION'S TRADE (%) 2017	FAI/GDP (%) 2017	UTILIZED FAI (USD BN) 2017
HONG KONG	1,106	7.4	363.1	46,199	2.8	89.3	20.4	1	
MACAO SAR	31	2.0	54.5	77,904	(1.8)	94.8	0.2	1	
GUANGZHOU	7,249	14.5	345.7	22,302	7.7	71.0	2.8	28.2	6.3
SHENZHEN SHENZHEN	1,997	12.5	366.3	27,166	8.6	58.5	8.0	23.5	7.4
ZHUHAI	1,736	8.	1.44	23,016	9.5	50.1	6.0	63.7	2.4
FOSHAN	3,798	7.7	150.3	18,401	7.9	40.9	1.2	46.5	1.6
JIANGMEN	9,507	9.4	43.9	8,746	7.9	43.8	0.4	9.79	0.5
ZHAOQING	14,891	4.1	33.3	7,617	7.0	48.0	0.1	72.7	0.2
понzіпн	11,347	8.4	62.1	11,871	8.2	43.0	1.0	59.8	1.
DONGGUAN	2,460	8.3	125.2	13,517	7.9	51.4	3.5	23.1	1.7
ZHONGSHAN	1,784	3.3	54.9	15,646	7.3	48.1	0.7	37.3	0.5
GBA TOTAL	55,907	9.69	1,643	21,742	9.9	65.4	39.2	•	
GBA (EX HK & MACAO)	54,770	61.5	1,226	18,219	8.0	56.8	23.4	46.9	21.8

Source: CEIC, UOB Global Economics & Markets Research





Recent Publications

Vietnam: Economic Growth Slows To 6.8% In Q1; Expecting SBV On Hold This Year, 29 March 2019

China: Premier Li's Boao Speech Supports Government's Commitment To Open Up Investment, 28 March 2019

Indonesia: External Debt Remains Manageable, 28 March 2019

Infographic: Month In Review, 28 March 2019

Malaysia: BNM Trims Growth Outlook; Eases Forex Rules, 28 March 2019

5Y SGS Auction: Stable Bid-To-Cover But Less Aggressive Bidding, 27 March 2019

NZD/USD Tumbles As RBNZ Hints Rate Cut As Next Move, 27 March 2019

Gold: Set To Rally Further As FED Signals End To Rate Hiking Cycle, 26 March 2019

Singapore Industrial Production: A Cautiously-Optimistic View On Singapore's Manufacturing Environment, 26 March 2019

Singapore: Slower Than Expected Core Inflation Seen, MAS Likely To Stay Pat, 25 March 2019



Scan the QR Code for a list of all our reports

Disclaimer

This publication is strictly for informational purposes only and shall not be transmitted, disclosed, copied or relied upon by any person for whatever purpose, and is also not intended for distribution to, or use by, any person in any country where such distribution or use would be contrary to its laws or regulations. This publication is not an offer, recommendation, solicitation or advice to buy or sell any investment product/securities/instruments. Nothing in this publication constitutes accounting, legal, regulatory, tax, financial or other advice. Please consult your own professional advisors about the suitability of any investment product/securities/ instruments for your investment objectives, financial situation and particular needs.

The information contained in this publication is based on certain assumptions and analysis of publicly available information and reflects prevailing conditions as of the date of the publication. Any opinions, projections and other forward-looking statements regarding future events or performance of, including but not limited to, countries, markets or companies are not necessarily indicative of, and may differ from actual events or results. The views expressed within this publication are solely those of the author's and are independent of the actual trading positions of United Overseas Bank Limited, its subsidiaries, affiliates, directors, officers and employees ("UOB Group"). Views expressed reflect the author's judgment as at the date of this publication and are subject to change.

UOB Group may have positions or other interests in, and may effect transactions in the securities/instruments mentioned in the publication. UOB Group may have also issued other reports, publications or documents expressing views which are different from those stated in this publication. Although every reasonable care has been taken to ensure the accuracy, completeness and objectivity of the information contained in this publication, UOB Group makes no representation or warranty, whether express or implied, as to its accuracy, completeness and objectivity and accept no responsibility or liability relating to any losses or damages howsoever suffered by any person arising from any reliance on the views expressed or information in this publication.

