

Jing Ulrich
Managing Director, Chairman,
China Equities & Commodities
+852 2800 8635
jing.i.ulrich@jpmorgan.com

Amir Hoosain
+852 2800 8641
amir.h.hoosain@jpmorgan.com

Benjamin Wong, CFA
+852 2800 8932
benjamin.mc.wong@jpmorgan.com

Kelvin Wong
+852 2800 8962
kelvin.x.wong@jpmorgan.com

A Different Kind of “Westernization” – a Firsthand Account of Inland Development in China

The Chinese New Year holidays (which fall in early-February this year) have come to represent a period of peak labor shortages for China's coastal enterprises, with many workers returning home at the end of their contracts and choosing not to come back. The underlying reason is that companies themselves have been migrating to the western regions of China in recent years, thus giving laborers the choice of working closer to home, where living costs and housing prices are lower.

In recent weeks, we visited domestic and multinational companies in Shenzhen and Guangzhou (two first-tier cities in the Pearl River Delta), and in Chengdu – the capital of Sichuan province in Southwest China. Our discussions with the companies (which hailed from a range of ‘higher-tech’ industries including IT services, internet, software, telecommunications equipment, pharmaceuticals and medical equipment – *see Appendix 1 for a summary*) provided insights into operating conditions in the two regions, as well as the factors that inform the choice of location for businesses that rely more heavily on the availability of high-skilled labor. Our meetings left us with the impression that beyond the obvious infrastructure story associated with Western development, private sector growth, especially in the service industry, is also accelerating in Western China, supported by attractive government incentives and the desire by many companies to gain proximity to strong regional markets.

I. Beneficiaries of Western Development

The theme of Western development will continue to gain traction over the new five-year plan period due to massive infrastructure investments, manufacturing relocation and the development of higher value-added industries supported by strong central and local-government incentives. Although the expansion of high-tech and service industries is very much evident in China's major inland cities, it is rapid improvements in transport, residential and industrial infrastructure that have facilitated this development. In this context, we believe construction material, railway construction, logistics and service providers, retail and property development companies with exposure to Western China, will be major beneficiaries of this trend (see Figure 1).

- For some high-tech enterprises, the incentive to expand to inner provinces come not only from cost reductions, but more so from the exposure to local markets. Mindray (MR.US) Medical and ZTE (0763.HK) are such examples.
- In addition to lower costs and greater exposure, companies are also attracted by a host of incentives offered by governments of inner provinces. These include preferential tax rates, land grants, and various forms of rebates.
- Despite the potential cost benefits of moving inland, most companies with established bases of operation in coastal cities are considering expansion, but not outright relocation. This is because the coastal cities still offer much better supply chain integration as well as an experienced and higher-caliber workforce. The relatively lower level of English skills and a deeper cultural disconnect are still impediments to operating purely from within inland cities.

Figure 1: Potential investment implications of Western Development

Company	Ticker code	J.P. Morgan recommendation	Comments
Construction material			Covering analyst: Nick Lai
BBMG	2009.HK	Overweight	Cement demand outlook remains robust given large infrastructure construction plans. Also major beneficiary of larger affordable housing targets of 10 million units in 2011 and ongoing industry consolidation.
Railway			Covering analyst: Karen Li
CCCC	1800.HK	Neutral	Exposure to potentially higher government railway capex for 2011. Fast tracking development plans of 120,000km operating length to 2015 from 2020 (of which 50,000km are targeted for the Western region). Total railway capex in 2010 was RMB 709 billion with 91,000km completed.
CRG	1186.HK	Overweight	
Property			Covering analyst: Lucia Kwong
CC Land	1224.HK	Neutral	Better affordability and higher income growth relative to major coastal cities. Demand for residential homes is likely to remain strong with greater influx of foreign, coastal city workers. Land bank exposure to Western region is 100%, 34%, 36% and 33% respectively.
CR Land	1109.HK	Neutral	
Longfor	960.HK	Overweight	
R&F	2777.HK	Overweight	

Source: J.P. Morgan Research

The expansion of public sector infrastructure projects in the last two years helped to trigger a shortage of migrant workers on the eastern seaboard and the resumption of wage acceleration, which in turn forced many companies in labor-intensive industries to move their base of production into the hinterland. Among the sample of companies that we met with, we found that cost benefits were non-uniform, depending heavily on the amount of lower-end manufacturing operations within each business. At one end of the spectrum, a company like Tencent (0700.HK), known for recruiting experienced software developers, has almost no incentive to expand its operations inland. However some inland cities are rising in importance as centers of lower-cost skilled labor – an oft-cited example is Chengdu, where the French computer game developer Ubisoft (UBI.FR) recruits a large number of local university graduates.

II. China's "Go West" Campaign – factors driving inland relocation and expansion

The Chinese government initiated its "Go West" campaign in March 2000, with the intention of extending the nation's economic prosperity to its poorer western and central regions. At the time of the program's inception, the average annual per capita GDP in Eastern provinces was RMB14,105, or almost 2.8 times that of the average Western province at RMB5,118. Through improved transport linkages, inland cities also benefited from the export processing boom that occurred on the coast. The campaign has achieved initial success in recent years with evidence pointing to a gradual transfer of industrial activity from the coast to the inland. In 2005, secondary industries' contribution to the Western region's GDP was 44.9%, climbing steadily to 47.9% by 2009. Meanwhile, the ratio for coastal provinces' fell slightly from 47.9% to 46.1% but the drop was considerably more apparent in Beijing and Shanghai, where the ratio fell from 39.2% to 31.7% (see Figure 2a). Not surprisingly, the opposite phenomenon was observed for tertiary industries, which grew at an accelerated pace in Beijing and Shanghai from 59.7% to 67.4%, as well as other coastal provinces from 42.3% to 45.8%, showing an expansion of services industries as their economies become more mature (see Figure 2b).

Figure 2a: Secondary industry as a component of provincial GDP

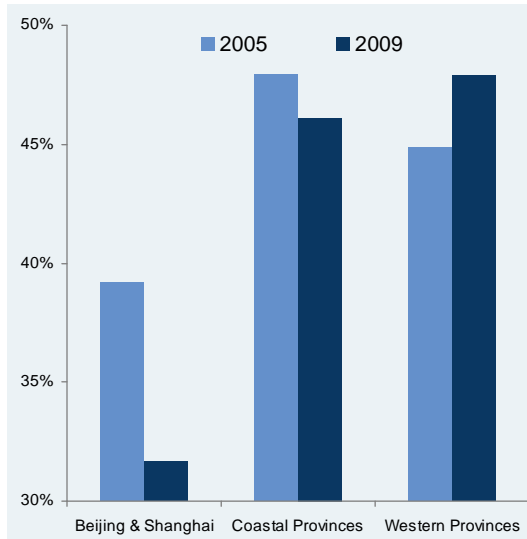
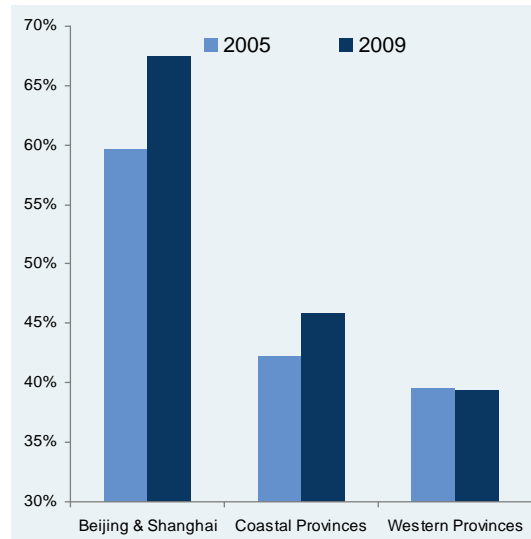


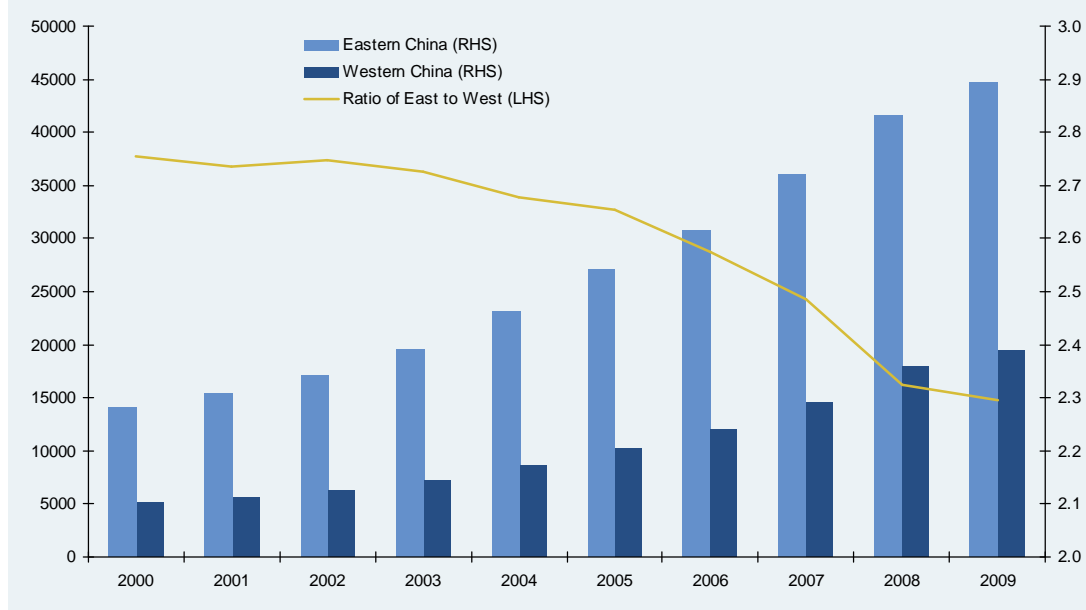
Figure 2b: Tertiary industry as a component of provincial GDP



Source: CEIC, J.P.Morgan Research

This structural shift in economic drivers between coastal and Western provinces is helping to reduce economic disparities. At the Western Development program's inception, average annual per capita GDP in Eastern provinces was RMB14,105, or almost 2.8 times that of the average Western province at RMB 5,118. By the end of 2009, the gap in GDP per capita had narrowed to 2.3 times (See Figure 3).

Figure 3: GDP per capita by region (RMB)



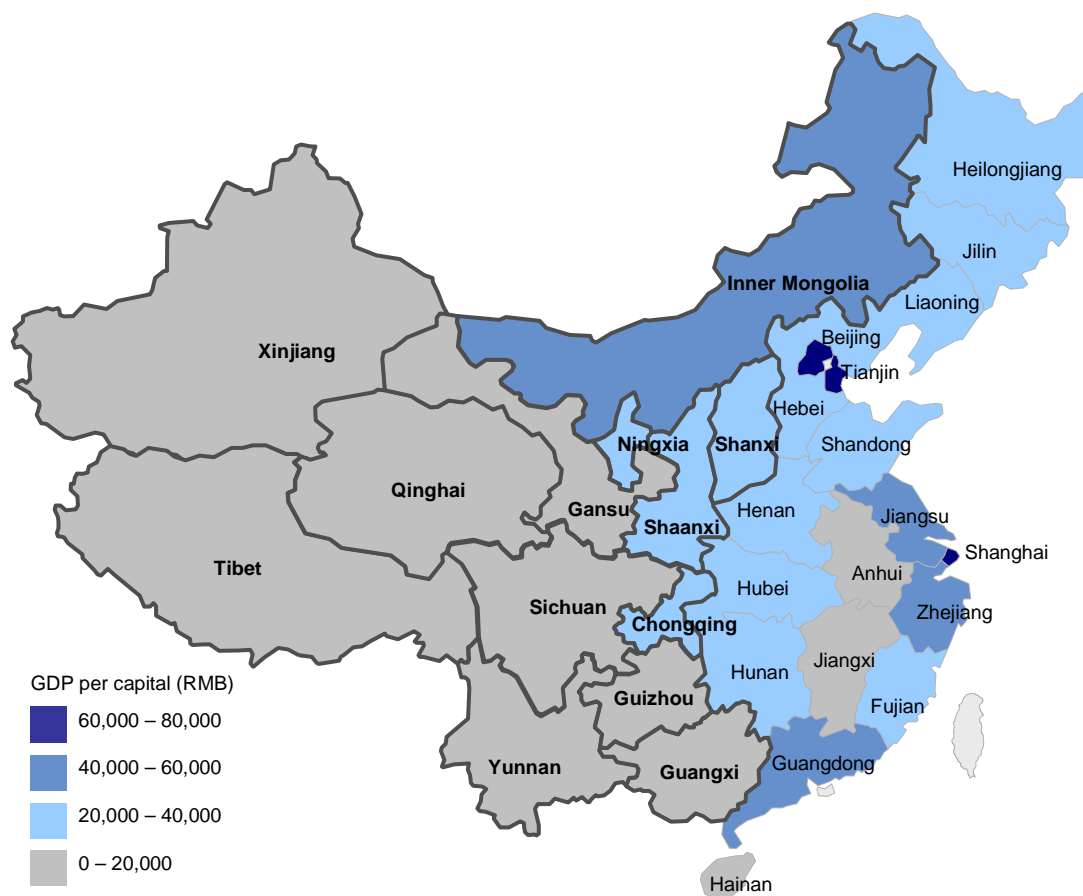
Source: CEIC * Disparity may exist between data from provincial and central statistics bureau

The Western development campaign returned to the spotlight with China's RMB 4 trillion stimulus package, announced in late-2009. More recent policy developments, such as the process of resource tax reform may also be seen as part of a broader package of support, in that they serve to enhance

the fiscal position of the resource-rich Western regions. While lower-end manufacturing and infrastructure construction have been presumed the main driver of regional development, more advanced manufacturing and services industries are also beginning to see China's interior as an attractive investment destination and base of operations. Having achieved a measure of success, China's policymakers indicated in mid-2010 that they would extend the Western Development campaign until 2020.

At the end of 2009, there were only 2 provinces in Western China with GDP per capita above the national median (RMB21,777) – Inner Mongolia at RMB40,282 and Chongqing at RMB22,920. Being well endowed in natural resources, Inner Mongolia was the biggest coal producer in China in 2009. Chongqing, a rapidly urbanizing industrial hub located near the Yangtze River, has benefited from the biggest increase in inbound FDI among all provinces totaling US\$4 billion in 2009. Meanwhile the per capita GDP for China's eight Western-most provinces stood below RMB20,000 in 2009, with Yunnan, Gansu and Guizhou each below RMB15,000 (see Figure 4).

Figure 4: China's GDP per capita distribution (RMB in 2009, Western provinces outlined in bold)



Source: CEIC

Eastern provinces include: Beijing, Fujian, Guangdong, Hainan, Hebei, Jiangsu, Liaoning, Shandong, Shanghai, Tianjin, Zhejiang

Central provinces include: Anhui, Heilongjiang, Henan, Hubei, Hunan, Jiangxi, Jilin

Western provinces include: Chongqing, Gansu, Guizhou, Guangxi, Inner Mongolia, Ningxia, Qinghai, Shaanxi, Shanxi, Sichuan, Tibet, Xinjiang, Yunnan

III. The Attraction of Inland Cities

In recent years many international and homegrown multinationals such as Intel (INTC.US), Dell (DELL.US), Foxconn (2317.TW) and Lenovo (0992.HK) have expanded their operations into Central and Western China (see Figure 5)

Figure 5: Reported investments from large companies into Western region since 2009

Company	City	Planned or actual investments (US\$ mn)	Purpose
Foxconn (TPE:2317)	Chengdu	2000 (planned)	New plants
Intel (NASDAQ:INTC)	Chengdu	600	New plants
Dell (NASDAQ:DELL)	Chengdu	No details	Operation center - manufacturing, sales and services
Lenovo (HKG:0992)	Chengdu	100	Business center
Acer (TPE:2353)	Chongqing	150	IT manufacturing center
Goodman (ASX:GMG)	Various	300	Set up logistic parks in western China
Ford (NYSE:F)	Chongqing	490	Build third assembly
Volkswagen (ETR:VOW)	Chengdu	735	New plants

Source: J.P. Morgan

The following “pull” factors were cited frequently during our meetings:

- **Labor cost advantages** were the primary attraction for companies relocating from major coastal cities. For example, the official minimum wage in Sichuan was RMB860 per month in 2010, approximately 20% lower than RMB960-1120 in major coastal regions.

At the industry-level, wage disparities can be more substantial. Wipro (WIT.US) cited labor cost differentials of 35-40% between Chengdu and Shanghai. With labor representing up to 70-80% of services companies' total costs, the inland labor cost advantage can have significant implications for profitability. Source Photonics, an American telecommunication equipment manufacturer, indicated that labor cost savings for manufacturing staff could be as high as 30%.

Many companies, however, see the labor cost advantage gradually diminishing. Official data corroborate this trend with minimum wages in Central and Western provinces growing at a faster rate. Minimum wages grew at ~25% CAGR over the last 5 years in Sichuan, compared to 10-12% in Beijing, Shanghai and Shenzhen and 24% in Guangdong.

- **Strong central and local government incentives** are also a major draw for companies considering relocation. Many incentives offered at the central, provincial and city-level for industries such as high value added manufacturing, IT & software services and financials can bring meaningful benefits to a company's bottom-line.

The key preferential policies mentioned during our meetings in Chengdu included:

- Enterprises investing in Western provinces may benefit from a concessionary corporate income tax rate of 15% (vs. a regular corporate income tax rate of 25%).
- During the first 5 years of operation, 20-100% of individual income tax payment for managerial and technical staff will be refunded.
- Concessionary rate on industrial land purchases or rental subsidies.

- Concessionary rates for employee accommodation
- Subsidies for recruiting and developing local talent.
- Up to 70% of local tax refunded to support R&D initiatives for large local taxpayers, with a term of 5 years.

Many of the local incentives are offered to companies on negotiated terms, depending on their contribution to the local economy. According to several medium to large companies located in Chengdu hi-tech zone, local hiring incentives can amount to as much as 2 months of an average worker's wage; one-fifth of training expenses may be reimbursed and up to 10% of social security contributions from companies can be rebated. Companies that purchased industrial land at concession rates to build their factories also benefit substantially from appreciating land prices.

Other than commercial incentives, local governments are also providing other forms of support such as convenient rental accommodation for staff and improving connectivity to the region. For example Wipro (WIT.US) successfully negotiated with the Chengdu government to begin a direct flight to Bangalore, which cut traveling time from 10 hours to around 5 hours.

- **Availability of labor supply**, both in terms of white and blue collar workers in Western regions. Almost all companies we spoke to in Chengdu cited the large supply of educated workers as a major attraction. According to the investment service bureau in Chengdu, there are 15.5 million residents in the city with tertiary qualifications, the fourth highest among Chinese cities. Every year 100,000 university graduates enter the workforce from the city's 42 higher education institutes. Synnex (SNX.US), a US-listed business process outsourcing service provider, for example, hires fresh university graduates with English degrees every year to perform back office functions for their US and European customers.

Several companies also cited a greater eagerness by workers to seek employment in Western regions. According to a survey by China Youth Daily that covered more than 7700 colleague graduates in 2009, a third of all graduates wish to move to a provincial capital or well-developed smaller cities, while 25% wish to stay in big cities such as Beijing and Shanghai. Similar trends have been reported among blue collar workers, who increasingly favor locations where living costs are more affordable. Over the course of 2009, the population of migrant workers from Western provinces who were working outside the region declined by 1.8 million to 34.4 million.

- **Capturing domestic market opportunities** - most of the companies we met have yet to derive sizable revenue from Western China, but all acknowledged the medium and long-term potential of the regional market. Wipro (WIT.US) for example stated that some of their MNC clients have established offices in Western China and some are in process of doing due diligence.

Mindray (MR.US) Medical is an example. Mindray (MR.US) specializes in supplying medical devices, exporting 60% of sales, while supplying the remaining 40% to domestic hospitals. 60% of export sales has been U.S.-bound, with the remaining to emerging markets. In more mature markets, Mindray (MR.US) employs a direct sales model; in other markets, most notably China, it has been necessary for Mindray (MR.US) to develop an extensive distribution network. As such, it has been crucial for Mindray (MR.US) to understand the geographical differences of its domestic clientele in order to tailor its marketing and development efforts to suit local users.

With labor constituting only 7% of total costs, the major impetus for Mindray (MR.US) to expand inland has been to better penetrate the Chinese market. This explains why manufacturing has largely remained in Shenzhen, where the supply chain is much better integrated. To reduce costs, Mindray (MR.US) has a manufacturing center in Nanjing that produces surgery tables and lamps, which are less complex products. R&D is currently focused in Beijing, while Shanghai is a top strategic priority for the company in which to set up an office. Xi'an is also being considered as a site for domestic expansion.

Another example is ZTE (0763.HK), which has R&D centers in Beijing, Shanghai, Shenzhen, Chengdu, Xi'an, Tianjin, Nanjing, Sanya, and Chongqing, in addition to 3 centers in the U.S. and one in each of Pakistan, India, and Sweden. The R&D centers in China were planned to satisfy strategic purposes, while manufacturing operations will continue to reside in Shenzhen and Guangdong in light of the higher level of vertical integration, and availability of highly-skilled staff.

IV. Factors Deterring Relocation to Western China

Despite the advantages of Western China as a production base, the “hollowing out” of industrial activity in coastal cities is an unlikely scenario. Complete relocation to Western China may bring substantial benefits to certain companies, but many companies merely wish to increase their exposure to the region and still other businesses see no immediate benefit to Western expansion at this stage due to such factors as:

- **Difficulty in reorganizing supply chain clusters** – especially for companies that manufacture more sophisticated products from an established coastal base and require high levels of coordination between supplier and customers. ZTE (0763.HK) regards up and down-stream integration to be an essential element in maintaining their competitive advantage. For this reason, they chose to retain their core manufacturing operations in Shenzhen and Guangdong, but management has been open to consider inland cities when setting up R&D centers.
- **Small labor cost differential for skilled employees.** Companies operating in advanced manufacturing and service industries often struggle to find an experienced talent pool in secondary locations. Up to 20% of the staff at several companies we met in Chengdu were expatriates or domestic migrants. These senior staff members and others with specialist skills demand a significant premium to their original salary when relocating. Among the companies we visited, Ubisoft (UBI.FR) and Tencent (0700.HK) – two companies with no manufacturing operations – exhibited the weakest intention to move inland. For experienced and skilled senior labor, Ubisoft (UBI.FR) and Tencent (0700.HK) both expressed that such a talent pool only exists in the tier-one cities, notably Shanghai for game development.
- **Favorable ties with local government.** Most of the companies we met with cited established ties with local governments as a major deterrent to relocating. Local governments with long-standing relationships are also more aware of company requirements, and would take these into consideration when negotiating legislation with the central government.
- **Language and culture.** English competency remains one of the hurdles to relocating inland, as the much smaller presence of overseas returnees and foreigners means that workers with a combination of technical and English skills are harder to find.

Appendix: Profiles of companies visited

Company	Listing details	Annual sales in 2009	Market capitalization (million)	Number of employees	HQ and main offices	Key product and service offerings
Ubisoft	Paris Stock Exchange: UBI FP	€1057.9 million	US\$ 785	6,400+	Montreuil-sous-Bois, France. Owns 23 in-house production studios are located in 17 countries	A leading creator, publisher and distributor of video games, Ubisoft has grown considerably over the past two decades as a result of our strategy centered on the creation of strong brands, in-house development, and a vast global distribution network.
Source Photonics	Private	N/A	N/A	4,000+	California, USA. Taiwan and China make up most of the employees	Leading provider of optical communication products used in telecommunication systems and data communication networks.
Molex	NASDAQ: MOLX London Stock Exchange: MOLXA	US\$2.6 billion	US\$ 3,750	33,000+	Illinois, USA. Molex manufactures its products in 59 plants that are strategically located across Asia, Europe and North America	Key offerings include the design, development and distribution of innovative product including everything from electronic, electrical and fiber optic interconnects to switches and application tooling.
Synnex	NYSE: SNX	US\$7.7 billion	US\$ 1,138	7,000+	California, USA.	The company provides outsourcing services in IT distribution, contract assembly, logistics management and business process outsourcing. SYNNE X distributes IT systems, peripherals, system components, software and networking equipment for OEM suppliers.
Wipro	NYSE: WIT	US\$5.6 billion	US\$ 38,349	108,000+	Bangalore, India.	A global IT services company that provides Consulting, Business Process Outsourcing, Business Technology Services, Enterprise Application Services, Infrastructure Management, Testing, Product Engineering, Engineering Design and Product Support. Our service
Tencent	HKSE: 700	HK\$ 14.1 billion	HK\$ 326,576	10,000+	Shenzhen, China	Provides value-added Internet, mobile and telecom services and online advertising under the strategic goal of providing users with "one-stop online lifestyle services".
Mindray	NYSE: MR	US\$634.2 million	US\$ 3,185	5,800	Shenzhen, China	A leading developer, manufacturer and marketer of medical devices in China with a rapidly growing international presence. Business segments include: patient monitoring and life support products, in-vitro diagnostic products and medical imaging systems
ZTE	HKSE: 763 SZ A: 000063	HK\$ 68.4 billion	HK\$ 91,688	70,000+	Shenzhen, China	Leading global provider of telecom equipment and networking solutions operating in more than 140 countries. It offers a wide choice of products ranging from voice, data, multimedia and wireless broadband services.
Guangzhou Shipyard	HKSE: 317 SZ A: 600685	HK\$ 7.4 billion	HK\$ 13,282	3,429	Guangzhou, China	GSI is based on core operations of shipbuilding and focused on building and exploitation of handy size ships.
Guangzhou Pharma	HKSE: 874 SZ A: 600332	HK\$ 4.3 billion	HK\$ 18,061	5,352	Guangzhou, China	It is principally engaged in the manufacturing and sales of Chinese patent medicine and western pharmaceutical products including the research, development, manufacturing, sales, export and import of Chinese medicine, western pharmaceutical products, medical apparatus and hygienic materials

Disclaimer

J.P. Morgan is a marketing name for investment banking businesses of JPMorgan Chase & Co. and its subsidiaries worldwide. JPMorgan Chase & Co. or any of its affiliates (collectively, "J.P. Morgan") makes no representation or warranty regarding the accuracy or completeness of the information herein. J.P. Morgan is not an advisor to any person in respect of any referenced transaction.

This material is not the product of J.P. Morgan's research departments and along with any associated verbal presentation (together the "Presentation") is purely indicative and is based on current assumptions and market conditions. Although information contained herein has been obtained from sources which we believe to be reliable, none of J.P. Morgan, nor any person acting on their behalf, makes any representation or warranty, implied or express regarding the accuracy or completeness of the information contained herein. The Presentation is not intended as an offer or solicitation for the purchase or sale of any financial instrument, nor does it constitute a commitment by J.P. Morgan to enter into any transaction referred to in the Presentation. J.P. Morgan shall incur no responsibility or liability whatsoever to the client or to any other person in respect of the Presentation and in the event that J.P. Morgan enters into any transaction described in the Presentation then such transaction shall be governed exclusively by the relevant transaction documents.

The recipient must make an independent assessment of any legal, credit, tax, regulatory and accounting issues and determine with its own professional advisors any suitability or appropriateness implications of any transaction referenced herein in the context of its particular circumstances. J.P. Morgan assumes no responsibility or liability whatsoever to any person in respect of such matters. This material is directed exclusively at market professionals and institutional investors and is not for distribution in any jurisdiction where such distribution contravenes applicable laws of any relevant jurisdiction, nor could it be distributed to any other person or replicated in any form without the prior written consent of J.P. Morgan. Notwithstanding any prior written consent provided by J.P. Morgan for the further distribution or replication of these materials and as consideration therefore, the initial recipient of these materials acknowledges to J.P. Morgan that it shall hold J.P. Morgan harmless for the consequences of such further distribution or replication (as the case may be).