





Cruising Ahead: China Merchants Group's Shekou Prince Bay Project

As China's economy continues to slow, it is turning to infrastructure spending once again to boost growth. Port development is part of this effort since active ports are expected to result in a more vibrant economy. With an eye towards tapping China's growing cruise industry, the Shekou subsidiary of the China Merchants Group (CMG) is harnessing the potential of its new Port-Park-City (PPC) urban development model. The PPC model promises substantial foot traffic and employment through its cruise homeports. However, high capital requirements and the many risks involved suggest that perhaps only state-owned enterprises may be willing to undertake these projects. Indeed, with overcapacity and market risks looming, the survival of homeports depends not only on patient capital, but also operational excellence and an ability to differentiate.

CHINA'S DRIVE TOWARD INFRASTRUCTURE SPENDING

For the past few decades, China has been the model of emerging market growth for other countries to beat. None have yet succeeded. Since 1991, China's annual GDP growth rate has reached as high as 14.2%. It has

never dipped below 7.5% until 2014.¹ The global financial crisis of 2008, however, remains a stark reminder that overdependence on external markets for national prosperity is not without risk. For this reason, the Chinese government remains on the lookout for new avenues for economic growth.²

- 1. "GDP Growth (annual %)." Literacy Rate, Adult Female (% of Females Ages 15 and Above) | Data. Accessed December 16, 2018. https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2017&locations=CN&start=1961&view=chart.
- 2. Hedrick-Wong, Yuwa. "The Reality Of China's Economic Slowdown." Forbes. August 24, 2018. Accessed December 16, 2018. https://www.forbes.com/sites/yuwahedrickwong/2018/08/23/the-reality-of-chinas-economic-slowdown/#1fcc0e6d4d86.

Public investment remains a constant in the Chinese model of economic development. Compared to most developed nations, China still has the highest public investment as a percentage of GDP (13%). That compares to 3% in the United States and 5% in India. In 2015, China's gross government investment was larger than the sum of the next 20 countries combined. On a per capita basis, China is only marginally behind the United States in government investment, essentially making China without equal in this effort.³

Now facing another period of economic transformation, the Chinese leadership has been explicit in its desire to continue using public investment as a driver of growth. Indeed, as part of the late 2017 19th Communist Party of China (CPC) National Congress, the CPC decided to include the "Belt and Road Initiative" and its infrastructure projects into the Party charter, signaling that this initiative will likely continue well into the next decade.

The Congress also highlighted that the government will "accelerate development in high-speed rail, highways, bridges, ports, and airports," while simultaneously

stressing the government's intention "to remove excess capacity, high leverage, and ... emphasize high-quality infrastructure." With more than 20,000 kilometers of high-speed railway to be in place by late 2020, meaning that 80% of China's major cities will be covered, the next phase of high-speed railway and affiliated development projects must focus on more remote and less pressing transportation hubs. As these projects typically produce lower financial returns, developers are simultaneously eyeing other infrastructure segments, including ports and cruise terminals.

THE RISE OF CHINA'S CRUISE INDUSTRY

China's tourism industry remains relatively robust. Specifically, the Chinese cruise market, being a relatively young alternative to air travel, has been growing at a staggering rate. While the global cruise industry grew close to 5.6%,6 China's cruise industry grew by 84% year-over-year on average from 2013 to 2016⁷ — equal to nearly 10% of all global passengers in 2016. China's Ministry of Transport expects the annual number of Chinese passengers to double to 4.5 million by 2020, making China the second-largest cruise market after the

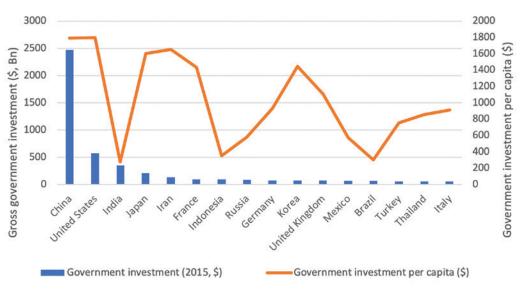
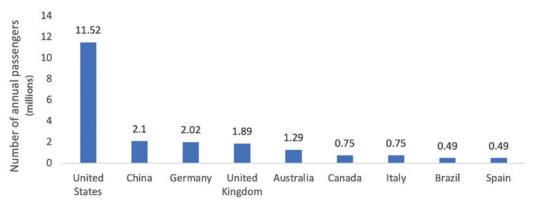


Figure 1: China's government investment per capita far exceeds those of many countries.

Source: IMF

- Estimating the Stock of Public Capital in 170 Countries. January 2017. Accessed January 10, 2019. https://www.imf.org/external/np/fad/publicinvestment/pdf/csupdate_jan17.pdf.
- Chinese Communist Party 19th National Congress. October 19, 2018. Accessed December 16, 2018. http://cpc.people.com.cn/ GB/64162/64168/415039/index.html.
- 5. "China's Plan for Its High-speed Rail." September 16, 2017. Accessed December 16, 2018. https://www.sohu.com/a/192322742 250747.
- "State of the Industry 2019." December 13, 2018. Accessed December 15, 2018. https://cruising.org/news-and-research/2018/ december/2019-state-of-the-industry.
- Sampson, Hannah. "China's Booming Cruise Industry Is Facing a Slowdown." Skift. January 06, 2018. Accessed December 16, 2018. https://skift. com/2018/01/06/chinas-booming-cruise-industry-is-facing-a-slowdown/.

Figure 2: Cruise Passengers from Country of Origin (2016)



Source: Cruise Lines International Association (CLIA)⁸

U.S.

The global cruise industry has moved quickly to respond to China's booming market. In 2015, cruise operator Carnival Corporation formed a US \$4 billion venture with two Chinese state-owned companies. The first, China State Shipbuilding Corporation, will focus on building, buying, and operating new cruise vessels. The second, the China Investment Corporation, China's sovereign wealth fund, has committed to building 10 new ports by 2020 to accommodate new cruise lines and passenger demand.9

For the real estate industry, cruise terminals present an exciting but risky proposition. Cruise terminals not only capture consumer spending both on-and-off cruises, but also offer major commercial opportunities in building, operating, and servicing cruise vessels at ports. The U.S. city of Miami, Florida is often pointed to as an example of potential economic impact. Its cruise industry brought in US \$7.97 billion to the state's economy in 2016, or nearly 1% of Florida's GDP, and created 150,000 jobs. ¹⁰ Given these numbers, and the Chinese government's strong interest in boosting economic growth, it is no surprise that many state-owned enterprises, including the China Merchants Group, are rushing to build cruise terminals.

CRUISE HOMEPORT ECONOMICS: BILLION-DOLLAR IMPACT

Similar to airport hubs, a thriving cruise homeport can cast a wide net of positive externalities across the region. Generally speaking, there are three types of ports:

- Port of call: a port designed as an intermediate stop for most cruise lines. Port of calls are typically smaller replenishment ports located on scenic routes, serving as both a destination and replenishment location for cruise lines.
- 2. Departure Port (not exclusive from homeport): a port designed to serve as an embarkation point, and thus is often well equipped with customs, procurement, replenishment, and vessel servicing capabilities
- 3. Homeport: a major port designed to serve as a hub for cruises, including embarkation, disembarkation, customs, procurement, vessel servicing, vessel construction, and transportation to other transportation means. Homeports are typically located in major coastal cities for ease of access to both tourists and cruise vessels.

Given that homeports are typically much larger than other ports, homeports typically generate 10 to 14 times

^{8. &}quot;State of the Industry 2019." December 13, 2018. Accessed December 15, 2018. https://cruising.org/news-and-research/2018/december/2019-state-of-the-industry.

^{9.} Ramakrishnan, Sruthi. "China Firms, Carnival Corp Form JV to Launch Chinese Cruise Line." Reuters. October 21, 2015. Accessed December 16, 2018. https://www.reuters.com/article/china-britain-carnivl/china-firms-carnival-corp-form-jv-to-launch-chinese-cruise-line-idUSL3N12L4RN20151021.

Cruise Lines International Association. "Global Cruise Industry Contributes \$7.97 Billion to Florida's Economy." GlobeNewswire News Room. October 04, 2017. Accessed December 16, 2018. https://globenewswire.com/news-release/2017/10/04/1140814/0/en/Global-Cruise-Industry-Contributes-7-97-Billion-to-Florida-s-Economy.html.

more economic benefits than a typical port of call. 11 Naturally, major cruise lines like Royal Caribbean Cruises and Carnival Cruise Line are headquartered in Miami, which, as one of the world's busiest homeports, 12 is able to accommodate up to 20 cruise vessels.

A thriving homeport can become a formidable economic engine. In 2016, consulting firm McKinsey & Company projected that a Shenzhen homeport, primarily China Merchants Group's Shekou project, has the potential to drive up Shenzhen's GDP by 1% to 2%. ¹³ E-House also estimates that each additional 200,000-tonne mega-berth, which can accommodate the world's largest cruise vessels, can generate up to 300,000 visitors for the homeport, implying the creation of more than 24,000 jobs and direct contribution of US \$100 million to the economy per year.

Each mega-dock also can contribute up to US \$1 billion indirectly to the economy, owing to a homeport's positive impact on several related industries. These include

- Consumables and entertainment: Restaurants and other retail segments directly benefit from the increased foot-traffic from both passengers and crew from homeports.
- 2. Cruise sales and tourism: Local hospitality and travel sales organizations would emerge to service cruise line demand.
- Cruise operations: Cruise vessels require significant logistical support at docks, including food procurement, maintenance, refueling, and customs clearance.
- Commercial support: Ancillary industries (e.g. office space) would arise to support commercial activities and crew members.

For real estate developers and municipalities, a successful cruise homeport is a much-needed jumpstart to the local economy. While tourists bring substantial spending within homeport facilities, long-term employment and the increased labor force support the development of a real estate market and the wider economy that sustains property prices. A residential development near a cruise homeport, for example, may seem to be unaffected at first glance, but it is closely tied

to the assumption that a cruise homeport can drive up real estate sales. For example, China Communications Construction (CCC), another state-owned enterprise, undertook the construction of Nansha homeport, located in the southern district of Guangzhou. Along with homeport construction, CCC also built residential complexes, offices, and schools around the homeport, and successfully completed its first phase of residential sales in late 2017.

BATTLE AMONG GIANTS IN THE PEARL RIVER DELTA

Given the strong historical growth in Chinese cruise passengers, the Chinese Ministry of Transport outlined the nation's cruise port development strategy in 2015.¹⁵ The plans are ambitious, and include two to three new homeports before 2030, with over a dozen ports of call supporting routes along the eastern coastline. Specifically, the Ministry expects China's cruise industry to focus on the Beijing-Tianjin coast, the Shanghai coast, and the Pearl River Delta.

The story of cruise port development, however, begins with Shekou. In 1981, Shekou established one of the earliest inter-city ferry terminals in the Pearl River Delta, shuttling passengers on hour-long ferries between Hong Kong, Macau, and Shekou. Between 2011 and 2016, CMG completed the construction of the Shekou Cruise Homeport and consolidated its ferry terminal into the homeport. Excluding its cruise operations, Shekou Cruise Homeport now operates more than 150 daily ferries in the Delta.

Designed by Denis Laming, the 42,000-square-meter Shekou Cruise Homeport boasts one 228,000-gt berth and one 120,000-gt berth, along with twelve 800-gt berths. With its mega-berth, Shekou Cruise Homeport is the only Chinese homeport capable of docking Royal Caribbean's Oasis-class ships, the largest passenger vessels in the world. Designed to handle up to 6.5 million passengers per year, the Shekou Cruise Homeport has the potential to become one of the world's busiest. In contrast, the Port of Miami, now the busiest port in the world, handled 5.3 million passengers in 2017. 17

^{11. &}quot;Shenzhen Executes on Cruise Terminal Economics." December 1, 2016. Accessed December 15, 2018. http://sz.house.163.com/16/1201/10/C76P6KC5000786DO.html.

^{12.} County, Miami-Dade. Service Centers - Miami-Dade County. Accessed December 16, 2018. http://www.miamidade.gov/portmiami/cruise-lines.asp.

^{13. &}quot;Shenzhen Executes on Cruise Terminal Economics." December 1, 2016. Accessed December 15, 2018. http://sz.house.163.com/16/1201/10/C76P6KC5000786DO.html.

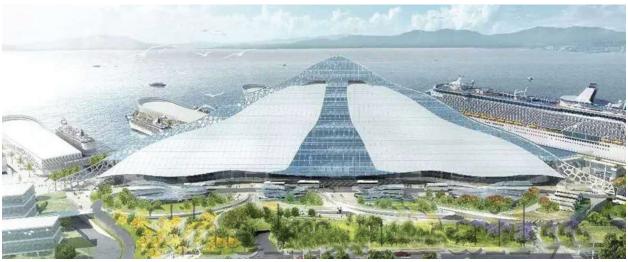
^{14. &}quot;CCC Invests in Nansha." February 16, 2017. Accessed December 16, 2018. http://www.gzns.gov.cn/tzns/tzdt/nsdt/201702/t20170216 340090.html.

^{15. &}quot;National Plan for Cruise Terminal Planning." Accessed December 16, 2018. https://baike.baidu.com/item/全国沿海邮轮港口布局规划方案.

^{16. &}quot;CruiseMapper." Cruise Port Mapper: Shenzhen. Accessed December 16, 2018. https://www.cruisemapper.com/ports/shenzhen-port-11271.

^{17.} County, Miami-Dade. Service Centers - Miami-Dade County. Accessed December 16, 2018. http://www.miamidade.gov/portmiami/cruise-lines.asp.

Figure 3: The Shekou Cruise Homeport, located less than 20 miles from Shenzhen International Airport and Hong Kong International Airport



Source: CruiseMapper

CMG: CHINA'S CENTURY-OLD SOE

As one of China's oldest state-owned enterprises, China Merchants Group (CMG) is no stranger to long-term infrastructure investments. Established in 1872 during the Qing Dynasty, CMG has invested heavily in China's early textile, mining, shipping, and insurance industries. After the fall of the Qing Dynasty and China's Civil War, CMG's ownership, based out of Hong Kong, was transferred to the People's Republic of China's Ministry of Transportation in 1950. CMG's field offices, established decades before the PRC, became instrumental in CMG's competitive edge in assessing feasibility of projects at a local level.

As a state-owned enterprise, CMG has long played a critical role as front runner to the Chinese government's economic and infrastructure plans. Most famously, CMG formed CMG Shekou in 1979 with the sole purpose of supporting China's open-door economic reform. Located just across the bay from Hong Kong, Shekou was China's first Industrial Zone, and was in operation well before the more well-known Shenzhen Special Economic Zone.

Figure 4: Shekou benefits from being near Hong Kong, China's Special Administrative Region and the traditional recipient of foreign investments.



Source: Google Maps

Since then, Shekou's average GDP per capita has topped more than US \$60,000, 20 making it one of the most productive districts in China and rivaling that of the U.S. But it was only in December 2015 that CMG Shekou filed for an initial public offering on the Shenzhen Stock Exchange, and stated its intention of operating across three segments. 21

 $^{18.\ &}quot;CMG\ History."\ History\ of\ China\ Merchants\ Group.\ Accessed\ December\ 16,\ 2018.\ http://www.cmhk.com/en/ac/history/History/index.shtml.$

^{19.} Shekou Industrial Zone - Firsts in Reform an Opening-up. October 09, 2019. Accessed December 16, 2018. http://www.chinadaily.com.cn/regional/2016-10/09/content_27003052.htm.

^{20.} Shenzhen City Planning (1996-2010), Nanshan District Planning

^{21. &}quot;China Merchants Shekou Industrial Zone Holdings Co Ltd (001979.SZ) Company Profile." Reuters. Accessed December 16, 2018. https://www.reuters.com/finance/stocks/company-profile/001979.SZ.

PORT-PARK-CITY: CMG SHEKOU'S 3-PRONGED STRATEGY TO SUPERCHARGE GROWTH

Despite all the excitement around the Shekou Cruise Terminal, CMG Shekou's mission goes far beyond its shipping berths. It is also the real estate developer and operator of the Shekou Industrial Park, the Shekou Cruise Terminal, and the neighboring Shekou residential areas. The Shekou Cruise Terminal is the driver behind the Port-Park-City (PPC) development model and its success would increase employment and improve infrastructure development in Shekou.

In essence, the PPC model aims to develop a thriving urban ecosystem along three fronts:

 <u>Port:</u> The Shekou Cruise Terminal is expected to increase employment in Shekou through both B2C (cruise and ferry customers) and B2B (cargo shipping) activities. As one of China's earliest free-market

- zones, the Shekou Port area is also home to some of China's oldest market-oriented accelerators. The China Merchants Bank and Ping An Insurance, both now leading financial institutions, originated in Shekou.²²
- Park: The Shekou Industrial Park has been driving the area's economic growth since the 1980s. Originally designed for low-skilled manufacturing around aluminum and paint, Shekou's clients have shifted to include high-end consumer electronics firms, including Apple, IBM, and Philips. By early 2018, there were more than 340 internet companies with offices in Shekou, employing more than 35,000 people and generating close to 40 billion RMB (US \$5.8 billion) in revenues and 100 million RMB (US \$14 million) in taxes for Shekou.²³ Along with commercial activities around the Port and accelerators, the Park is the backbone of Shekou's commercial and industrial endeavors.

Dimension	CMG Shekou PPC	CFLD PPP Gu'an
Application	Currently unique to Shekou	Applicable to most PPP urbanizations this decade
Operating model	Local Shekou government grants exclusive management, development, construction, and operational rights to CMG. CMG has significant decision rights on urban planning and design.	Local Gu'an government manages urban development plans and audits CFLD's service levels and costs. CFLD proposes designs and construction to Gu'an and its clients. CFLD was granted exclusive rights to manage the city's operations through a contract.
Scalability	Low. Requires port resources and one-time approvals from high-profile central agencies	High. Model focuses on funding and rights to develop and manage a city. Smaller projects can be approved at a local level.
Location	Requires major port with geographical requirements (e.g. depth of port)	Focuses on tier 2 and 3 satellite cities
Development rights	CMG purchases development rights from Shekou government.	CFLD obtains exclusive rights to develop and manage Gu'an, under the premise of future profitsharing.
Profit-sharing	Land rights, public service fees, commercial revenue commission, industrial revenue commission	Public service fees, tax break / land rights for CFLD as a reward for increased investments and tax base for Gu'an
Exit model	M&A buyout from the government	At contract expiration, CFLD will not be compensated for its exit.

Source: E-House internal study

^{22.} CMG Shekou - Introduction, Accessed December 15, 2018, https://www.cmsk1979.com/about.aspx?type=2.

^{23.} CMG Shekou Internal Data.

 <u>City:</u> Shekou City is the crown jewel of the Shekou PPC ecosystem. Supported by employment gains in Shekou Port and the Industrial Park, Shekou City's residential developments have led to the building of shopping malls, hospitals, schools, and hotels. Moreover, given that substantial tax cuts remain a key draw for Port and Park-based businesses, most of Shekou's taxes continue to come from residential and land sales, ensuring ongoing local government support.

SOEs UNIQUELY POSITIONED FOR PPC URBAN DEVELOPMENT

Because of a riskier payback horizon, higher capital requirements, and the need for strong government support, state-owned enterprises are uniquely positioned to carry out a PPC urban development model. In fact, all three cruise homeports in southern China – the Hong Kong Kai Tak Cruise Terminal, the Guangzhou Nansha Cruise Terminal, and the Shekou Cruise Terminal – were funded by either SOEs or local governments.²⁴ The Shanghai Wusongkou International Cruise Terminal, now the busiest homeport in Asia, is a joint-venture between the Shanghai local government and SinoTran & CSC Holdings, another subsidiary of China Merchants Group.²⁵

Compared to a typical commercial or residential development, a PPC urban development model requires not only more capital, but patient capital. For example, Shekou Homeport alone had cost more than 21 billion RMB (US \$3 billion)²⁶ and will be built over five years. In addition, a cruise terminal cannot immediately recoup its costs through a sale as would be the case for more conventional real estate developments.²⁷ Its return on investment would depend on the strong functioning of an entire ecosystem.

To put this in perspective, Evergrande, one of China's largest real estate developers by revenue, had 822 projects in 2018 in reserve with an average land value of 623 million RMB (US \$89 million). The Ministry of Land and Resources²⁸ estimated that land value, on average, comprises 23% of the total project revenue. At Evergrande's current gross margins, this implies that an average project for Evergrande could cost around 1.7 billion RMB.²⁹ Even for China's most prominent real estate developer, the Shekou Homeport would be at least

12 times the cost of construction, not including the cost of residential properties, surrounding infrastructure, and other complementary projects on top of the cruise terminal.

What makes this manageable has everything to do with the nature of corporate governance in China. Namely, an SOE is the beneficiary of sovereign support in a way that is not available to private firms. SOEs have the luxury of a longer time horizon before their majority shareholder (the state) demands positive returns, thus making it possible for SOEs to pursue more expensive and riskier projects. Moreover, most SOEs operate with the expectation of indirect financial support from the state in the event of financial distress.

In addition to its higher capital requirement and longer payback horizon, a PPC project requires substantial government cooperation at both the central and local levels. The variety of business lines – cruises, cargo terminals, residential development, highway development, and others – each require a number of licenses and regulatory approvals at the local level. Specific infrastructure, such as a designated homeport, also requires regulatory support from the central government. Here, a state-owned enterprise is more likely to secure an alignment of interests at different levels of government, and in turn be more likely to succeed in executing the PPC model of urban development.

Indeed, the structure of a PPC project is set up differently from the growing number of public-private partnerships (PPPs) that exist in China. As illustrated below, CMG's Shekou development has more long-term operational and financial agreements than what is found in a conventional PPP. In contrast to CFLD's 'new style urbanization' PPP project, which recently launched in Gu'an with much government fanfare, CMG's SOE status has translated into greater agency, flexibility and longer-term protection for the firm.

RISKS REMAIN: OVERCAPACITY AND UNPROVEN FEASIBILITY

Despite strong government support, the CMG Shekou model nonetheless faces substantial overcapacity risks and in turn, questions of long-term financial feasibility. After all, other coastal areas also hope to gain from

^{24. &}quot;CruiseMapper: Cruise Port Mapper: Nansha. Accessed December 16, 2018. https://www.cruisemapper.com/ports/ nansha-guangzhou-port-1395.

^{25.} http://www.sinotrans-csc.com/col/col11636/index.html

^{26. &}quot;CruiseMapper: Cruise Port Mapper: Shenzhen. Accessed December 16, 2018. https://www.cruisemapper.com/ports/shenzhen-port-11271.

^{27. &}quot;CruiseMapper." Cruise Port Mapper: Shenzhen. Accessed December 16, 2018. https://www.cruisemapper.com/ports/shenzhen-port-11271.

^{28. &}quot;Ministry of Land and Resources: Land Costs Is about 23% of Total Sales Price." Accessed December 16, 2018. http://tool.ccb.com/Info/1258351.

^{29. &}quot;Evergrande Annual Report 2018." Accessed December 16, 2018. http://doc.irasia.com/listco/hk/evergrande/interim/2018/intrep.pdf

new market trends. For example, while the Ministry of Transport proposed the national development of two to three homeports by 2030,³⁰ southern China alone has completed three home ports (Shenzhen, Guangzhou, Hong Kong) in the last 10 years. With Xiamen, Dalian, Yantai homeports now under construction,³¹ it is highly likely that China will have close to 10 homeports by 2020.

Moreover, despite considerable growth in the Chinese cruise industry, tremendous volatility remains, marked by a sharp decline in 2017. Foreign cruise operators have also noted that consumer fickleness, downward price pressure, and operational difficulties are making China an increasingly unattractive cruise market.³² The government's ban on cruise operators selling directly to consumers, for example, means that tickets are typically sold at a massive discount in bulk to online travel agencies, which engage in aggressive price-cuts to build volume. Consumer demand has also recently dipped, with Chinese customers possibly having lost their excitement over a standardized, limited number of destinations from China

Table 1: Year-on-Year China cruise passenger growth rate (2007-2017)

Year	YOY growth rate
2007	78%
2008	78%
2009	81%
2010	156%
2011	-15.30%
2012	119.20%
2013	148.40%
2014	44.40%
2015	50.40%
2016	93.00%
2017	11.40%

Source: China Cruise & Yacht Industry Association

In turn, any homeport's long-term economic feasibility remains uncertain. CMG Shekou's annual report, for example, highlights that the homeport has been a substantial cash drain on Shekou's development. In its third quarter financial report of 2018, CMG Shekou reported that operational and financial cash flows continue to remain negative even after main construction has been completed, draining 11.8 billion RMB (US \$1.7 billion) in the last nine months alone.³³ While CMG Shekou will likely recoup its costs via commercial and residential sales in its PPC model, investors rightly wonder how CMG Shekou will manage the port's lack of profitability if not for a government bailout of some kind.

CONCLUSION: CHOPPY WATERS AHEAD

The PPC model is an innovative endeavor into the urbanization of China's coastal resources, but thus far, the market remains skeptical how such large infrastructure projects can be sustained. With overcapacity, especially in southern China's most prominent cities, the CMG Shekou homeport will need significant differentiation and operational discipline to move into profitability. While CMG Shekou's commercial and residential capital gains may eventually offset some losses, it will have to manage the homeport's perpetual financial and operational pressure over the next decade to set the stage for long-term sustainability.

^{30. &}quot;National Plan for Cruise Terminal Planning." Accessed December 16, 2018. https://baike.baidu.com/item/全国沿海邮轮港口布局规划方案.

^{31.} Dell. Yantai to Be an International Homeport for Cruise Liners by 2019. January 29, 2018. Accessed December 16, 2018. http://www.chinadaily.com.cn/m/shandong/yantai/2018-01/29/content_35608209.htm.

^{32.} Sampson, Hannah. "China's Booming Cruise Industry Is Facing a Slowdown." Skift. January 06, 2018. Accessed December 16, 2018. https://skift.com/2018/01/06/chinas-booming-cruise-industry-is-facing-a-slowdown/.

^{33.} CMG Shekou - Investor Relations. Accessed December 15, 2018.https://www.cmsk1979.com/investor.aspx?type=33