

## China's Multispeed Economy: Opportunities and Challenges in Industrial Products and Services

Business leaders across China's industrial landscape just waved goodbye to a challenging and for many probably a worse-than-expected 2015. As we head into 2016, the outlook for many players remains rather misty. The market is never to be predicted, but by analyzing past trends and events, we can start to build a picture of the opportunities that lie ahead. In anticipation of the release of China's 13th five-year plan, we have summarized the key developments that shape the opportunities and challenges for industrial companies in China in the coming years.

Anybody running a business in China needs to start by understanding the macro environment. More so than in most other markets, the business environment in China is shaped by profound economic, political and socio-demographic changes.

Let's start with the economic outlook. With 2015 growth likely hovering around 7%, the days of double-digit growth are definitely over. Seven percent is the "new normal." But is this really that bad? Yes, when you compare it against the 14% growth in 2007. But 7% growth equates to RMB5 trillion in incremental GDP in 2016, which is the same as the entire Chinese economy 20 years ago or the size of the entire Indonesian economy in 2014! In any major economy, 7% would be considered an economic miracle — in China, we call it a slowdown!

The headwinds that many industrial companies have been feeling in the past two to three years are not necessarily a market growth issue, nor will that be the case going forward. Growth of 6–7% per annum means the economy in 10 years will be twice its current size. In most cases, underlying end-market growth across many industrial sectors will remain robust. However, other factors are impacting company performance in the short term, such as overcapacity, cutthroat competition and the delay in capital spending caused by China's anti-corruption drive.

China's easy days of catch-up growth are over. Five years ago, all you had to do was be in the right place at the right time and you had a great business. The more critical issue for business leaders now is whether they have the right capabilities, business model and product offering to compete in this new normal environment.

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**Figure 1**  
Major Macro Developments in China



**China's multispeed economy.** Growth in China is not evenly distributed across the economy — China has become a multispeed economy. Some sectors are still showing very fast double-digit growth. For instance healthcare and environmental protection are doing very well and the digital space continues to explode. But other sectors such as the automotive space are slowing down to single-digit growth.

So with average GDP growth around 7% and some parts of the economy growing much faster than that, by definition we are seeing some sectors that are flat or even in decline. Suppliers of capital equipment have been hit hard by a fall in demand due to overcapacity. Also the government is trying actively to rebalance the economy toward more consumption and services and away from investment and infrastructure-led growth.

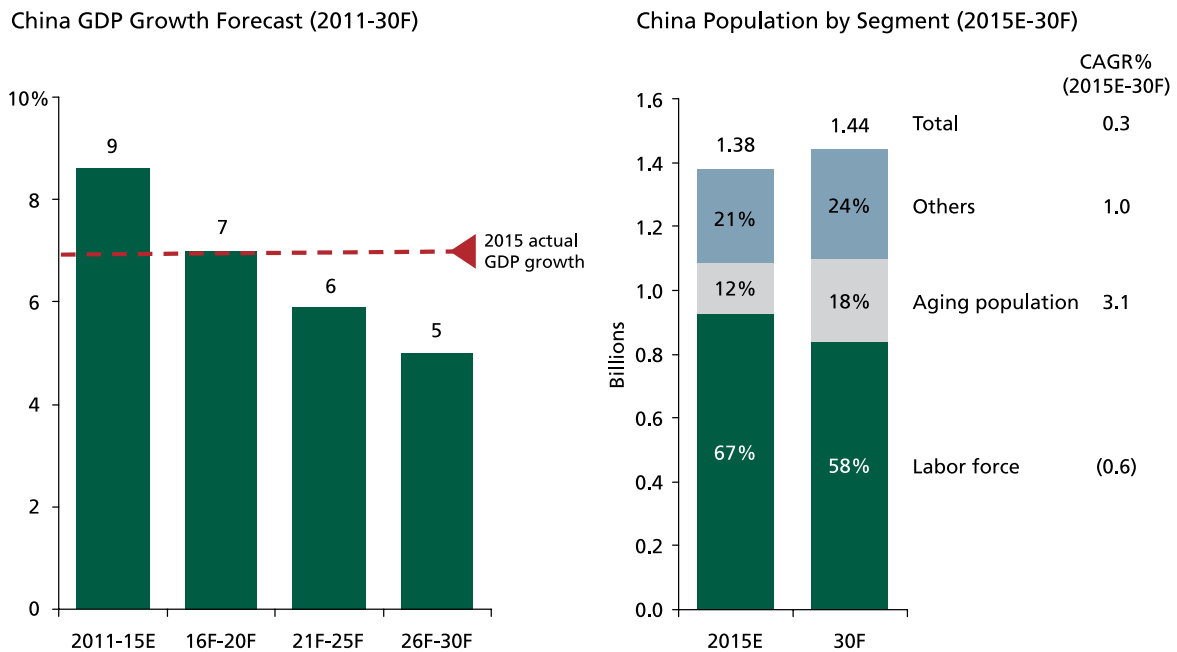
**The demography impact.** The Chinese population is graying rapidly, and the size of the working population is shrinking. This trend means labor cost pressures are likely to remain and rising prices in service sectors will prevail. Labor-intensive and low-value-added activities will continue to shift to cheaper locations either within or outside China. Another key trend is

the migration into towns and cities. China's urban population is expected to reach 1 billion in 2030, which will provide some buffer against the shrinking working-age pool as new workers move from rural subsistence farming into the secondary and tertiary sectors.

**The political dimension.** More so than in any other market, the business climate in China is shaped by government policy and regulatory developments, and sometimes the lack thereof. The 3rd plenum in late 2013 set the stage for China's reform direction under Xi Jinping over the next 10 years.

The government announced some major paradigm shifts, which in recent years have been given more color: from quantity to quality, accepting a lower level of growth (the new normal) and a focus on the environment. The role of the government was also to change: from participating in and planning the economy to stepping back. The economy is too big and complex, and the government cannot control all aspects of it in the planned manner of the past. The stock market turmoil over the past six months has made this very clear, but it remains to be seen if China truly liberalizes key aspects of the economy.

**Figure 2**  
**China Macro Trends**



Source: World Bank, *Trading Economics*, *Macroeconomics Study Journal*, L.E.K. analysis

Other themes embraced by the government include more focus on R&D and innovation; a stronger system to check corruption (we've certainly seen plenty of that!); encouraging foreign investment in coastal cities; and state-owned enterprises (SOE) reform, allowing private investors to take a stake and controlling interest in SOEs.

### SOE Reforms for Level Playing Field?

In practice, the SOE reforms so far seem to have taken more the direction of merging players into monolithic giants. The challenge with the SOE reforms is that the State-owned Assets Supervision and Administration Commission of the State Council (SASAC) doesn't really own these businesses; they are overseeing them on behalf of the state council. SASAC doesn't appoint the senior management nor does it seem to have any operational control. So it has really been more about reducing the number of SOEs through mergers and trying to make them bigger in an attempt to create global champions. But what is needed is to open up these SOEs to more competition to drive innovation and operational excellence. But that is not really SASAC's role — that is more National Development and Reform Commission (NDRC) territory.

Besides the government's ongoing efforts in shifting from quantity to quality, fast growth to environmental awareness, and planning the economy to assisting it, China last year proposed several industrial upgrade initiatives, including Made in China 2025 and Industry 4.0, aimed to boost high technology and innovation over the long term.

### Made in China 2025...

The Made in China 2025 program starts to provide a level of specificity that gives more concrete direction as to where China is heading and how company leaders should align their strategies. It's interesting that the program focuses on a 10-year horizon rather than the more typical five-year period. China's ambition is to become a manufacturing power that leads through innovation and not through scale or costs. There is no long-term value in the latter.

But this is not easy to achieve. China has learned it is difficult to plan for innovation and get results in the short term. Unlike building airports or power plants, innovation takes time and can be unpredictable, and true innovation does not adhere to fixed timelines. As a result, initial targets for some major programs

and complex technological projects were not being met (e.g., the C919 aircraft program and China's aggressive push into new energy vehicles in the 12th FYP).

So a 10-year horizon was taken, and already it has been announced that this plan will be followed by three more plans, taking us to 2049, the centenary of the founding of the People's Republic. By that time, China needs to be a leading manufacturing power, on par with global leaders in Germany, Japan and the U.S.

Made in China 2025 specifies the key tasks necessary to achieve China's ambitions. These include improving manufacturing innovation, integrating technology and industry, strengthening the industrial base, fostering Chinese brands, enforcing green manufacturing, promoting breakthroughs in 10 key sectors, advancing restructuring of the manufacturing sector, promoting service-oriented manufacturing and manufacturing-related service industries, and internationalizing manufacturing.

The plan also identifies the 10 key industries that will likely enjoy high-growth prospects within China's multispeed economy: new information technology, numerical control tools and robotics, aerospace equipment, ocean engineering equipment and high-tech ships, railway equipment, energy-saving and new-energy vehicles, power equipment, new materials, medicine and medical devices, and agricultural machinery.

### ... or Made in India?

The key theme that cuts across the plan is innovation: China needs to upgrade manufacturing from quantity to quality. There is recognition that China needs to follow this path as it is at risk of getting stuck in the middle. China is not able to compete with advanced nations such as the U.S., Germany and Japan in terms of advanced manufacturing and innovation. At the same time, emerging economies with their own advantages are catching up and could potentially pose a threat from the bottom. Prime Minister Modi of India last year introduced the concept of "Made in India."

### So What Does It All Mean?

If you are running an industrial product or business service company in China, what's next? What does it all mean for laymen trying to run a business? They are paid to grow their business in a sustainable and profitable way in order to keep the shareholders happy. So what are the concrete opportunities for businesses in China?

Overall, we think the outlook is quite positive if you can bear some of the short-term wobbles:

- Market forces will play a more prominent role as opposed to heavy control by the government
- The size of the economy will double in the next 10 years
- A drive towards innovation and globalization means a more level playing field
- Innovation, quality and manufacturing excellence become key competitive levers — pure cost-driven competition or government relationship models are less likely to succeed

But the easy days are over. Companies have to pick their battles carefully and develop strategies and capabilities to have lasting success. We have selected three investment themes that align against the major macro trends and that can support continued development of industrial product and service providers in China.

**Automation and robotics.** With labor costs going up, many Chinese manufacturing businesses are now experimenting with introducing automation and robotics in their production processes in an effort to save costs and improve productivity. Also, liability is an increasing expense for hazardous industries, and robotics can help reduce worker exposure. Many car part companies are actively looking at robotics to help in tasks such as assembly of airbags, epoxy application and ultrasonic welding of plastic parts. Companies in the automation and robotics sector can gain a competitive advantage by supporting clients as they adjust their manufacturing processes and adopt best practice.

**Green energy and new materials.** Hydro energy is China's main renewable energy source but is capped by the lack of suitable new locations, and the government has recently

halted construction of several dams in Sichuan province citing environmental concerns. So growth will need to come from other areas, especially after the recent commitments from China at the U.N. Climate Change Conference in Paris.

Wind and solar power will continue to be pillars in the new-energy era of the next two decades. But a wide variety of other innovative technologies, including heat transfer and thermal energy storage media, will be required to enhance energy efficiency and open opportunities for companies. The government is also looking at more established technologies (such as natural gas) to take a major role in China's efforts to clean up the air and cap carbon emissions.

#### **Business model evolution — from product to solution.**

Driven by rising labor costs and more demanding customer needs, we are seeing a gradual shift away from competing purely on cost in the industrial product and service space. Customers are increasingly looking at value, and suppliers are increasingly looking at lowering total cost of ownership (TCO) — reducing downtime, optimizing maintenance and repair, and

improving product life time. They are also increasingly looking not just for pure products but for solutions that integrate financing, training, after-sales service and product development. Against this backdrop, companies will need to offer more application-specific products that help customers lower TCO/ manufacturing costs, enhance their products and reduce environmental impact.

No doubt many others opportunities exist — each will need to be carefully weighed against China's macro trends and the company's resources and capabilities to compete effectively in China's multispeed economy.

To conclude, China will continue to provide ample growth opportunities for industrial product and service companies. By developing a sound understanding of how the major macro trends are impacting market demand, customer needs and competitive dynamics, business leaders can identify which products or services are going to be in greatest demand and can align their capabilities and resources to compete effectively in China's multispeed economy.

**Figure 3**

### **Strategic Priorities for Industrial Players in China**

<b>Strategic realignment</b>	<ul style="list-style-type: none"> <li>● <b>Now that the market growth is no longer spectacular and competition has intensified, how will companies sustain their growth in China?</b> <ul style="list-style-type: none"> <li>● What is the corresponding version of strategy and business plan under the new normal of “slower growth” in China?</li> <li>● What is the upgrade journey to enable companies to expand into more value-added business?</li> <li>● What are the appropriate levers for companies to pull to improve its operation performance (e.g., cost reduction and sales force effectiveness)?</li> <li>● How do companies respond to the recent new policies from the Chinese government to catch the next wave of growth (e.g., “Made in China 2025”)?</li> </ul> </li> </ul>
<b>Chinese “global champions”</b>	<ul style="list-style-type: none"> <li>● <b>How do domestic Chinese companies become “global champions”?</b> <ul style="list-style-type: none"> <li>● What is a realistic “go global” road map for domestic Chinese companies?</li> <li>● How do domestic Chinese companies build their organizations capabilities to cope with more competitive market environments (e.g., from “efficient distribution” to effective selling” for the sales force)?</li> </ul> </li> </ul>
<b>Closer integration of MNCs</b>	<ul style="list-style-type: none"> <li>● <b>How do MNCs get better integrated into the Chinese market?</b> <ul style="list-style-type: none"> <li>● How could MNCs defend their market share in China when their local low-cost competitors are catching up with capabilities and know-how?</li> <li>● What is the new global strategic position of “China branch” (e.g., from manufacturing plant to regional R&amp;D center)?</li> <li>● How should MNCs customize and internalize their global best practices on management infrastructure in China?</li> <li>● How could MNCs better serve the ever-more-sophisticated local Chinese customers?</li> </ul> </li> </ul>

## Opportunities in China's Chemical Industry

Companies operating in China's chemical industry will have to pay close attention to the macro trends shaping China's business environment. China's emphasis on environmental protection and innovation opens up many areas where chemical companies can thrive, as the examples below illustrate.

### Green Products

At the U.N. Climate Change Conference in Paris last year, China vowed to stop carbon emission growth by 2030, and bring coal-use growth to a halt by 2020. The energy mix will continue to shift towards renewables which creates opportunities for the chemical industry. China's increasing tightening and enforcing of environmental regulations will further benefit the industry. For instance, expect demand for new materials, including lightweight materials, insulation materials in buildings and coatings in low-E glass.

Efforts to fight air and water pollution require innovation in membrane technologies, as well as chemicals used in water treatment and air purification (for both commercial and residential applications). Innovation in battery technology is essential in making a significant shift to new-energy vehicles.

And emission targets cannot be reached without green manufacturing processes, including high standards in emission control, reduction of waste and integrated production processes. The chemical industry also provides solutions to help contain the environmental impact of coal-fired power generation.

### Building Materials

Buildings provide a huge potential for energy-savings. Property developers will increasingly use better-quality building materials for future projects. This is already beginning to happen at the local level.

For instance, the Tianjing municipal building codes have been adjusted and mandate that all new buildings install low-E glass, which provides a tremendous opportunity for film suppliers. Chemical firms offer expertise and raw materials for all major construction product applications, including adhesives and sealants, construction materials and prefabricated products.

### R&D

With the increasing focus on innovation, we are seeing tremendous growth in R&D activities in China, not just by multi-national companies (MNC) players but also by domestic companies. Chemical firms are increasing the scale and capabilities of their China R&D facilities to cement their roots and develop products for the local market.

We expect to see increasing demand for innovative and advanced products. For instance, more and more pharma and Medtech companies are moving manufacturing to China, and suppliers of APIs and advanced materials must have plans in place to serve their needs.

Chemical suppliers should be ready not only to offer products but also to provide application know-how and on-site engineers to ensure their products are applied correctly in the production process. They will need to optimally support their customers' expanding R&D investments, so that they are best positioned to capture the business when their customers launch new products.

### Manufacturing

China's rapidly rising labor costs are pushing a fundamental shift in manufacturing approach with automation and robotics becoming much more prevalent. What does that mean for chemical producers?

Besides application opportunities in supplying a wide range of products the OEM market and aftermarket, there are opportunities related to core production processes. The use of specialist chemical and hazardous material-handling robotics will become much more widespread. With labor costs going up, liability is an increasingly frequent and large expense for chemical companies, and robotics can help reduce worker exposure.

We also see an opportunity for chemical firms to advise customers in the use of robotics in material handling and gain a competitive edge in the form of value-added services.

For instance, many tier one and tier two automotive companies are now actively looking at automation and robotics in order to remain competitive. Many of their manufacturing processes can benefit from automation as they involve hazardous materials, such as the toxic inflator propellers used in the assembly of air bags and the toxic fumes produced in two-part epoxy applications and ultrasonic welding of plastic parts.

But these companies may not have the scale and expertise to introduce appropriate solutions to automate production and reduce contamination risks. There could be a great opportunity for advanced chemical suppliers to support their customers as they adjust their manufacturing processes and adopt best practices. In the process, chemical firms can strengthen their customer relationships and gain a competitive advantage.

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