OVERCAPACITY IN CHINA
An Impediment to the Party’s Reform Agenda
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Overcapacity in China: An Impediment to the Party’s Reform Agenda

1. Executive summary

“This is a reform to the government itself. During the course of reform, the vested interests will be upset. This is not nail clipping. Instead, this is taking a knife to one’s own flesh. So, pain is natural. However painful it may be, we are determined to keep going until our job is done”.


Overcapacity has been a blight on China’s industrial landscape for many years now, affecting dozens of industries and wreaking far-reaching damage on the global economy in general, and China’s economic growth in particular. Yet when the European Chamber released its first report on this topic in 2009, it was a seldom-examined phenomenon. Unfortunately, during the last six years, overcapacity in China has only continued to worsen.

The scale of overcapacity in China’s steel, aluminium and cement industries highlights the severity of the problem: steel production has become completely untethered from real market demand, and is now more than double the combined production of the four next leading producers: Japan, India, the United States (US) and Russia; in China’s aluminium industry, 60 per cent of production capacity has negative cash flow; and according to data from China’s National Bureau of Statistics and the US Geological Survey, in just two years—2011 and 2012—China produced as much cement as the US did during the entire 20th century.

Due to the effect of overcapacity on industry profits, and in conjunction with weak commodity and energy prices, during the 45 months up to December 2015, China saw its producer price index continually decline. This trend has seriously influenced the profitability of China’s industrial producers.

The original overcapacity report, released by the European Chamber and Roland Berger Strategy Consultants in the autumn of 2009, set out to examine to what extent overcapacity harms China’s economic development and contributes to rising trade tensions. The goal was to discover why and how overcapacity had come to affect some of China’s key industries, such as steel, aluminium, cement, chemicals and refining, and to provide recommendations as to how the problem could be brought under control. While the resulting report was presented to the EU-China Summit that took place in Nanjing on 30th November, 2009, it regrettably did not lead to a concerted effort to address the problem at that time.

In the autumn of 2015, the European Chamber decided to produce an updated report examining subsequent developments in industrial overcapacity and the continued relevance of the recommendations that were provided in 2009, and make additional suggestions. This time, the aim is to inspire the Chinese authorities to vigorously pursue...
the necessary structural changes to reduce overcapacity and drive China’s economy to a new level of sustainable growth. It is hoped that this report’s recommendations will also contribute to a sharpening of the aims and objectives of the soon-to-be-released 13th Five-Year Plan (FYP) and the success of China’s 2016 presidency of the G20.

Definition and history of overcapacity

For the purposes of this study, overcapacity is defined as the difference between production capacity and actual production, i.e. overcapacity is considered the converse of the utilisation rate.

China’s overcapacity problem is by no means a new one but it is now more pervasive. Its influence on the economy, both domestic and global, has become ever more destructive, particularly in light of the still-lingering effects of the 2009 global economic crisis on world markets.

The crisis led to a significant reduction in demand for imports from China at a time when even more investment, in the form of the Chinese Government’s massive stimulus package, was being pumped into building new plants. Despite then National Development and Reform Commission (NDRC) Chairman Zhang Ping’s statement in 2009, that “there won’t be a penny spent on enlarging mass production or highly-polluting and resource-intensive sectors,” the stimulus package resulted in a massive expansion of the production capacities of many state-owned enterprises (SOEs). This situation was perpetuated by a surge in lending—encouraged by the government, to meet the needs of the thousands of infrastructure investment projects that were being approved around the country—in conjunction with the ease with which producers were able to secure such loans.

This wave of fixed asset investment (FAI) in infrastructure projects, as well as further FAI that has resulted from smaller subsequent stimulus measures, has only created short-term demand for input supplies, though. Consequently, the problem has worsened in many industries with easily available credit resulting from the stimulus package supporting yet more expansion of industrial capacity that is disconnected from real market demand. This is substantiated by the growing total excess production and declining utilisation rates found in the industries examined in this report.

The global impact of China’s overcapacity can also be seen in the form of growing trade tensions, particularly in the steel industry. In March 2015, the European Union (EU) was conducting six investigations that may result in tariffs on Chinese steel products with anti-dumping measures against one type of steel product imposed that same month. In November 2015, Member States also called on the EU to utilise “the full range” of its trade defence instruments in order to support Europe’s steel industry and expressed opposition to granting China Market Economy Status (MES) at the World Trade Organization (WTO). In the US, in 2015, countervailing duties and tariffs were enacted by the US Department of Commerce against a range of Chinese steel products. Most recently, the US Department of Commerce made a preliminary decision at the end of December 2015, to enact additional tariffs of 255.8 per cent on Chinese corrosion-resistant steel. Since trade frictions hamper supply chains, this poses a major threat to the positive effects of globalisation.

8 Oliver, Christian & Pooler, Michael, EU states call for action against China steel dumping, FT, 9th November, 2015, viewed 2nd December 2015, <http://www.ft.com/intl/cms/s/0/37f15a42-872b-11e5-90de-f44762f09896.html#axzz3r8kHrxEa>
Meanwhile, the threat from non-performing loans (NPLs) that have resulted from loans made to companies operating in industries characterised by overcapacity has also continued to grow.¹⁰

**Organisation of this study**

The study is divided into four sections. The first examines the reasons for China’s current overcapacity problem, the policies and politics that underpin it and the reasons why the situation has deteriorated as a result of China’s credit expansion since 2008.

In the second section, the study looks at how this problem is affecting eight key industries, and explains what the specific drivers of overcapacity are in these sectors. The industries examined are:

- Crude steel
- Electrolytic aluminium
- Cement
- Chemicals
- Refining
- Flat glass
- Shipbuilding
- Paper and paperboard

### Utilisation rates for six industries

<table>
<thead>
<tr>
<th>Industry</th>
<th>2008</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>Steel</td>
<td>100%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Aluminium</td>
<td>100%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Cement</td>
<td>100%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Refining</td>
<td>100%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Flat glass</td>
<td>100%</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>Paper and paperboard</td>
<td>100%</td>
<td>60%</td>
<td></td>
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</tbody>
</table>

N.B. As the chemical industry covers an extremely wide range of products and quantifying capacity in the shipbuilding industry is highly complex, for the sake of clarity these two sectors have not been included in this chart.

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The third section of the study then turns to the broader impact of China’s overcapacity – how it negatively affects the growth of China’s economy and how it also contributes directly to rising global trade frictions. It also examines how it relates to recently announced initiatives like China Manufacturing 2025 and One Belt, One Road (OBOR).

Ultimately, the study’s findings show that overcapacity is driven by a small number of key recurring factors, among them:

1. Local protectionism and the fragmentation of industries that is driven by regionalism;
2. Weak enforcement of regulations;
3. Low input prices due to government policies;
4. A fiscal system that encourages local governments to attract excessive investment;
5. Widespread availability of inexpensive technology;
6. Environmental, health and safety (EHS) standards and laws that are not fully implemented; and
7. A philosophy of market share vs. profitability.

Finally, the study makes a number of recommendations as to how overcapacity can be reduced. Some of the actions taken by the Chinese authorities to curb overcapacity from 2009 onward have been positive, examples of which are outlined in the following section. However, the European business community in China sees further opportunities to address overcapacity through reforms to individual policies and industries, as well as through a broader restructuring of China’s economic model. In all, 30 constructive recommendations are provided, which include both measures that directly target overcapacity and indirect measures that would spur the development of other sectors of the economy, thus reducing the tendency to rely on FAI.

Direct measures include:

1. Cutting capital expenditure (‘capex’) in industries characterised by overcapacity;
2. Reforming the fiscal system to give local regions more funding possibilities, for example, by moving to a consumption-based, value-added tax (VAT) sharing system in order to reduce their incentive to subsidise local companies with the goal of maintaining their tax base and employment levels;
3. Strictly enforcing the limitations provided in the 2014 Budget Law to tackle the propensity of local governments to subsidise local companies;
4. Continuing to improve IP protection in order to safeguard innovations and providing Chinese companies incentives to increase research and development (R&D) spending, thereby enabling them to move up the value chain and away from the vicious cycle of manufacturing low-tech products for which profits are limited and oversupply already exists;
5. Implementing EHS standards and labour laws more rigorously and continuing to adjust input prices by increasing resource and environmental charges, forcing the least efficient and most polluting companies in industries characterised by overcapacity to exit the market, thereby reducing supply;
6. Reducing energy price subsidies to industry and continuing resource price reform by focusing on areas like coal resource tax, and pricing for electricity, water and natural gas;
7. Publishing more reliable and transparent industry data in a timely manner to enable companies to make more informed decisions about their production volumes; and
8. Expanding and increasing SOE dividend payments to reduce the ability of SOEs to invest in unneeded expansions.

Indirect measures include:

9. Redistributing SOE dividend payments to Chinese households indirectly through government spending on
social security, healthcare and education in order to stimulate more private consumption and economic growth through the resulting growth in demand for goods and services;

10. Continuing to increase government spending on pension and healthcare systems in order to provide the social ‘safety net’ that would support employees that are laid off and enable households to consume more, thereby further diversifying the economy and tax base by driving demand for goods and services;

11. Allowing market access for specialised, efficient private financial service providers by encouraging both small and medium-sized enterprises (SMEs) and private (venture) capital in order to create new drivers of tax revenue and employment at the local level, thereby reducing dependence on revenue from companies operating in industries characterised by overcapacity;

12. Enhancing the business environment for SMEs, as the innovations they bring to the market can help to provide solutions for China’s overcapacity problems; and

13. Further opening up the service industry to the private sector and encouraging stronger competition in the service sector as a way of generating new drivers of tax revenue and employment at the local level, to reduce the reliance on industries characterised by overcapacity.

Government statements and actions to date

The Chinese Government has clearly demonstrated that it understands the scale of the problem. As early as 26th August, 2009, the State Council released a statement noting that overcapacity had become a serious problem in many industries and that many local governments were continuing to expand capacity “blindly” and make “duplicated” investments without considering the mid- and long-term implications.11

In response to this threat, the State Council revised its policy targets with the goal of reducing the negative impacts from overcapacity such as factory closures, job losses and mounting bad bank loans. In its statement it announced: “What especially requires our attention is that it is not only traditional industries such as steel and cement that suffer from productive overcapacity and are still blindly expanding.”12

The European Chamber acknowledges that since the State Council’s 2009 statement some actions have subsequently been taken in an attempt to ensure that the cost of production inputs is better aligned with market demand:

• In 2012, the NDRC introduced a progressive electricity pricing system for aluminium producers.

• In October 2013, and in advance of the Third Plenum of the 18th National Congress of the Communist Party of China Central Committee (Third Plenum), the State Council introduced price reforms for water and electricity. This measure called for the removal any local price subsidies and the introduction of tiered pricing for significant users of water and electricity in overcapacity sectors.


Steel, cement, electrolytic aluminium, flat glass and shipbuilding were identified as priority sectors in which existing projects would potentially be re-evaluated and proposed projects would be blocked.14

The Third Plenum’s Decision on Some Major Issues Concerning Comprehensively Deepening the Reform (Decision) stated that “a long-term mechanism will be established and improved for preventing and dissipating excess production capacity”, in addition to introducing an initiative to remove price controls in order to allow markets to play the decisive role in allocating resources.15

Unfortunately, these measures, and others like them, have resulted in few real breakthroughs that positively address China’s industrial overcapacity (the main exception, the wind energy sector, will be briefly discussed in section three).

### Summary of policy content

<table>
<thead>
<tr>
<th>Boost demand</th>
<th>Domestic demand</th>
<th>Overseas demand</th>
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<tbody>
<tr>
<td>Promote urbanisation</td>
<td>Balance urban-rural development, build up more towns, promote the population of towns and expand infrastructure construction</td>
<td>Encouragement of export by providing financial support and tax benefits</td>
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<tr>
<td></td>
<td></td>
<td>One Belt One Road and AIIB</td>
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<tr>
<td></td>
<td></td>
<td>Construct and connect infrastructure between countries, cooperate in the energy field, construct trade and investment alliances</td>
</tr>
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<tr>
<th>Restrain Supply</th>
<th>Incremental capacity</th>
<th>Existing capacity-Upgrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loans and credits</td>
<td>Stricter control on loans and credit</td>
<td>Standardisation of the energy pricing system and curbing energy subsidies (especially in the aluminium sector)</td>
</tr>
<tr>
<td>Stricter standards</td>
<td>Higher market entry and project approval standards with regard to several factors such as technology, capacity scale, emission control and equipment standards of production lines</td>
<td></td>
</tr>
<tr>
<td>Accountability system</td>
<td>Implementation of accountability system for local governments and related institutions</td>
<td></td>
</tr>
<tr>
<td>Better supervision and enforcement</td>
<td>Strengthening of the supervision and inspection of overcapacity enforcement</td>
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</tbody>
</table>

- **Domestic demand**: Promote urbanisation.
- **Overseas demand**: Export.
- **Incremental capacity**: Loans and credits, Stricter standards, Accountability system, Better supervision and enforcement.
- **Existing capacity-Upgrade**: Less raw material and energy subsidies.
- **Existing capacity-Eliminate**: Transparent information system, Industry restructuring, consolidation, Social support.

This poses the question, why has follow-through on many central government initiatives and statements been so limited? One possible explanation is that the high growth rates published for 2010 and 2011 (10.6 and 9.5 per cent respectively), caused the government to become complacent.16

Furthermore, anticipation among industry players of an explosion of demand led to irrational exuberance and further malinvestment.
The Chamber’s stance

The European Chamber appreciates the Chinese Government’s positive attempts to deal with the issue of overcapacity. At the same time, much remains to be done to bring the problem under control and to ensure that it does not subsequently re-emerge.

Our member companies have to continuously evaluate China’s business environment, both as it currently exists and its likely evolution. Operating in a country in which its 31 provinces and autonomous regions have competing and conflicting interests gives rise to serious concerns regarding the central government’s ability to effectively implement coherent and effective policies. Whether a long-term solution to the problem of local protectionism—which plays a significant role in enabling inefficient companies to avoid closure—can be found, is yet to be seen.

While it is laudable that the Third Plenum’s Decision stated that the market should be allowed play the “decisive role” in the economy and the fact that the 2015 Central Economic Work Conference identified tackling overcapacity as one of the top-five priorities for 2016,17 such aspirations need to be paired with correspondingly bold actions. Recognising that overcapacity was a priority for the central government, in early January 2016, some industries and provinces did announce their targets for capacity cuts with Anhui, Gansu, Shandong, and Xinjiang also carrying out surveys of unproductive companies. However, as the announced cuts were generally small and actual action is yet to be seen, there is no reason to assume that they will ultimately lead to fundamental changes.18 This assumption is supported by the fact that no major breakthroughs ultimately resulted after the annual Central Work Conferences that took place from 2007 to 2014, each of which also listed limiting and controlling overcapacity as a key task for the following year.19

The fact that the overcapacity problems highlighted by the Chamber in 2009 have become more pronounced indicates that economic restructuring is now more essential than ever. It remains to be seen whether or not policy-makers are up to the task. Unfortunately—and in spite of the central government’s stated focus on curtailing overcapacity—many of the sources of the problem have resulted from macro-economic, industrial and fiscal policies that have been part of a development strategy designed to favour industrial and investment expansion over consumption: it therefore needs to be recognised that the Chinese Government’s current role in the economy is part of the problem. The audacity to change that the government requires must include a willingness to change itself.

2. Reasons for overcapacity

2.1 History of overcapacity

China’s overcapacity was a problem long before the 2008 global economic downturn pushed the issue firmly into the spotlight. Taking stock of the gravity of the situation in the late 1990s, then Premier Zhu Rongji radically changed China’s policies in this area.20 By shutting down SOEs and making up to 40 million industrial workers employed by them redundant China’s growth slowed for several years. Improving productivity was not Premier Zhu’s central aim. He took these steps to combat the country’s severe over-investment problem. The problem went largely unnoticed abroad due to the fact that in the 1990s, China was not fully integrated into the global economy and as such its overcapacity did not translate into a huge trade surplus. That is not the case today.

After 2002, China’s heavy industrial economy experienced an extraordinary boom: within the space of five years, the relative size of heavy industrial production in the economy nearly tripled. This remarkable surge, unprecedented in China’s economic history, signalled the beginning of another round of overcapacity. The primary reasons that led to its re-emergence are outlined below.

2.2 Financial crisis and stimulus package

Before the 2008 financial crisis, Chinese producers could get away with their overcapacity, exporting goods when domestic consumption was not absorbing capacities. Exports acted like a ‘safety valve’ on a pressure cooker. Chinese exports collapsed in late 2008, as a result of the dramatic retrenchment of the economies of the EU and the US. With this safety valve no longer working, China’s overcapacity became impossible to ignore. Even more worrying, while global demand decreased China’s production capacity actually continued to expand. The growing gap between a low and stagnant global demand and increasing domestic production capacity emphasised the overcapacity problem.

The Chinese Government’s swift response in November 2008, consisted of a massive fiscal stimulus package including an unprecedentedly large lending programme in 2009. It targeted infrastructure investment, with the government-encouraged lending surge resulting mainly in the expansion of Chinese SOE production capacity. This led to manufacturing companies’ FAI expanding at an average of 18.8 per cent year-on-year from 2009 to 2014.21

The Chinese stimulus package poured credit into increasingly questionable projects and increased direct and indirect subsidies to investment and manufacturing. While these policies boosted the economy in the short term, in the medium term they have further distorted markets and complicated China’s economic transition.

“NPLs were reported to have risen by USD 76 billion during the first ten months of 2015, to about USD 291 billion, a 35 per cent increase from the beginning of the year.”

As an indication of the scale of the problem, in 2014, the five major state-owned banks all prepared for likely defaults on loans issued as part of the stimulus package to local governments and companies in industries characterised by major overcapacity. This resulted in all five selling subordinated bonds or preferred shares in order to strengthen their balance sheets and meet Basel III requirements that are being phased in through to the end of 2018.22

This problem deteriorated further in 2015: NPLs were reported to have risen by USD 76 billion during the first ten months of 2015, to about USD 291 billion, a 35 per cent increase from the beginning of the year;23 in May 2015, China’s top banking regulator, Shang Fulin, stated that he expected NPLs to continue to rise;24 and commercial banks’ official average NPL ratio rose from 1.6 per cent at the beginning of 2015 to 2.07 per cent by the end of October 2015.25 A November 2015 survey conducted by China Orient Asset Management Co found

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23 Murphy, David & Qiu, Haiku, Buckling Under Stress, CLSA, 1st December, 2015, p. 4.


25 Murphy, David & Qiu, Haiku, Buckling Under Stress, CLSA, 1st December, 2015, p. 4.
that 93 per cent of bankers believe that the bad loan situation is actually worse than the official data indicates, with many Chinese banks reportedly using a range of creative measures to avoid having to report NPLs.

Clearly the channelling of loans from the stimulus package into the expansion of industries where there was no real additional demand has created serious problems for China’s financial system. While it is accurate to state that in the early 2000s China’s rate of NPLs was much higher, at that time high rates of growth enabled the government to resolve the problem fairly quickly. With a less optimistic economic outlook in 2016, options are no longer so simple. Significantly, this stress on banks’ balance sheets also makes it more difficult for competitive private companies to access the credit that is necessary for their own expansion as well as for broad restructuring of China’s economy to be realised.

2.3 SOE dividend payments and the interests of local government

Until recently, Chinese SOEs did not have to pay dividends. Indeed, a pilot programme was only initiated by the State-owned Assets Supervision and Administration Commission (SASAC) in 2008. Dividend income was neither directly redistributed to Chinese households nor indirectly through the State. In most cases, retained earnings were reinvested in the company.

This approach was partially due to reforms carried out under Premier Zhu to address overcapacity in the 1990s. In order to reduce excess capacity, the government shut down thousands of small- and medium-sized SOEs, which resulted in millions of workers being made redundant. Beijing took on responsibility for the legacy social burdens of large SOEs. Premier Zhu’s reforms not only directly reduced operating costs in the SOE sector, but also helped to make SOE operations more profit-orientated. Waiving dividend payments—meaning that SOEs could retain their earnings—was the compensation Premier Zhu gave large SOEs for reducing their capacity.

When the balance sheets of most SOEs improved in the 2000s, SOEs still did not have to pay out dividends. They continued to pocket their earnings. This contributed to China’s soaring corporate savings rate and encouraged companies to expand capacity. Faced with a domestic financial market that offers few alternative investment instruments and has a largely closed capital account, Chinese SOEs readily use their retained earnings to invest in additional capacity.

The announcement at the Third Plenum in 2013, that dividend payments would be increased to as high as 30 per cent of profits by 2020, initially appeared to be a major positive development. As encouraging as this statement sounds, though, there are three reasons why it may not lead to real changes.

First, the figure of 30 per cent only applies to some SOEs and is actually not particularly high. The World Bank has found that this is still substantially lower than the dividend payments of most corporate entities. For example, for mature and established industrial firms in the US, dividends of 50 to 60 per cent are normal; the average dividend for SOEs in five developed economies is also found to be 33 per cent.

Second, reported profits can be adjusted by shifting them to subsidiaries or adjusting how investments are accounted for. The portion of profits on which dividends is paid may therefore also be suppressed.

Third, while it has been reported that dividend payments will be used to fund projects and services that will raise

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living standards, this may not ultimately take place. In fact, in 2012, Wu Xiaoling, Vice Chair of the Financial and Economic Committee of the National People's Congress (NPC), stated that about 90 per cent of the dividends paid by SOEs into the State Capital Management Budget are eventually funnelled back into restructuring SOEs administered by the SASAC. As a result, these SOEs continue to have excess capital on hand for potential expansion plans with limited funds being redistributed to citizens through programmes and services that would otherwise help to stimulate private consumption.

“…for mature and established industrial firms in the US, dividends of 50 to 60 per cent are normal; the average dividend for SOEs in five developed countries is also found to be 33 per cent.”

Instead of being subjected to strict market discipline, SOEs are often tasked with fulfilling broader political goals, such as pursuing market share, maintaining and expanding employment in their jurisdictions, as well as developing the capabilities and capacity to deliver for local investment projects. The implicit guarantees and the tolerance of NPLs and inadequate returns on investment can lead local governments to push—and companies to accept—these skewed motivations to seek and use their connections to secure loans to expand or maintain capacity. Their decisions regarding production levels are therefore clearly not determined primarily by market signals.

2.4 Easy liquidity and the fiscal system

Access to liquidity was further stimulated by state credit subsidies. To attract investments, local officials often give implicit lending guarantees to companies whose investment plants show no consideration for the country’s overcapacity situation. Investments are important for local officials because companies boost employment in the region and improve tax revenues in the medium term. Traditionally, an official’s career development was boosted by positive local gross domestic product (GDP) growth data: they were evaluated based on GDP growth, industrial production and visible physical changes in cities. This state of affairs remains the case in many parts of China today. The 2008 stimulus package, which presented local governments with huge amounts of money in early 2009, in an attempt to kick-start the economy, worsened this trend at the local level.

Too much industrial development in regional China causes a host of problems. The majority of locally-generated taxes must be passed on to Beijing, local governments cannot keep them. As local governments cannot raise bonds to finance their social and hard infrastructure they are far more reliant on their local producers than are their counterparts in Organisation for Economic Co-operation and Development (OECD) countries. Their reliance on VAT and business tax means they tend to encourage investments that maximise their fiscal incomes regardless of the overall market situation. This behaviour dates back to the days of undersupply. Unfortunately for China, this approach is no longer practical for industries characterised by oversupply. If the consumption tax was not the only source of fiscal income for local governments, they would probably quickly lose interest in capital investments.

This was recognised by the central government and led to the 2014 revised Budget Law that prohibited local governments from subsidising their local champions. However, due to a lack of enforcement, to date, it has not led to major changes.


2.5 Industry localisation/fragmentation

“...many industrial sectors in China are weighed down by a ‘long tail’ of small firms with tiny market share and poor performance, but who, like zombies, just won’t die.”

—Scott Kennedy, *China Policy Watch: Industrial Consolidation: Trimming The Long Tail*

A 2015 report noted that “many industrial sectors in China are weighed down by a ‘long tail’ of small firms with tiny market share and poor performance, but who, like zombies, just won’t die.” The report suggests that this pattern of low industry concentration has its origins in the 1950s and 1960s, when planners encouraged regional self-sufficiency. Although further reforms moved in the opposite direction, with the intention of developing an integrated national marketplace based on economies of scale and regional comparative advantage, this old industrial pattern has in many regards remained.

Central government policies seek industry consolidation as a panacea to the problems of excess capacity. However, it is not necessarily the fragmentation and low industry concentrations in many of the affected industries—and the inability to control the expansion of such a wide range of firms—that are at the root of overcapacity. Low levels of industry concentration do not necessarily lead to poor industry performance and overcapacity. Many smaller and niche market participants that are likely to be absorbed by larger firms during the course of a consolidation are actually operated more efficiently and are in possession of a stronger capacity to innovate. More pertinent to the issue of overcapacity is whether the industry structure is developed by market forces and healthy competition or through government support.

Industry fragmentation *per se* is therefore not responsible for exacerbating overcapacity, rather it is a result of continued government promotion of favoured firms for policy ends across all localities.

2.6 Local-level economic policies

“China is not yet an open and domestic market, but rather a patchwork of regional markets, each with its own unique trade and investment barriers.”

Local protectionism is a widespread problem in a continent-sized country like China, where the performance of local government officials is measured almost entirely on local GDP growth. This manifests itself in many ways. Local government officials try to attract as much investment as possible and then regulate local economic activities in ways that put non-local entities at a disadvantage. Chinese provinces, under pressure to help out local firms, issued a series of ‘buy local’ policies in 2009, a dynamic that can still be found in many localities today.

Company bankruptcies are avoided using local subsidies. Non-local competitors face additional fees for products that are produced in other regions of China and, regardless of whether or not they offer the best prices and quality, locally-based manufacturers may also be required to source their production inputs from a protected company.

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The popularity of mergers and acquisitions (M&A) is limited because of the ensuing loss of influence among local officials. The present tax system has added to the reluctance of local governments to agree to M&A, as VAT revenues are based on the manufacturer’s location – when a company takes over a local player, the VAT income stream benefits another jurisdiction. Mergers and acquisitions in China might flourish after the shift from VAT on production to a consumption-based VAT sharing system that divides revenue between the central and local governments. Such adjustment might also help to further accelerate restructuring of the economy.

China is not yet an open and coherent domestic market, but rather a patchwork of regional markets, each with its own unique trade and investment barriers. In administering this continent-sized country, the central government therefore often possesses a less than absolute capacity to implement its macroeconomic policy objectives or to maintain some measure of coordination across subnational regions.

Without being able to benefit from economies of scale or standardisation, production costs are higher than normal and certain enterprises cannot expand market share and accumulate enough strength because they have been effectively barred from competition in certain localities. Production sites are kept open even if they are underutilised, leading to overcapacity for the entire Chinese economy. With so many ‘local champions’ being supported under the present system, it is hard for domestic companies to become ‘national champions’.

Sections 2.3 through 2.6 have all highlighted the fact that the state of relations between the central and local levels of the Chinese Government—as well as the interests of competing sub-national Chinese jurisdictions—has played a key role in the development of industrial overcapacity. While the significance of these factors is clear, in recent years some have expressed optimism that coordination between the central and local governments is likely to improve.

One such voice belongs Shanghai-based venture capitalist and political commentator Eric Li, who published an article in Foreign Affairs in January 2014, entitled Party of the Century: How China is Reorganizing for the Future. In it, Li argued that the significance of the Third Plenum’s announcement that China would establish a single national budget with revenue and spending unified under Beijing’s control had yet to be fully appreciated. This was attributed to the fact that, if implemented, Beijing would “assume almost complete control over national spending with administrative authority over things like overseeing infrastructure projects and the provision of health care to be more clearly delineated between Beijing and the regional and provincial governments.” Furthermore, the rules on transfer payments between the central and local governments were to be standardised with Beijing also taking over direct management for local government debt.

It has been almost exactly two years since Li argued the significance of these pronouncements, and longer still since the Third Plenum from which they sprang. Unfortunately, with the exception of the 2014 revised Budget Law, which established a unified and standardised budgetary system that covers the central and local governments, there have been few indications that these proposed changes will ultimately become reality. As the scale of debt held by China’s local governments has only continued to expand, this is a serious problem which presents ramifications to the central government’s ability to address overcapacity, as well as to implement reforms more broadly. This raises the question of whether or not the central government possesses the political clout necessary to make such reforms, and ultimately the degree to which they are focused on the reform agenda.

### 2.7 Easy availability of technology

Overcapacity is most widespread in sectors that are considered low-tech or when technology is inexpensive or widely available, as is the case with cement and steel. It is easy to set up new production lines and to increase capacity in these sectors.

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In addition, the slow implementation of intellectual property rights (IPR) in China means technologies are spread far and wide. In some cases—take the renewable energy sector for instance—new technologies are disseminated by foreign companies when they establish fresh supply chains. This technology then feeds into the production lines of foreign investors in China and also serves domestic companies. The result is the presence of a whole new supply chain of companies eager to sell their wares, which fuels overcapacity.

2.8 Subsidised environmental costs to producers

“If pricing mechanisms for natural resources are rationalised, the enforcement of environmental levies is essential to prevent further deterioration of air and water quality.”

Environmental and social welfare effects are difficult to quantify. According to a joint study by The World Bank and the Development Research Center of the State Council, however, the costs of environmental pollution and resource depletion approach 10 per cent of annual GDP “of which air pollution accounts for 6.5 per cent, water pollution 2.1 per cent, and soil degradation 1.1 per cent”.34 If the pricing mechanisms for natural resources are rationalised, the enforcement of environmental levies is essential to prevent further deterioration of air and water quality.

The European Chamber recognises that some changes have already taken place. One example is the introduction by the NDRC in 2012, of a progressive electricity pricing system for aluminium producers.35 Another is the State Council’s move in October 2013, to introduce price reforms for water and electricity in order to eliminate local price subsidies, with tiered pricing introduced for significant users of water and electricity in overcapacity sectors, such as steel, cement, electrolytic aluminium, flat glass and shipbuilding.36 The development of emissions trading programmes and the consideration of a carbon tax is also encouraging. However, for the scale of the problem of overcapacity and the environmental ramifications that it has created, these measures are likely too little and too late. As is often the case, the ability of the central government to effectively implement well-meaning legislation is the main challenge.

2.9 Environmental, health and safety standards

Environmental, health and safety (EHS) standards also contribute significantly to the national overcapacity problem. There are no opportunities at a national level to shut down obsolete or polluting plants as this falls under the jurisdiction of local governments, which are loath to close such plants because of the resultant unemployment.

Environmentalists and legal specialists generally concur that the existing environmental laws and regulations in China are adequate. Again, enforcement is the problem. China, with its vast area and massive population, faces an enormous challenge in balancing its economic growth with environmental concerns. While the status change from bureau to ministry gives the MEP more administrative power, it has not been given adequate enforcement power. The MEP is nominally responsible for enforcement and monitoring, but the real power is actually spread among numerous other authorities, including the NDRC (on environmental industry development), the Ministry of Water Resources, the State Forestry Administration and the State Oceanic Administration. This reduces the effectiveness of environmental monitoring and control.

Ultimately, environmental protection rests with some 2,500 EPBs spread throughout the country. They are responsible for monitoring and enforcing environmental laws and regulations within their jurisdiction. Real decision-making power lies with local government. Local protectionism results in conflicts of interest in monitoring and enforcing environmental laws and the EPB may become a ‘servant’ of local government with no real powers. The prevailing local implementation of environmental and labour laws keeps sub-standard companies in business to the detriment of the local environment. In European Chamber’s Position Paper 2014/2015, a recommendation was made that steps should be taken to ensure that EPBs gain independence from local governments. Reporting directly to the MEP would give local EPBs real power to enforce local laws and regulations, and provide them with adequate means and resources.

“Environmental protection rests with some 2,500 EPBs spread throughout the country.”

While it is still too early to judge the long-term effectiveness of the revised Environmental Protection Law (EPL) that came into effect on 1st January, 2015, the key question is, as always, will strict regulatory enforcement and monitoring be applied locally? Unfortunately, as the power of this law can be trumped by competing legislation China’s system of environmental governance remains fragmented, and while local governments continue to control their EPBs, there is no reason to assume that in the long term it will fully succeed.

When local governments turn a blind eye to national laws being violated, they effectively give companies operating below legal standards a local subsidy. This gives those firms a distinctive cost advantage and keeps companies in business that may otherwise be closed. Subsidies of this sort keeps overcapacity in the market, and hurt the bottom line of responsible companies who abide by national laws.

2.10 Philosophy of market share versus profitability

“Some producers…viewed overcapacity as an opportunity to gain market share.”

Although most industrial companies are market-orientated, the state still controls many of them. This means that a great number of these 150,000 companies have no ‘market’ ownership and that accountability and transparency are lacking. As discussed in section 2.2, in most cases, these companies pay smaller dividends than the average private company. As the major shareholder, the state has historically made limited claims on earnings and profits, and has had a correspondingly limited interest in maximising profitability. Capacity, production and market share goals are used as the primary benchmarks to assess the performance of these state-controlled corporations. As many of China’s business people act in a ‘market share-driven’ economy, companies reinvest retained earnings to gain market share and to make their companies bigger. Size matters in China.

Some producers have also viewed overcapacity as an opportunity to gain market share. Companies that have money and believe that they can weather overcapacity’s storm have opted to further expand their operations in the expectation that other companies will fall out of the market. In such an eventuality, these companies would

then be able to reap the rewards of large-scale presence in the marketplace and recoup their investments once overcapacity eases and the market picks up. The problem with this, however, has been the sheer number of companies that are seemingly attempting to weather the storm by applying this strategy.

3. Eight severely affected industries

The European Chamber has selected eight key industries where member companies can contribute their know-how to developing effective and sustainable solutions to combat overcapacity:

- Crude steel
- Electrolytic aluminium
- Cement
- Chemicals
- Refining
- Flat glass
- Shipbuilding
- Paper and paperboard

Although the original 2009 study also addressed the wind energy sector as the industry is no longer characterised by major overcapacity it is not analysed in detail in this study. Discussions with industry experts indicate that after the explosive growth that took place in this sector from 2007 to 2010, and resulting overcapacity from 2008 to 2011, Chinese government policies to prevent less technologically advanced companies from bidding on projects and raising grid connection standards in order to discourage new market entrants addressed the problem. The resulting
market consolidation that took place also helped to balance supply and demand with fifteen companies that now account for over 90 per cent of the Chinese market.

As outlined at the beginning of section two, for the purposes of this study overcapacity is defined as the difference between production capacity and actual production, meaning overcapacity is considered as the converse of the utilisation rate. To analyse the problem of overcapacity more effectively, further data has to be considered, including sector production, compound annual growth rate (CAGR), projected demand and FAI.

### 3.1 Crude Steel

“…[China’s] steel industry now accounts for more than half of global output, or more than twice the combined output of the next four biggest steel makers: Japan, India, the US and Russia.”

China is the world’s biggest steel producer. Dan Rosen, Founder and China Director, Rhodium Group, has calculated that from 2004 to 2014, global steel production increased by 57 per cent – China contributed a staggering 91 per cent to this increase. As a result, its steel industry now accounts for more than half of global output, or more than twice the combined output of the next four biggest steel makers: Japan, India, the US and Russia. It enjoys this massive capacity largely thanks to supportive industrial policies spanning decades whose sole aim was to help this ‘strategic’ industry flourish. The government was still introducing favourable polices to support steel even as late as 2002.

Market forces cannot be discounted in explaining the meteoric rise of China’s steel production capacity over the past decade. The growing economy, especially before the 2009 financial crisis, provided the greatest momentum for the development of the steel industry. Strong demand from infrastructure construction, real estate, machinery and the automobile industry, coupled with overestimated market expectations, pushed up the steel price dramatically. The soaring price not only spurred large steel groups to build new steel lines, but also attracted many small and medium-sized steel companies to the industry.

**Overcapacity in steel**

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity</th>
<th>Production</th>
<th>Utilisation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>644 million tonnes</td>
<td>512 million tonnes</td>
<td>80%</td>
</tr>
<tr>
<td>2014</td>
<td>1.14 billion tonnes</td>
<td>813 million tonnes</td>
<td>71%</td>
</tr>
<tr>
<td>2008 vs. 2014 scale of overcapacity</td>
<td>132 million tonnes vs. 327 million tonnes</td>
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</table>

**Government steps to curb overcapacity not effective**

Government policies have primarily targeted small and semi-legal producers (private and local government-owned), which also tend to be more polluting and less energy-efficient. As early as 2004, Beijing started advocating slower growth in steel sectors, but without any great success. At the time, a booming economy and robust global demand for Chinese steel gave producers and local governments little incentive to follow Beijing’s guidance. State-owned steel mills have traditionally viewed long-term market viability as secondary to safeguarding the jobs and economic growth that these projects deliver to their local communities. At the same time, high steel prices fuelled by the domestic development boom and rising global demand attracted new entrants that operate on very narrow margins and enjoy as much as a 30 to 40 per cent cost advantage compared to their state-owned competitors.

39 Dan Rosen, Rhodium Group, Presentation, Beijing, November 2015.

In the bullish market leading up to the financial crisis, government policies aiming to curb the growth of overcapacity in the steel market had little chance of success. The collapse in global demand for steel after the crisis should have created a perfect environment to reduce capacity in the steel sector. Instead, as has been outlined, the Chinese Government’s massive stimulus spending efforts have directly contributed to exacerbating overcapacity.

Recognising the increasing scale of overcapacity in the industry, in March 2009, the State Council’s Steel Industry Adjustment and Revitalisation Plan was released. This plan was aimed at, among other things, controlling steel production and eliminating backward capacity by implementing stricter standards.

According to the plan, about 140 million tonnes of capacity were ‘illegal’ and this was accounted for by the thousand or so smaller mills in the country (according to the plan, there were about 1,200 registered steel companies in China, but the top 66 companies already made up 80 per cent of total capacity). At the same time, however, the plan called upon the top ten producers to boost their capacity, either through M&A or through organic capacity expansion. In August 2009, the MIIT revealed that it was currently drafting guidelines to speed up M&A in the iron and steel industry, including VAT policies favouring SOEs. Unfortunately, though, facilities often prove difficult to consolidate or shut down and many steel producers in fact simply modernise existing obsolete capacity, instead of shutting it down. Capacity that is slated to be permanently removed from the market is therefore often found to subsequently reappear.

In addition to the pressures to maintain employment this is also attributable the fact that in many regards it is cheaper to continue high levels of production than to shut it down. Mills also often continue to operate because they are saddled with debt and it is only through continued production that loans can be returned or, indeed, rolled-over. Some companies have therefore increased their production capabilities in order to avoid elimination or consolidation. As an example, one government policy from 2010, that sought to eliminate blast furnaces smaller than 400m$^3$, foundry furnaces smaller than 200m$^3$ and electric arc furnaces smaller than 30m$^3$ spurred a number of producers to expand their capacity above these thresholds in order to avoid closure. In one case reported by The Wall Street Journal, a company in Hebei province that received USD 785,000 of compensation for dismantling four small blast furnaces spent the funds it received on building a larger one.

In December 2015, HSBC posited that even with 50 million tonnes of capacity eliminated (or at least suspended) during the first 11 months of the year, a further 120 million would have to be cut in 2016, before China’s industry could reach a utilisation rate of 80 per cent. Unfortunately, with the easiest closures having already taken place, this is likely to be challenging. The longer the stalemate lasts between unprofitable, but politically connected, SOEs that are focused on low value-added segments of the industry and comparatively profitable, specialised and efficient private mills, the more likely it is that it will be the latter’s capacity that will be forced to exit the market.

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43 Ibid.
The scale of the challenge is further highlighted by the fact that in 2013, the government again stated that it aimed to cut production by 80 million tonnes by 2017, or the equivalent of the US’ entire annual output. While 31 million tonnes of smelting capacity was eliminated in 2014, the reported delays in shutting down 60 of Hebei’s 240 million tonnes of production by 2017, mean that there is no reason to assume that this target will be met.

In January 2015, the MIIT announced a plan accelerate the overhaul of the steel industry and bring it to a “basically balanced level”. As this goal targeted having more than 80 per cent of production utilised by 2017, which would mean a total output of 800 million tonnes, it would necessitate a major drop from 2015 production levels. The draft plan called for the M&A process to create three to five major steel producers by 2025, with the 10 largest companies accounting for no less than 60 per cent of total output. Market access and exit rules were also slated for improvement. As part of this initiative, the MIIT also vetted domestic steel makers and shortlisted those who were found to be compliant with regulations. These shortlisted steel mills, which have a total combined capacity of one billion tonnes, were to be subject to upgrading and restructuring. While the policy was scheduled to take effect in July 2015, it was yet to be implemented as of the end of 2015.

This is against a background in which annualised steel exports from January to October 2015 also reached 110 million tonnes, which amounts to 12 per cent of China’s output and an increase of 16 million tonnes from 2014 levels. This is a sharp contrast from the 1990s, at which time a significant portion of the steel products that China consumed were imports. For example, in 2014, China exported 4.5 million tonnes of steel to the EU, a 49 per cent increase over 2013. Between January and October 2015, China’s exports to the EU rose to seven million tonnes for a further increase of 41 per cent over the same period of 2014.

M&A an imperfect solution to address the problem

In a 2013 report on overcapacity in the global steel industry, The Boston Consulting Company argued that M&A only provides a solution when the merged companies enjoy synergies that make the new company more efficient and profitable, and then only if the government allows the merged company to take advantage of these synergies. If not, it only creates a “larger low-profit business”, which may have a limited effect on the root problems of overcapacity and profitability. As government intervention is found to be most effective when it ensures fair competition and lowers exit barriers, if effectively implemented the MIIT’s January 2015 announcement that market exit rules will be improved is a positive development.
Current drivers of overcapacity in China’s steel industry

Based on European Chamber research, overcapacity in the steel industry has been mainly driven by:

- The desire on the part of regions to be self-sufficient, leading to capacity duplication at the national level;
- A combination of SOEs being insensitive to profit/loss and small/dirty/inefficient steel mills that suspend activity when price dips and re-open when the market is more favourable;
- Adverse effects of the stimulus package, which encouraged large mills to add capacity and has made small- and medium-sized mills, which the government wants to shut down, profitable; and
- The provision of subsidised energy by regional governments.

3.2 Electrolytic Aluminium

China’s electrolytic aluminium industry has witnessed extremely rapid growth over the past decade with the country now accounting for half of the world’s supply, which amounts to 13 times the US’ production. This growth story was driven first and foremost by a boom in both domestic Chinese and global demand. In turn, this high demand drove prices up and increased return-on-equity (ROE), making the industry more attractive for investment from SOEs and private companies. Market entry was facilitated by easy availability of technology and favourable access to financing. Combined with subsidised energy costs (which accounts for 20 to 40 per cent of the cost structure depending on worldwide location), these factors turbo-charged the development of the industry in China (in both primary and extrusion industry segments).

This market-driven boom was supported by favourable government policies. There was encouragement for SOEs to enter the primary aluminium industry segment, despite the sector’s high-energy consumption, while private capital was allowed to pour into the manufacturing (extrusion) segment. As a result, the industry has moved from 4.9 million tonnes of overcapacity and a utilisation rate of 78 per cent in 2008, to 9.2 million tonnes of overcapacity and a utilisation rate of 76 per cent in 2015. While both the primary and manufacturing segments suffer from overcapacity, the following analysis will focus on the primary segment of the Chinese aluminium industry.

Aggravation of overcapacity in the medium term

Since the publication of the European Chamber’s original report in 2009, capacity in this sector has continued to expand rapidly – from 2005 to 2015, 90 per cent of the increase in global aluminium production took place in China. Overcapacity therefore continued to expand in spite of the restrictive policies described above, with utilisation rates continuing to drop as new smelting capacity came online and FAI either remaining stable or growing. The impact of government-driven stimulus spending also had a negative impact in this area in the sense that it led to the re-opening of closed facilities and increased local-level investment in the sector. Growing overcapacity eroded prices, thereby compounding the effects of the global economic downturn.

Overcapacity in electrolytic aluminium

<table>
<thead>
<tr>
<th>Year</th>
<th>Capacity</th>
<th>Production</th>
<th>Utilisation rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>18.1 million tonnes</td>
<td>13.2 million tonnes</td>
<td>78%</td>
</tr>
<tr>
<td>2015</td>
<td>38.1 million tonnes</td>
<td>28.9 million tonnes</td>
<td>76%</td>
</tr>
</tbody>
</table>

2008 vs. 2015 scale of overcapacity: 4.9 million tonnes vs. 9.2 million tonnes

52 Komesaroff, Michael, Aluminum: Coping with Excess Capacity, GK Dragonomics, 10th March, 2015, p. 1
Government actions in response to overcapacity to date

Overcapacity is not a new problem for China’s aluminium industry. As early as 2002, at the beginning of the Chinese aluminium boom, the central government released a series of policies in response to excessive investment in the sector. However, the capital-intensive primary industry segment is predominantly controlled by provincial and municipal governments whose policy priorities lie, first and foremost, with driving local GDP, employment and tax revenues.

The global economic downturn made overcapacity in the aluminium sector more prominent, which prompted the central government to introduce a set of corrective measures. In March 2009, it issued a requirement for local administrations to stop subsidising electricity prices for aluminium smelters that had failed to obtain central government approval. This move aimed to encourage consolidation in the industry by favouring larger (often state-owned) producers, and in theory to reduce capacity by forcing smaller operations to shut down.

In May 2009, the State Council announced a three-year ban on new capacity and a removal of small plants with a combined capacity of 725 thousand tonnes by 2010, as well as an increase in the standards for energy consumption and greenhouse gas emissions. Subsequently announced plans for the development and adjustment of the non-ferrous metals industry also indicated that while any new construction or reconstruction aluminium project would not be permitted, consolidation in the industry would be encouraged.

The European Chamber recognises that impressive innovations have also been achieved in terms of energy efficiency, technological development and the reduction of capital expenditures for new plants. However, with 9.2 million tonnes of overcapacity in 2015, on a utilisation rate of 76 per cent and total losses growing from USD 1.2 billion in 2013, to USD 1.5 billion in 2014, the scale of the challenge has grown considerably since 2009. Even with China’s demand expected to continue to grow through to 2020, with the transportation industry as an important driver, as this is an energy-intensive industry that also creates real environmental pressures the costs of the current scale of overcapacity extend beyond earnings and losses.

"China’s electrolytic aluminium industry has witnessed extremely rapid growth over the past decade with the country now accounting for half of the world’s supply, which amounts to 13 times the US’s production."

In response to these trends, in 2012, the NDRC introduced a progressive electricity pricing system for aluminium producers. In October 2013, and in advance of the Third Plenum, the State Council for the first time also introduced price reforms for water and electricity. This measure called for removing any local price subsidies and introducing tiered pricing for significant users of water and electricity in electrolytic aluminium and four other priority sectors where existing projects would potentially be re-evaluated and proposed projects would be blocked. Measures to establish stricter market-entry requirements as well as to eliminate outdated capacity were also to be enacted.

53 Based on the 14th January, 2016, mid-market exchange rate <http://www.xe.com/>
Data supports a sceptical view of how successful these measures have been. Barclays found that from 2008 to 2015, 64 smelters with a combined capacity of 15 million tonnes announced production curtailment. As only 14 smelters with a combined capacity of 1.3 million tonnes were ultimately dismantled, 78 per cent of smelters in question—representing 92 per cent of the capacity of the 64 smelters—have either returned to the market or are still able to do so if prices become favourable. Furthermore, with 21.5 million tonnes of capacity added during the same period, permanent closures only amounted to six per cent of added capacity. During the first 11 months of 2015, suspensions amounted to approximately 4.9 million tonnes, a major increase over recent years. However, as many of these plants are likely to restart production when the market shows some signs of improvement, closures that may only be temporary do not address the root problem of overcapacity.

In response, there have been reports of industry players trying to work together toward solutions. For example, CHINALCO has attempted to support prices by pushing for the formation of a grouping with eleven other domestic smelters that would only sell directly to customers, instead of to the Shanghai Futures Exchange. In December 2015, there were also reports that fourteen Chinese smelters would meet to discuss production cuts as well as other possible measures in the face of prices that had hit six-year lows. However, with more than 60 per cent of the country’s capacity reportedly facing negative cash flow, deep cuts would be necessary before near-term support for prices would be possible.

**Current drivers of overcapacity in China’s electrolytic aluminium industry**

Based on European Chamber research, overcapacity in the electrolytic aluminium industry has mostly been driven by:

- Market forces: high prices prior to the crisis attracted SOEs and private investment into the sector;
- Subsidised energy (20 to 40 per cent of cost structure depending on worldwide footprint and overheads);
- Easy access to technology and funding;
- Stimulus spending in construction, that has fuelled an expansion in capacity in up-stream industries such as aluminium; and
- The cost-intensive and time-consuming nature of closing down industry facilities.

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56 Ibid.

57 Ibid.

3.3 Cement

In 2015, China’s cement production accounted for 57 per cent of global output and was about nine times larger than the second largest producer, India. Being the most populous nation in the world, with an urbanisation rate of 55 per cent in 2015, China is in the midst of a huge urbanisation process that has required the construction of unprecedented amounts of urban housing and infrastructure. Despite this massive demand, the Chinese cement industry suffers from overcapacity with a deluge of new capacity having come on-stream in recent years.

China’s cement capacity in 2014 was 3.1 billion tonnes per year, while total production was almost 2.25 billion tonnes, resulting in an utilisation rate of 73 per cent. China’s cement industry is composed of large state-owned companies and a plethora of very small producers. At the same time, the cement industry has gone through a technology change from smaller, more polluting vertical kilns—mostly used by smaller producers—to larger, more energy-efficient new suspension pre-heater (NSP) kilns generally deployed by larger producers.

Government steps taken to curb overcapacity

Reacting to the scale of the problem, at the end of September 2009, the NDRC issued guidelines aimed at curbing overcapacity in the cement industry by suspending indefinitely the construction of all planned cement lines for which construction had not yet begun, including those that had previously received formal NDRC approval. The guidelines also contained a set of measures and energy efficiency standards aimed at accelerating consolidation of the industry and the transition from vertical to NSP technology. The policy mandated that any new capacity must be met by equivalent cuts in outdated capacity. Finally, provinces with more than one tonne of cement per capita would not be granted new licences for cement lines.

In 2009, State Council document number 38, *Notification of Opinions on the Inhibition of Overcapacity and Redundant Construction in Some Industries and Guide to Sound Development*, also targeted the removal all of the obsolete kiln capacity (vertical shaft kilns) by the end of the 12th FYP period. While the accumulated closure of obsolete capacity from 2009 to 2014 reached 360 million tonnes, the China Cement Association (CCA) estimates that approximately 68 million tonnes of obsolete capacity still remains in the market. In 2013, State Council document number 41, *Guideline to Resolving Severe Overcapacity Problems*, went further by banning the establishment of further capacity in oversupplied regions and preventing banks from providing projects that have not attained legal approvals with loans, bonds or initial public offerings (IPOs).

Upgraded environmental requirements, the phasing out of low-grades of cement and the encouragement of loans from commercial banks, equity placements, bond issuances from the secondary market and tax benefits in support of M&A have also been used to reduce capacity. Going forward, initiatives introduced by the MIIT and the CCA also include closing small-sized NSP production lines in seriously oversupplied regions in particular.

Unfortunately, these measures have so far only managed to slow down the rate at which the problem is
expanding. While FAI in the industry declined from USD 25.8 billion in 2009, to USD 14.7 billion in 2015, the utilisation rate dropped three per cent, from 76 down to 73. At the same time, the scale of total overcapacity rose 400 million tonnes from a base of 450 million in 2008, to 850 million in 2014. With demand only projected to grow by minus one to two per cent from 2016 to 2020, this does not constitute a success story.

Furthermore, industry sources reveal that there are loopholes that allow for approvals to be granted locally instead of through the NDRC by claiming that the new facility will increase environmental improvements. These loopholes also contribute to a worsening of the overcapacity situation and should be closed at the earliest opportunity.

“*In 2015, China’s cement production accounted for 57 per cent of global output and was nine times larger than the second largest producer, India.*”

**Current drivers of overcapacity in China’s cement industry**

Based on European Chamber research, overcapacity in the cement industry is mostly driven by:

- A failure to shut down vertical kiln capacity in a timely manner, thereby creating a capacity ‘lag’;
- Inadequate historical capacity planning with additional permitted capacity exceeding demand projections;
- Inadequate enforcement of regulations meant to prevent operation by unpermitted new projects. Projects like this continue to be built with those that have already been built using loopholes in capacity approval processes to justify further capacity additions; and
- Relatively low capital entry barriers and inadequate enforcement of EHS and product quality standards, which enable non-compliant operators to enter and supply the market

**3.4 Chemicals**

China’s chemical industry is vast, complex and highly segmented. This is reflected in the slightly different structure of this section.

The development of China’s chemical and petrochemical industry underwent massive changes in the years leading up to the European Chamber’s original 2009 report. While the sector has historically struggled to keep pace with the rapid development of China’s economy, according to the China Petroleum and Chemical Industry Association (CPCIA), in 2014 it was the world’s leading producer of fertiliser, soda ash, caustic soda, sulfuric acid, methanol, calcium carbide, as well as other products.  

After a decade of expansion, the financial crisis hit hard with the CPCIA reporting that during the first 11 months of 2008, industry profits were down 7.1 per cent year-on-year with 4,556 companies reporting financial losses, 20 per cent more than in 2007. With a large number of investment projects that had been in the pipeline, both

in China and internationally, coming into service at exactly the time that previous growth estimates needed to be re-evaluated, the industry faced real changes. However, in April 2009, the CPCIA concluded that with such a large domestic market the industry would be able to face these difficulties and would eventually be able to look forward to a time when further development would be possible.\(^\text{64}\)

“Greater China is home to approximately 25,000 chemical companies.”

Though the industry therefore faced challenges, shortly before the European Chamber’s 2009 report the CPCIA reached the following evaluation of the state of the industry:

- 50% of products are in a balanced supply and demand situation.
- 30% of products are in short supply.
- 20% of products have overcapacity problems.\(^\text{65}\)

However, after the short-term benefits of the government’s 2008 stimulus package worked their way through the industry, the picture was not so favourable. Overall demand growth has slowed down in line with slowing of the Chinese economy, while more capacity increases have resulted due to over-heated investments. These investments have been fuelled by the investors’ and local officials’ overconfidence in the high market growth of the past as well as the short-term effects on demand that resulted from the stimulus package.

In a sharp contrast to the more optimistic evaluation put forward earlier, in April 2014, the CPCIA issued a highly detailed warning about overcapacity in the industry. It concluded that from 2008 onward supply had grown far faster than demand, with overcapacity now a serious problem for ten products—fertiliser, urea, methanol, chlor alkali, soda ash, calcium carbide, tyres, hydrogen fluoride, ammonium phosphate and silicone methyl monomer—with no shortage of additional capacity and a larger problem projected for the following year.\(^\text{66}\)

After identifying utilisation rates of 80 to 82 per cent as reflecting a balanced market, with 75 per cent or lower taken to indicate serious overcapacity, evidence was presented that utilisation rates for seven of the ten products in question were 75 per cent or lower and only two of the products were found to have utilisation rates in the range of 76 to 80 per cent. While urea was found have a healthy utilisation rate of 83 per cent, it was projected to drop to 75 per cent by 2015. With major capacity increases by 2015 projected for nine of the products and five of them expected to see utilisation rates fall by five per cent or more (against two products for which rates were expected to improve by five per cent or more), the CPCIA was not optimistic.

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Overcapacity in China

Turning to the most up-to-date data the general state of China’s industry is highlighted by the fact that only one of the 16 chemicals listed in the following chart has a utilisation rate that has improved significantly over the last three years. Furthermore, in 2014, only three of these chemicals already had utilisation rates in the range of 80 to 82 per cent with two more enjoying rates in the range of 76 to 80 per cent. All of the remaining 11 are found to have utilisation rates below 73 per cent. For an industry that provides inputs into such a wide range of industrial processes, this represents a major misallocation of capital.

<table>
<thead>
<tr>
<th>Subsector</th>
<th>2012 Utilisation Rate (UR)</th>
<th>2013 UR</th>
<th>2014 UR</th>
<th>Trend of change</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTA</td>
<td>84.3%</td>
<td>68.6%</td>
<td>61%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>SBR</td>
<td>80%</td>
<td>73%</td>
<td>64%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>cis-BR</td>
<td>63%</td>
<td>52%</td>
<td>48%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>MAP</td>
<td>80.5%</td>
<td>66.7%</td>
<td>65.8%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>Urea</td>
<td>85%</td>
<td>83.1%</td>
<td>81.5%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>Soda Ash</td>
<td>83%</td>
<td>77.2%</td>
<td>81.4%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>DAP</td>
<td>78.9%</td>
<td>79.2%</td>
<td>79.2%</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Calcium carbide</td>
<td>53.8%</td>
<td>60.7%</td>
<td>62.6%</td>
<td>Improved slightly</td>
</tr>
<tr>
<td>PVC</td>
<td>56.3%</td>
<td>61.8%</td>
<td>68%</td>
<td>Improved slightly</td>
</tr>
<tr>
<td>Methanol</td>
<td>60.2%</td>
<td>59.5%</td>
<td>64%</td>
<td>Improved slightly</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>50-60%</td>
<td>50-60%</td>
<td>70.2%</td>
<td>Improved slightly</td>
</tr>
<tr>
<td>Caustic soda</td>
<td>72.2%</td>
<td>74.1%</td>
<td>81%</td>
<td>Improved</td>
</tr>
<tr>
<td>n-Butanol</td>
<td>81%</td>
<td>71%</td>
<td>72%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>2-Ethyl hexanol</td>
<td>73%</td>
<td>77%</td>
<td>76%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>Acrylic acid</td>
<td>81%</td>
<td>81%</td>
<td>66%</td>
<td>Deteriorating</td>
</tr>
<tr>
<td>Butyl acrylate</td>
<td>92%</td>
<td>82%</td>
<td>66%</td>
<td>Deteriorating</td>
</tr>
</tbody>
</table>

(Source: China Petroleum & Chemical Industry Federation, China Chemical Industry News)

Greater China is home to approximately 25,000 chemical companies. With a large number of them producing the same products, they are left chasing after a finite number of customers. Many of these companies also lack the capacity to innovate or to specialise in products that enjoy higher utilisation rates, a problem that was identified by the CPCIA in 2014. For new projects, they therefore have no other choice but to jump on the treadmill of repetitive investments in low-end products due to the bottleneck in their R&D capability and lack of advanced technologies.

In contrast, The Boston Consulting Group has found that in all international markets the highest total shareholder returns have “shifted from commodity products manufactured in extremely high-capacity plants to focused specialties”. These “focused specialty companies” are found to succeed by creating “highly refined products that usually serve a narrowly defined industry or functional application”.67 This development poses a challenge to the profitability and ability of Chinese chemical companies to differentiate themselves in a crowded market.

Government steps taken to curb overcapacity

In light of mounting overcapacity challenges, the central government started to take steps to rein in overinvestment in some areas of the chemical sector. In the coal-to-chemical sector, the State Council started taking action in 2006, by setting the minimum size for new plants to one million tonnes per year. However, many smaller plants exist below 300 thousand to 600 thousand tonnes per year. These less efficient and more pollution-intensive plants are either owned by private companies operating outside the law, or by local governments keen on driving local GDP growth.

When the European Chamber’s first overcapacity report was published in 2009, it was expected that the MIIT would become much stricter, with permission to build new production facilities and to expand existing capacities for certain products only being granted to those manufacturers that received direct approval. Unfortunately, with local governments empowered to approve more and more chemical investments, major improvements have not resulted.

This is partially due to the fact that local tax revenue in many locations has remained heavily reliant on chemical investments, especially those based on simple processing of local resources like coal, salt and phosphate. In the coal-to-chemical field in particular, capacity additions have often been promoted by local governments. Many project approvals require resources-coal-on-site ratios of 50 to 60 per cent in order to promote local economies.

Subsequently, in the 12th FYP, the government announced a capacity goal for all chemical products and included a list for outdated capacity to be eliminated. In 2011, the NDRC also issued a comprehensive notice for the standardisation of the coal-to-chemical industry that included strict controls for market entry, strengthening of project approval and stricter measures for resource allocation such as land. Unfortunately, and as a result of local protectionism, some outdated plants have even been able to expand above the minimum capacity required by central authorities in order to avoid being shut down.

The effects of these developments has resulted in severe safety/environmental risks as witnessed in the increasing number of chemical accidents over recent years. The subsequent waste in financial and human resources has detracted from the industry’s ability to invest in innovation and the upgrading of facilities, which is necessary for the implementation of the China Manufacturing 2025 initiative. As noted by the CPCIA, due to the limited capacity that many of its chemicals companies currently have to invest in R&D, China also remains reliant on imports for some high-end, high-tech products.

Current drivers of overcapacity in China’s chemical industry

Based on European Chamber research, overcapacity in the chemical industry is mostly driven by:

- The desire for self-sufficiency, despite existing global overcapacities;
- A fragmented industry, with many small players operating outside of state supervision;
- Local governments that, with the exception of large-scale petrochemical and coal chemical projects, possess permitting authority to promote the industry through electricity price, rail freight, and tax incentives in order to stimulate upstream and/or downstream economic activity;
- Local governments protecting outdated plants and enabling them to expand production scale in order to avoid being shut down; and
- Poor IPR protection for chemical products that Chinese domestic producers have either developed or bought the technology for.
3.5 Refining

Measured by overall throughput, China is the second-largest oil refining country in the world, after the US. However, China’s oil refining industry has been troubled by a surplus in total capacity for many years.

China’s annual refining capacity was 391 million tonnes in 2008, with a throughput 314 million tonnes, meaning that refineries were operating at 80 per cent of capacity. Six years later, in 2014, its annual refining capacity had risen to 686 million tonnes with a throughput of 456 million tonnes, a utilisation rate of 66 per cent. In highly capital-intensive industries like refining, a comparatively high utilisation of slightly below 90 per cent can already be considered as an avoidable waste given the considerable resources involved. It is also important to note that this operating rate could well be generous as small (permanently underutilised) refineries are often not covered by official statistics.

The total capacity of these small refineries made up about 20 per cent of China’s entire capacity in 2009, rising to about 25 per cent in 2014. These so-called ‘teapot’ refineries are mainly located in Shandong, Liaoning, Henan and Guangdong. The diesel fuel produced by these facilities, which is usually of below-average quality, is often used to power farm machinery and industrial stoves, as these do not require high quality fuel.

“…instead of eliminating excess capacity or creating more efficient refineries…mergers have often just created companies with larger capacities without realising any significant efficiency gains.”

Government steps taken to curb overcapacity

From 1999 onwards the central government mandated the closure of refineries with a refining capacity below 52 thousand barrels per day (bpd).

The relative success of this policy can be measured by the fact that a decade later, in early May 2009, the NDRC announced further plans, this time targeting small, obsolete refining facilities, while supporting increases in refining capacity by the leading market participants. The measure was aimed specifically at closing down low-efficiency, low-quality refining facilities of less than 20 thousand bpd by 2011, and also encouraged the closure, merger or transformation of refining facilities with capacities of up to 40 thousand bpd.

In 2013, the output threshold was subsequently raised to 104 thousand bpd, which is significant as the capacity of most teapot refineries is currently below 100 thousand bpd. As usual, local governments resisted efforts to remove small refineries as they are important sources of tax and revenue.

To survive the government’s restructuring plan, some small refining companies merged with other state- or privately-owned operators to increase economies of scale. Unfortunately, instead of eliminating excess capacity or
creating more efficient refineries, such mergers have often just created companies with larger capacities without realising any significant efficiency gains.

**Still a strong increase in capacities**

These regulations pushing for industry consolidation had one major negative side-effect. Domestic refiners, especially those smaller in size, often heavily increased their investments. As they attempted to scale-up to reach a size necessary to avoid closure or acquisition, their capacity increased further. These investments were often made by local governments or facilitated by them through preferential loans by local banks. As is the case in many of the industries examined in this study, local governments were simply trying to protect what is often a key local industry in terms of GDP, employment and tax contributions.

**Rise of the teapots**

As recently as 2013, the outlook for the teapots did not appear to be positive. At that time the central government announced that all refineries should be equipped to produce high-quality fuels by 2017. This involves standards which on average take about two years to implement at a minimum investment of USD 100 million per refinery.

As many of the teapot’s utilisation rates are in the 40 to 44 per cent band, this made sense. However, the near-term prospects of some of the more competitive teaports have subsequently improved. It now appears that policies will be aimed at making them more efficient and profitable with the government offering quotas in exchange for the closure of inefficient capacity. As of late 2015, they have been permitted to apply for permits to import crude oil directly, thereby decreasing their input costs. As this is taking place in the face of decreasing domestic demand, it is expected that soon they will be permitted by the Ministry of Commerce to export oil products. As a result, in 2017, average utilisation rates for the teapots may rise to close to 60 per cent. Going forward many of the more competitive teapots may therefore begin to grow.

**Current drivers of overcapacity in China’s refining industry**

Based on European Chamber research, overcapacity in the refining industry is mostly driven by:

- The desire for self-sufficiency, as China tries to be less reliant on foreign countries, even if they already have enough capacity; and
- Small refineries creating the bulk of revenue and thousands of jobs for local governments, so closure is prevented by all available means.
3.6 Flat Glass

Flat glass can be divided into three segments: float glass, which amounts to approximately 90 per cent of global flat glass production; sheet glass, which amounts to approximately six per cent; and rolled glass.

As a result of Chinese urbanisation and the resulting demand for construction materials, there has been strong demand for construction glass for many years. Capacity in this sector was 650 million weight cases per year at the end of 2008, with production of 574 million weight cases per year, giving a utilisation rate of 88 per cent. While in 2009, this already translated into half of the world’s entire flat glass production, in 2014 its annual total capacity and actual production expanded to 831 and 1,046 million weight cases respectively for a utilisation rate of 79 per cent.

As with most of the industries examined in this study, China’s flat glass industry is highly fragmented. Production lines are spread across the country with the main markets in Guangdong (South China), Huadong (East China) and Hubei (North China). Only in April 2015, with the merger of Kibin and Zhejiang Glass to form a company with approximately 4.5 million tonnes of working production capacity, did one company reach national champion-level scale.

Demand for glass is seasonal and ups and downs in the industry are normal. In spite of this a tipping point for overcapacity was reached after the 2008 stimulus package produced a boom in market demand, sharply rising prices and the addition of new production lines. This expansion continued until 2012, when prices began to fall and companies in the industry started to experience financial difficulties.

“While in 2013, there were 290 production lines in total, of which 230 were running, by September 2015, these numbers were 346 and 216 respectively.”

Starting in August 2013, the industry began to recover as a result of a slight demand increase and a decreased number of market participants. In 2014 and 2015, leading companies in the industry also upgraded 73 lines from float white production to high-end products like coloured, solar and ultra-thin. Major mergers of significance to industry consolidation also took place with the previously-mentioned merger of Kibin with Zhejiang Glass and China Triumph Group reportedly acquiring a large number of small industry players, and the latter also increasing its capacity in the higher value-add indium tin oxide (ITO) and ultra-thin segments.

However, overcapacity is still a major issue. While in 2013, there were 290 production lines in total, of which 230 were running, by September 2015, these numbers were 346 and
Overcapacity in China

Overcapacity in China

30 respectively. Furthermore, while more sophisticated and specialty glass production is a more profitable and less competitive market segment, too many companies still remain focused on low-end flat glass production. Due to the pressure on profits created by overcapacity many of these companies lack the capital necessary to move up the value chain.

Government steps taken to curb overcapacity

In recent years, the central government has increased its focus on overcapacity elimination in China’s flat glass industry. This has involved issuing policies to encourage companies to shift production to Western China; imposing stricter market entry standards; establishing stricter emission controls; and encouraging industry consolidation.

As has been seen in multiple industries, the central government’s initiatives have not been effectively implemented at the local level and there have still been instances where provincial governments have allowed new capacity to be built. However, some significant improvements were seen in 2015, with the MIIT forbidding new lines from being established before 2017, and the new EPL pushing some low-end producers out of the market.

Current drivers of overcapacity in China’s flat glass industry

Based on European Chamber research, overcapacity in the flat glass industry is mostly driven by:

- The government stimulus package of 2008, which resulted in an unnatural boost in demand from real estate construction, which in turn resulted in a capacity increase in order to fulfil the demand;
- The ability of provincial governments, which remain focused on near-term economic growth, to approve new production lines; and
- Hesitance to close production lines due to the fact that it takes at least six months to resume production after suspension and the one-time cost of about USD 7.5 million involved in suspending a production line.

3.7 Shipbuilding

The shipbuilding industry consists of four main segments: container ships, which are used to transport approximately 90 per cent of manufactured goods; bulkers, which are used to transport raw materials like coal and minerals; tankers, which transport oil; and offshore service vessels and rigs. While there has recently been more demand for tankers, all segments currently face overcapacity.

In terms of total ship completions, China was the world leader from 2010 until the first half of 2015, with a 36.8 per cent global share during the first half of 2015. During that six-month period South Korea and Japan were second and third with 33.4 and 20.2 per cent shares respectively. However, during the first half of 2015, it fell to second place with 27 per cent, behind South Korea at 36.3 and slightly ahead of Japan at 26.3 per cent.

Overcapacity in China

“Industry sources indicate that in 2014 alone subsidies from ‘the scrap and build’ programme exceeded USD 400 million for three large state-owned ship owners.”

From 2008 to 2014, China’s accomplished shipbuilding output expanded from 28.81 to 39.05 million deadweight tonnes (DWT). During the same period, however, the number of active shipyards dropped from just over 300 to less than 150. While this may initially appear to be counterintuitive, it is attributable to the fact that a large number of smaller yards have been shuttered in response to negative market conditions and overcapacity. In contrast, the large yards which account for the majority of the industry’s capacity, and especially those owned by the government, are far less likely to close in response to market conditions.

While the number of active yards during the first ten months of 2015 declined further to 100, which is almost comparable to the number active at the beginning of the 2000s when China’s industry was beginning to expand, it is difficult to determine how many of these are permanent closures and how many will subsequently reopen if market conditions show some improvement.

Overcapacity developments since 2009, status and future outlook

The shipbuilding industry is relatively new to China, having only started in 1999 when political leaders announced that they wanted to see the country develop into the world’s number one shipbuilding nation by 2015. As a result of the subsequent boom in China’s demand for bulk commodities, the industry ultimately began to take off in 2002. Since it is comparatively simple to build the bulk vessels that transport commodities, they provided the primary basis on which the industry has developed. The government also provided easy access to financing via policy bank lending or SOEs, such as the China International Marine Containers Group (CIMC), as a result of this strategic priority. Strong domestic and global demand at that time, and the resulting increases in ship prices by as much as 10 to 30 per cent, made the industry highly attractive for both Chinese government and private investment.

Before the start of the financial crisis, the government issued plans to further promote the shipbuilding industry: for example, in 2007, the Commission for Science, Technology and Industry for National Defence (COSTIND, the predecessor of the MIIT) announced the Action Plan of Establishing a Modern Shipbuilding Model and the Long-term Development Plan of the Shipbuilding Industry. While the former targeted the development of high-technology models, the latter stated industry development targets to be achieved by 2015.

Government steps taken to curb overcapacity

Since the financial crisis, policies to target the problem have included: higher standards for market entry; more stringent environmental regulations; tighter control on loans and credit and stricter supply of land resources. In addition, and specifically to the shipbuilding segment, the Chinese Government is promoting the elimination of outdated capacity and structural change by ‘picking winners’ through consolidation of smaller yards into the largest ones, providing subsidies to top yards that have been chosen to drive the industry’s development and expanding competence beyond bulk vessels to include more advanced ships.

The effects of other initiatives aimed at helping the yards, however, are more mixed and have created downstream issues for the shipping industry. The ‘scrap and build’ programme offers generous subsidies to ship owners to replace outdated and high-fuel-consuming vessels with more efficient, new ships from Chinese yards. Industry sources indicate that in 2014 alone subsidies from this programme exceeded USD 400 million for three large state-owned ship owners. Ultimately, aiding Chinese ship owners to renew fleets at below-market prices through subsidies distorts the market by facilitating the construction of vessels which would not otherwise be built.

Most ship owners report that these subsidies do not actually improve their ability to negotiate better prices, with the shipyards capturing a large part of the subsidies’ value. The benefit of the subsidies to ship owners is primarily replenishment of their cash flow, not a large change to their balance sheet. Since private owners whose ships are partially owned by banks are less inclined to participate in these programmes, the primary beneficiaries to date have been ship-owning SOEs.

In further support of struggling Chinese yards, China is emerging as a major player in ship financing and ship leasing. Popularly known as the ‘Great Chinese Wall of Money’, these new leasing and financing companies are creating opportunities for ship owners who in some cases would not otherwise be able to find financing on the ordinary financial market to purchase ships that have been produced in China. This distorts normal market mechanisms and contributes to the present overcapacity in the shipping industry. China is of course not alone in helping customers of its national shipyards by providing financing in support of domestic yards. It is, however, unique in the speed and scale with which it has emerged as a leading ship financing nation.

The fact that the capabilities of China’s industry remain primarily focused on building bulk vessels ensures that it is mainly driven by the state of the bulk commodities market, which is not expected to change soon. As a result there are no easy answers for addressing issues in overcapacity in China’s shipbuilding industry. While the central government is promoting the development of a more high-end industry, neither it nor local governments want to see the mass layoffs and bad debts which would accompany widespread closures of yards. This has led to the central government merely issuing ‘directions’ to shut down yards as opposed to setting down strict rules. Many local governments have therefore continued to support low-end and outdated production capacities with favourable access to capital and land leasing.

**Current drivers of overcapacity in China’s shipbuilding industry**
Based on European Chamber research, overcapacity in the shipbuilding industry is mostly driven by:

- Easy access to financing driven by employment reasons;
- Easy access to financing driven by policy goals;
- Strong policy-driven support for the expansion of China’s shipbuilding industry; and
- Huge changes in industry dynamics and long-term demand for vessels, particularly bulk vessels.
Overcapacity in China

3.8 Paper and Paperboard

In recent decades, China’s paper and paperboard industry has grown rapidly with a CAGR of 11.9 per cent during the 11 years from 1999 to 2010. During this period, total output rose from 29 million tonnes to 102 million tonnes of paper and paperboard, with a further 30 per cent expansion to 129 million tonnes in 2014. While rates of annual growth have been in general decline from 2012 onward, this is a result of the far larger base on which further growth is now taking place.

On the back of this enormous growth, China surpassed the US in 2008 to become the world’s leading producer. However, in terms of productivity and efficiency the story is different: while the country’s industry had approximately seven thousand paper and paperboard manufacturers at the end of 2013, their average production of less than 20 thousand tonnes sat well below the average found among their competitors in advanced economies.

As of 2013, the majority of mills were either fully or partially government-owned, and they have not always been run efficiently or with profit maximisation in mind. As a result, the industry has moved from 80 million tonnes of production and a utilisation rate of 90 per cent in 2008, to 108 million tonnes of production and a utilisation rate of 84 per cent in 2014.

“...the industry has moved from 80 million tonnes of production and a utilisation rate of 90 per cent in 2008, to 108 million tonnes of production and a utilisation rate of 84 per cent in 2014.”

Overcapacity development, status and future outlook

As is the case in the other industries examined in this study, growth in production capacity has become untethered from market conditions. While 2015’s growth in capacity of 4.2 per cent was far lower than the 10.3 per cent it reached in 2011, this was still enough for China to account for approximately 30 per cent of total global capacity. Although growth in China’s demand from 2005 to 2015 was seen as slow, with the expansion of capacity outpacing demand, the country has also shifted from being a net importer to a significant net exporter of paper and paperboard. However, since many Chinese market participants are not competitive on global markets overcapacity has emerged. As this has also brought down producers’ margins, the industry now faces serious pressure.

In spite of this trend, state-owned local banks have continued to make loans to companies looking to maintain or expand the production of products for which there is no additional near-term demand. As this indicates that no professional risk assessments are being conducted, it can be attributed to the desire of local governments to protect their own champions with the goal of maintaining their tax base and employment levels. However, within these averages producers of tissue paper and packaging have done comparatively better than producers of graphic paper, for which demand is at best stagnant.
Government steps taken to curb overcapacity

Recognising the issue the Chinese Government has endeavoured to close outdated, inefficient and heavily polluting production capacity. As paper and paperboard production is energy and water intensive (the latter commodity being one that is extremely scarce in China) as well as a significant source of pollution, reducing production capacity was a priority as early as 2005 to 2009. During that period 6.5 million tonnes of capacity were removed per year. Updated industry discharge standards for water pollutants were also released in May 2009, which set a higher bar for new mills. As a result, local governments that had not previously been serious about closing down outdated capacity began to enforce environmental standards.

In May 2011, as part of a move to establish new guidelines put in place by the NDRC earlier that year, the MIIT established a closure target of 7.45 million tonnes, subsequently raising it to 8.2 million tonnes that July. At the beginning of September 2013, it was reported that the MIIT had given 67 “low-end papermaking companies” until the end of the month to phase out their capacity and facilities, with the transfer of capacity to other companies also prohibited. At that time Miao Wei, Minister of Industry and Information Technology, stated, “In order to resolve overcapacity conflicts and prevent air pollution, we decided to strengthen efforts to complete the task of eliminating excess capacity during the five-year plan period one year in advance.”

Most recently, in December 2015, it was reported that the State Council was preparing to implement a new plan that will target water-polluting paper mills, as well as other industries, for closures by the end of 2016. Under the plan, the elimination of obsolete equipment was also highlighted as a priority.

While the Chinese Government has implemented policies that have led to the closure of old and polluting mills representing an elimination of 36 million tonnes of capacity from 2010 to 2014, capacity during the same period expanded by 68 million tonnes. Net expansion therefore amounted to about 32 million tonnes in an industry where domestic demand is growing far slower than it was only five years ago. As some of the most polluting and energy inefficient mills have already been closed, further closures are likely to be increasingly difficult to realise. With overcapacity now a global issue in the industry, exports cannot be expected to absorb the industry’s glut of production, even with further efficiencies restructuring. With approximately four million tonnes of capacity still being added per year, this poses a significant challenge.

Current drivers of overcapacity in China’s paper and paperboard industry

Based on European Chamber research, overcapacity in the paper and paperboard industry is mostly driven by:

- Local support to industry in order to support tax bases and employment;
- Favourable access to capital from state-owned banks; and
- Subsidised water and energy prices that have not fully accounted for environmental costs.

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74 Chen, Cathy & Patton, Dominique, China to Ban Water-Polluting Paper Mills, Oil Refineries, Reuters, 16th April, 2015, viewed 9th January, 2016, <http://uk.reuters.com/article/us-china-water-pollution-idUKKBN0NK0N70PR20150416>
4. Overcapacity causes domestic and global problems

The primary victim of China’s overcapacity is the Chinese economy itself, however, it is not the only one that feels the pain. Since industries in other regions of the world are also affected by the extra capacity in China’s system the global economy also suffers, as tensions between China and its trading partners increase.

4.1 Impact on the Chinese economy

The extremely low utilisation rates of industries with overcapacity means that resources are being wasted. Companies with overcapacity are forced to reduce their costs in order to maintain profit margins. Often, reducing costs is not enough. Companies may feel forced to cut corners, disregard EHS standards and circumvent labour and social laws. In practical terms, overcapacity contributes to slower wage growth and may increase inequalities between provinces, with the low-income segment being hurt most.

As companies in overcapacity industries suffer from low profits they lack sufficient cash for R&D projects, which leads to less innovation. Since they cannot move up their value chain, affected companies are forced to further increase capacity in the hope of increasing their overall competitive situation. This negative spiral is self-perpetuating as well as a major obstacle on the government’s intended path to becoming both an innovative and sustainable economy.

It is also contrary to the vision laid out in the China Manufacturing 2025 initiative, which has set aggressive timelines for Chinese industries to move up the value chain toward producing more R&D-intensive and innovative high-technology products. For example, a goal has been set for indigenously designed and constructed high-tech ships to reach 40 per cent of the global market by 2020. For 2025, the subsequent goal is for indigenously researched, designed and constructed high-tech ships to reach a 50 per cent share of China’s domestic market. Even with major subsidies being offered to shipyards by government programmes, the scale of overcapacity in the industry, and resulting pressure on profit margins, means that it is challenging to invest in R&D to the extent that meeting these goals requires.

In the advanced basic materials sector, a goal has been set to adjust the industry structure and achieve self-sufficiency as well as some export capability by 2020. For 2025, the subsequent goal is to adjust basic material products in order to achieve upgrades and replacements and for domestic firms to account for a 90 per cent share of the domestic market. Advanced basic materials, which require major investments in R&D, are also of value for meeting China’s stated ambitions under the same initiative for the rail, new-energy vehicle and agricultural machinery industries.

Meanwhile, the threat of mounting NPLs continues to loom large. The low profits suffered by companies in overcapacity industries mean they will find it difficult to service interest payments, let alone repay loans. As highlighted already, it is precisely into these capital-intensive industries that a significant amount of current bank lending is flowing. If NPLs rise significantly in 2016, as most observers anticipate, Chinese regulators will once again be forced to recapitalise the smaller and regional banks, as they have in the past.
4.2 Global impact: trade tensions

How does this affect trade tensions? Overcapacity in China directly impacts the level of trade tensions among global players. With unemployment still too high in the EU and the US, it is hard to see that either will be willing to absorb much more of the cost of the post-financial crisis adjustment. This makes discussions over trade harder than ever, especially in 2016 as the US and the EU prepare to make a highly significant decision regarding whether or not to grant China MES.

“While China’s exports of steel still account for a small percentage of its total production, the sheer size of them—more than 1.5 times the US’ total production—means that they still have a significant influence on world markets.”

In September 2015, India responded to the surge of extremely cheap Chinese steel entering its market by imposing a 20 per cent tax. The response of Chinese mills was to cut their prices further in order to continue to unload production. India’s Secretary of Steel stated in early December 2015, that the range of goods covered by the tax may expand as a consequence, and the possibility was raised that anti-dumping duties might also be imposed. As for ASEAN-member states, Malaysia and Thailand have also filed trade cases, and Indonesia and the Philippines reportedly have checks in place to ensure that imports comply with regulations.

Further afield, in early January 2016, it was reported that South Africa will extend tariffs on some steel products in response to a glut of imports from China.

Anti-dumping cases

To date, trade frictions have not been a major issue in industries where large-scale exports are not economical, such as cement and flat glass. However, for many of the other industries examined—and steel in particular—the export of China’s excess capacity at extremely low prices has created a great deal of friction and led to a series of anti-dumping investigations.

While China’s exports of steel still account for a small percentage of its total production, the sheer size of them—more than 1.5 times the US’ total production—means that they still have a significant influence on world markets. With the World Steel Association’s estimation that global demand would drop by 1.7 per cent in 2015, and only expand by 0.7 per cent in 2016, expanding exports can be expected to lead to more anti-dumping investigations. In the EU, which has lost a fifth of its steel workforce since 2009, and where demand remains 25 per cent lower than it was prior to the financial crisis, this led to the imposition of anti-dumping measures in March 2015, on Chinese steel as well as calls from Member States and industry groups for further anti-dumping measures.

Trade tensions and anti-dumping cases are not merely an issue for China’s relations with the US and the EU either. Relations with India and ASEAN-member states have also been complicated by perceived dumping abroad by Chinese companies in industries that have been distorted by overcapacity. There are also reports that multiple Asian countries that are meant to be part of China’s new plans for regional integration have serious reservations about importing China’s excess capacity.

78 Ibid.
4.3 The limited ability of OBOR and the AIIB to absorb overcapacity

Some have suggested that the establishment of the Asian Infrastructure Investment Bank (AIIB) as well as initiatives like One Belt, One Road (OBOR) will be help solve China’s overcapacity problem. This line of thinking envisages China exporting its excess production to countries within its regions, and perhaps further afield as well. In January 2014, one person publicly advocating such an approach was He Yafei, China’s current Vice Minister of Foreign Affairs, who at that time was Vice Minister of the Overseas Chinese Affairs Office of the State Council.

In 2014, Vice Minister He Yafei published an article in the South China Morning Post in which he argued that a plan to export excess capacity should be formulated and combined with a ‘going out’ strategy to help internationalise Chinese enterprises.

He acknowledged the potential harmful effects of overcapacity stating that, “If left unchecked, it could lead to bad loans piling up for banks, harming the ecosystem”, and going on to say that it would negatively impact China’s transition to a new growth model and people’s livelihoods, and could even “destabilise society”. The article went on to state, however, that exporting overcapacity to build infrastructure in Asia and Africa would create a ‘win-win’ outcome. It argued that it would solve China’s overcapacity problem while simultaneously assisting developing countries to expand and improve their infrastructure, creating expanded trade opportunities through increased connectivity, which would support greater economic growth.

Similarly, in a brief note published by Credit Lyonnais Securities Asia (CLSA) in 2014, entitled A Brilliant Plan: One Belt, One Road, it was concluded that the initiative might have as much impact on China’s domestic economy as the countries that the plan encompassed. This was attributed to the fact that the country’s “top priority is to stimulate the domestic economy via exports from industries with major overcapacity such as steel, cement and aluminium.”

This sentiment was echoed again in July 2015, when Huang Libin, an official from the MIIT, stated, “For us there is overcapacity, but for the countries along the ‘One Road One Belt’ route, or for other BRIC nations, they don’t have enough and if we shift it out, it will be a win-win situation.”

“…putting aside cement, construction, heavy machinery and other industries, in steel alone China would require USD 60 billion per year to absorb its current overcapacity.”

—David Dollar, China’s Rise as a Regional and Global Power: The AIIB and ‘one belt, one road’

Apart from the geopolitical challenges involved in attempting to undertake an initiative as sweeping as OBOR in a region that poses a wide range of risks, there are several key reasons why optimism in this approach may misplaced:

- Products like cement, steel and plate glass cannot be exported economically in large volumes.

81 Cheung, Francis & Lee, Alexious, A Brilliant Plan: One Belt, One Road, CLSA, viewed 2nd December, 2015, <https://www.clsa.com/special/onebeltoneroad/>
The scale of funding to be made available by the AIIB and the size of the majority of the markets along OBOR are too small to have a significant impact on China’s macroeconomic situation. Many countries will not be willing to accept large amounts of Chinese debt and labour, and those that may be willing pose high risks for loan defaults.

As OBOR will be implemented on a bilateral basis, there is potentially more room for projects funded outside of the AIIB to absorb overcapacity. However, the markets of the Central Asian countries are far too small to absorb a meaningful percentage of China’s excess production. Crucially, there are limits to the degree to which countries with relatively strong governance, like India, Indonesia and Vietnam, would be willing to accept Chinese debt, production and labour. While countries with weaker governance, such as Pakistan and Cambodia, may be more accepting, they pose a correspondingly high risk of loan defaults.

Chinese policy-makers therefore need to evaluate whether taking this gamble is in the country’s long-term interests.

5. Recommendations

“The Third Plenum’s Decision stated that ‘a long-term mechanism will be established and improved for preventing and dissipating excess production capacity.’”

The recommendations in this section are based on the knowledge and experience of European Chamber member companies—European companies that are active across China—and represent a summary of their views about overcapacity and related issues in their individual industries. A good number of these recommendations were originally made in 2009, and, after reviewing overcapacity developments over the ensuing six and half years, they remain relevant today.

The European Chamber’s goal in providing this input is to inspire the Chinese authorities to pursue necessary structural changes to reduce overcapacity and drive China’s economy on to a new level of sustainable growth. These recommendations take into account the substantial reforms introduced by the Chinese authorities as well as businesses’ past experience in coping with overcapacity in other markets.

Some of the required measures are relatively straightforward and can be implemented as long as the political will exists to do so. Others are much more complex and require implementing broader and deeper structural changes to China’s economy.

The Chinese Government has already taken a number of important measures to rein in industrial overcapacity. Going back to 26th September, 2009, ten ministries working under the umbrella of the NDRC noted that the following industries were problematic and required immediate attention: steel, cement, flat glass, coal chemical, polycrystalline...
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silicon and wind power energy as well as some elements of the electrolytic aluminium, shipbuilding and soybean crushing industries.\[^{85}\]

In response to the problems, the NDRC-led group announced the following primary measures:

- Control industry sector growth, including inventory optimisation (support the consolidation process, international competition and technical progress).
- Guide and maintain political pressure for industries that pollute and consume high amounts of energy, such as steel and cement; improve new industries’ capacity to innovate.
- Foster new industries while upgrading conventional industries (international competition and sustainable development).
- Allow the market to lead the response to the problem in conjunction with macroeconomic regulation (including coordination and analysis).

“The Annual Central Work Conferences from 2007 to 2015, have all identified tackling overcapacity as a priority…”

In October 2013, and in advance of the Third Plenum, the State Council also released a measure that introduced price reforms for water and electricity, calling for the removal of all local price subsidies. It also introduced tiered pricing for significant users of water and electricity in overcapacity sectors. Steel, cement, electrolytic aluminium, sheet glass and shipping were identified as priority sectors in which existing projects would potentially be re-evaluated and projects that had not yet been built would be blocked.\[^{86}\]

The Third Plenum’s Decision stated that “a long-term mechanism will be established and improved for preventing and dissipating excess production capacity”, and that an initiative would be introduced to remove price controls in order to allow markets to play the decisive role in allocating resources.\[^{87}\] The Annual Central Work Conferences from 2007 to 2015, have all identified tackling overcapacity as a priority, though fundamental breakthroughs are yet to be seen outside of the wind energy sector.

In advance of the European Chamber’s 2009 report, specific industry guidance measures were also issued, including the following:

- Strictly control market access.
- Strengthen environmental protection supervision.
- Introduce regulations and codes for land supply.
- Improve financial supervision and control.
- Improve project approval administration.
- Encourage corporate mergers and reorganisation.


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- Create an information-release system to monitor industrial output and utilisation.
- Develop accountability systems for local authorities.
- Deepen system reform (fiscal and taxation system).

Meanwhile, the government also moved to cut off land supply for projects that failed to meet certain pre-defined, publicly available industrial policies, another measure that should serve to reduce overcapacity. In October 2009, the Ministry of Land and Resources announced that local land and resources offices had been ordered to better plan and control land use. Under the announcement, industries including iron and steel, cement, electrolytic aluminium, plate glass, coal chemicals, polysilicon, wind power equipment and dock berths will no longer receive more land for further development. However, high-tech, high-added-value, low-cost and low-emission industries will be given the land they need. The notice also requires local authorities to keep a closer eye on farming land that is applied for industrial use.

Since 2009, and as outlined in the analysis of the eight industries covered by this report, the Chinese Government has also released additional specific industry guidance measures.

Yet despite these many attempts to address overcapacity the results have not been particularly positive. The European Chamber’s understanding is that this is down to three main reasons:

- **Local protectionism**: the prospect of losing tax revenue and suffering an increase in unemployment, along with other vested interests, has created a situation where local governments are inclined to act in their own interests. Whereas they may be pleased to see closures in other regions they remain deeply opposed to real changes taking place in their own backyard.

- **The threat of social unrest**: this is a genuine concern in ‘single industry’ regions or ‘company towns’ where the primary, or only, source of employment and tax revenue that fund services is an industry that is marked by overcapacity. Without a functioning social welfare system, keeping as many employees on the payroll—even at highly reduced wages—and producing low-end goods is preferable to overturning the established social order. This is especially the case when workers do not have highly transferable skills or strong prospects for re-employment in a slowing economy.

- **The government’s current role in the Chinese economy**: this is part of the fundamental problem. Effectively implementing long-term solutions would require letting go and giving market forces free rein. For a system that is often deeply wedded to government-led solutions, such reforms go against established instincts as well as a development model that worked well in the past. This may be what Premier Li was referring to when, in March 2015, he characterised reforms as like “taking a knife to one’s own flesh”. 87

5.1 **Stimulate Domestic Consumption and Reduce Investments**

Chinese companies active in sectors suffering from overcapacity will need to reduce their capacity as long as industry utilisation rates are very low, and must substantially reduce capital expenditure at the corporate level.

Reforms that will facilitate a transfer of money away from SOEs into the hands of shareholders are necessary in order to boost consumption. In particular a more extensive SOE dividend reform is required as well as more privatisation of SOEs. Corporate retained earnings would then actually make their way to residual owners rather than automatically getting reinvested.

Continuing to shift the economy toward higher levels of domestic consumption also requires greater government investment in social welfare in the form of social security healthcare and education. This can be seen in the

report *China 2030: Building a Modern, Harmonious, and Creative High-Income Modern Economy* (China 2030 Report) that was published by the World Bank and Development Research Centre of State Council in 2012. The report argues: "One key area, for example, is the financing of basic public services such as pensions, medical care, education, and housing, where the government can invest more, drawing on resources it had previously devoted to infrastructure and manufacturing".89

This also fits well with the expected focus of the soon-to-be-released 13th FYP on expanding the role of domestic consumption in driving the growth of China’s economy.

**Recommendations**

- Expand and increase SOE dividend payments and redistribute to Chinese households indirectly through government spending on social security, healthcare and education.

- Continue and increase government spending in pension and healthcare systems in order to provide the social ‘safety net’ that would enable households to consume more.

**5.2 Continue to Reform the Fiscal and Financial System**

The most important challenge in China’s financial system remains efficient capital allocation, namely how to allocate capital in such a way that it will maximise sustainable growth. The iron triangle of interlocking interests that currently exists between SOEs, local government and local banks creates a range of distortions that has rendered the attainment of this goal elusive.

The European Chamber lauds the move to limit the ability of local governments to subsidise their local champions through the 2014 revision of the Budget Law, and hopes that this will be strictly enforced.

On the topic of reforming the fiscal system, the *China 2030 Report* had the following to say: “Reforms of state enterprises and banks would help align their corporate governance arrangements with the requirements of a modern market economy and permit competition with the private sector on a level playing field. This would create the appropriate incentives and conditions for increased vigour and creativity in the economy in support of China’s successful transformation into a high-income society”.91

Research by UBS into the economic situation in Shanxi, the province with the second-lowest growth rate in 2015, highlights the scale of inertia at work. Managers at coal industry SOEs reported that despite the dire state of the industry in which they operated, and their recognition of the importance of diversification, in the absence of government direction they would not venture into other sectors. This was due to the fact that entrepreneurship might not be rewarded while failure could potentially have negative consequences. As a result, they preferred to limit their business to current operations, keeping as many people on the payroll as possible while remaining confident that—in a clear example of moral hazard—if need be, the local government or state banks would bail them out.90 With limited new drivers of growth, the local economy finds itself in a kind of stasis.

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**5.3 Promote a Vibrant Service Sector**

In China, the service sector accounted for 40 per cent of GDP in 2008, and grew to 48.1 per cent in 2014, according to the National Bureau of Statistics. While this represents a significant increase, it is still far lower than the 56, 68, 79, 79, and 80 per cent of GDP that they contributed to the Indian, German, French, British and American economies respectively. This figure reflects China’s rural history and economic planning. To protect local jobs, many local governments continue to maintain obsolete industries and turn a blind eye to overcapacities, yet most of the industries affected by overcapacity are capital intensive and are thus a relatively expensive and inefficient means of propping up employment.

It is therefore vital to remove and reduce restrictions and taxation burdens on the services sector, which would enable private and foreign-invested enterprises to grow and compete in more services industries, too.

Encouraging the development of the service sector by allowing more competition across the board would help ease the employment pressure faced by local governments. Moreover, developing services would support employment in a relatively low-energy intensive way, while providing more opportunities for household consumption.

It is clear that developing the pension, healthcare and unemployment protection systems—including vocational re-training of redundant industrial workers for jobs in service industries—is the solution for reducing Chinese households’ savings rate and thus increasing consumption. Developing the national pension scheme for migrant workers is another significant area that needs to be tackled.

By expanding the range of products that can cover the day-to-day risks of millions of households, the continued development of the commercial insurance sector could encourage Chinese families to spend greater amounts of their savings.

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**Recommendations**

- Tighten the loan approval process by making financing contingent upon project economic viability (medium- and long-term) and environmental/social impact.
- Encourage utilisation of locally available private capital to increase (non-state) banking and insurance services, which would help integrate the non-urban population into the banking system and into insurance coverage.
- Allow market access for specialised, efficient private financial service providers by encouraging both SMEs and private (venture) capital.
- Instigate central and local government support for programmes that increase general commercial and financial literacy, especially in public schools and universities, as well as broader media-based financial education.
- Overcome the traditional and still predominant focus on short-term quantitative gains in investment activity by companies operated within the SASAC-system at state or provincial level. Instead, central and provincial governments should encourage long-term value creation (often beyond the office term of local decision-takers) in life, health and pension insurance.
- Continue to expand and further develop the consumer credit market.
- Develop micro-finance and micro-insurance services within savings bank services.
- Strictly enforce the provisions in the 2014 Budget Law that place restrictions on the ability of local governments to subsidise local champions.
- Move to a consumption-based VAT sharing system in order to remove incentives to support local champions for tax reasons.
Continued development of micro-credit and micro-insurance can also help to boost and stabilise income for rural SMEs that could in turn absorb surplus labour, which would otherwise worsen the plight of migrant workers. Likewise, providing micro-finance to young entrepreneurs in key environmental protection areas or other future technologies would create more high-quality job opportunities for millions of graduates. It would improve the economic mix in traditional industrial regions, too.

**Recommendations**
- Further open up the service industry to the private sector.
- Continue to increase government spending on pension and healthcare systems in order to provide the social ‘safety net’ that would support employees that are laid off and enable households to consume more, thereby further diversifying the economy and tax base by driving demand for goods and services.
- Enhance the social safety net, expand coverage of the pension system, healthcare insurance and other unemployment benefits.

**5.4 Strengthen the Privatisation Process**

The European Chamber recognises that initiatives continue to be developed to reform the 111 national-level SOEs that are administered by the SASAC. Even though recent measures are focused on using M&A to establish bigger and stronger national champions, with some acceptance of private capital in the hopes of making them more efficient, this can still be characterised as a positive, if incremental, step. While these account for many of the largest and most important SOEs, there is a nationwide total of approximately 150,000 such companies. While their shared importance to the Chinese economy has declined, they still employ 30 million people, many in regions where workers have limited alternative options.

A remnant of the pre-reform economic model, as both providers and sources of funding for basic services like local hospitals and schools, these companies are deeply embedded in the company and industry towns where they operate. Unfortunately, as their ties to local governments and state-owned banks enable them to consume a disproportionately high percentage of the credit available in China’s economy on favourable terms, they continue to drag down economic growth and restructuring.

Ultimately, tackling overcapacity is not only a matter of reducing capacity growth. Capacity itself must be reduced. The longer the restructuring of outdated and inefficient capacity in the industrial sector is postponed, including the closure of excess facilities, the more likely it will be a painful experience. Furthermore, delaying the process will not produce an effort that is more likely to succeed.

“...there is a nationwide total of approximately 150,000 such companies [SOEs]. While their shared importance to the Chinese economy has declined, they still employ 30 million people, many in regions where workers have limited alternative options.”

The most effective way to address the problem is through a process of gradual privatisation led by the state. When companies in a sector plagued by overcapacity are privatised, the overcapacity is automatically lowered as low margins and resulting low profits lead to the least efficient—and normally oldest and most polluting—
companies closing. In Europe, this process has led to the creation of innovative, highly-competitive global players, though the process took between 10 and 20 years depending on the sector.

The fact that even the central government characterises underperforming SOEs that are kept on life support with loans (that are often rolled over) as ‘zombie companies’, raises the question, why are efforts to privatise not being pursued in earnest?

With China’s approximately 150,000 SOEs employing a total of 30 million people, a move to rapidly privatise a large number of them at once is undesirable. At the same time, given how serious the problem of overcapacity has become, and when combined with rising rates of NPLs, some layoffs are inevitable. Thankfully, the scale of the problem is smaller than in the late 1990s, when the China International Capital Corp (CICC) conservatively estimates that 21 million employees of SOEs were laid off. A recent report by the CICC has predicted that during 2016 and 2017, 30 per cent of the 10 million people employed in China’s coal, steel, electrolytic aluminum, cement and glass industries will lose their jobs. In spite of the fact that this would amount to three million layoffs, it is only expected to create a “marginal effect” on unemployment rates. While this already compares favourably to the layoffs in the late 1990s, when 13 million of the 21 million people that the CICC estimates were laid off found new jobs, with an additional one million transferred internally. If the same ratio holds in 2016 and 2017, then only one million jobs would be lost in this process. In contrast to the late 1990s, when the country’s labour force was still growing rapidly, China’s labour force is now contracting, which should render the task of finding them new jobs relatively less challenging.

Ultimately, these one million workers would only amount to 0.3 per cent of China’s urban population. While this evaluation is complicated by the fact that a large proportion of these workers are concentrated in regions with few alternative employment options, this can be addressed with social programmes. Recognising the importance of providing government support, a spokesperson for the NDRC pledged in early January 2016 that social policies would be put in place to ensure against layoffs with a special fund to be set up at central government level to reward local governments that cut overcapacity. While, to date, the amount that the central government will contribute is unclear, these funds are reportedly to be used primarily as compensation for layoffs.

In fact, layoffs are already starting to take place: six out of 13 state-owned steel companies that were surveyed by the CLSA in November 2015 stated that during the year they had either already laid off five to 10 per cent of their workforce or planned to do so in the near future. In coal, an industry that is not directly examined by this report, in late September 2015, the Chinese company Heilongjiang Longmay Mining Holding Company announced that during the following three months it would lay off 100,000 of its 240,000 employees.

Beyond local protectionism and the fear of domestic unrest, there are likely fears of an outcome comparable to Russia in the 1990s, with asset stripping by insiders and the emergence of oligarchs as a separate centre of power. However, in light of the reinvigorated capacity of the Central Commission for Discipline Inspection (CCDI), these are surmountable challenges.

It is important that local governments be provided with alternate sources of funding for social programmes as well as the provision by Beijing of a social safety net that can support displaced workers. The China 2030 Report also weighed in definitively on this topic, concluding: “While the government needs to withdraw from direct involvement in production, distribution and resource allocation, it will need to focus greater attention on designing and implementing the policy and regulatory framework that empowers others to participate in

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95 Ibid.
96 Murphy, David et al., Macro Materials: Consolidation to Quicken, CLSA, 16th November, 2015, viewed 18th December, 2015, p. 1.
97 Longmay to Cut 100,000 Coal Jobs, China Daily, 26th September, 2015, viewed 16th January, 2016.
economic decision making so that the desired outcome of rapid, inclusive and sustainable growth is achieved.”
The report goes on to argue: “In redefining its role, the government will need to accelerate reforms in the state-owned sector and combine it with further development of the private sector. It will also need to advance reforms in factor markets (capital, land, and labour) to help strengthen the foundations of a market economy and promote greater competition and innovation.”

### Recommendations
- Encourage gradual privatisation in sectors suffering from overcapacity.
- Ensure a fair and level playing field between domestic and foreign enterprises and SOEs.

#### 5.5 Promote Innovation

The ability of enterprises to innovate is a crucial element in the process of curbing overcapacity and transforming China’s economy into one that is sustainable. This is something that the Chinese Government has recognised in the drafting of its China Manufacturing 2025 initiative.

Indigenous innovation, however, cannot thrive without innovators and the IP they create being protected. Research and development activities are expensive and time consuming but are needed to achieve innovations. If IP is not sufficiently protected, Chinese enterprises will be deterred from investing in R&D and will largely remain assemblers and manufacturers lacking their own core technologies.

As outlined in the European Chamber’s Intellectual Property Rights Working Group Position Paper 2014/2015, it is both Chinese and foreign SMEs that will benefit from any measures taken to strengthen the protection of trademarks, patents, copyrights, trade secrets and other forms of IPR.

In addition to improving IPR enforcement—a direct way of promoting innovation—SMEs should also be afforded greater protection as they frequently play a critical role in delivering innovations. They bring revolutionary technologies, products and services to the market and are rightly acknowledged in the EU for the key economic and social role that they play as a major growth and employment catalyst. However, a lack of transparency surrounding administrative and regulatory requirements, difficulty gaining access to business-critical information, a dearth of standards and problems procuring financing are among the many issues that have continued to hinder SMEs’ development in China.

### Recommendations
- Continue to improve IP protection in order to safeguard innovations and provide Chinese companies incentives to increase R&D spending.
- Enforce IPR protection to the greatest extent and punish all violations in accordance with the law.
- Limit the disclosure of technical know-how to what is strictly necessary.
- Publicise infringement decisions to raise confidence in China’s IPR enforcement mechanisms and deter potential infringers.
- Enhance the business environment for SMEs, including improving access to financing and providing business-critical and pertinent regulatory/administrative information in an open and timely fashion.

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5.6 Improve the Implementation of Environmental, Health and Safety Standards and Laws

Beijing has taken important initial steps to reduce overcapacity, by raising the importance of employment and the environment relative to GDP and fiscal revenue when evaluating local officials for their career development.

In order to control new project approvals, environmental regulations and their supervision have to be strengthened. Construction should not commence on projects that fail to pass the environmental impact assessment.

At the same time, stricter enforcement of China’s EHS standards and laws would reduce overcapacity in energy-intensive and potentially polluting industries such as steel, non-ferrous metals and chemicals.

**Recommendations**

- Make transparent, fair and mandatory environmental impact assessments a pre-requisite for approval of new projects over a certain size.
- Monitor compliance with EHS standards and penalise companies that violate them.
- Increase independence of the Ministry of Environmental Protection (MEP) and the Ministry of Human Resources and Social Security (MoHRSS) at the local level in order to improve enforcement.
- Monitor projects falling under government procurement to ensure that bid winners comply with standards set forth in the bid requirements.

5.7 Reform Resource Pricing

The Chinese Government has been discussing overhauling the country’s resource-pricing mechanisms for about a decade now. At the Third Plenum in November 2013, for example, an initiative was announced to remove price controls in order to allow markets to play the decisive role in allocating resources.¹⁰¹

Global and regional markets are characterised by market-based prices, while some of China’s domestic markets are often still characterised by government-guided prices. Although coal prices in China have been partially market-priced, most other energy prices, including refined products, electric power and natural gas prices, are not yet fully market based.

The extended decline of the PPI (producer price index) provides a good macro-environment for rationalising many resources’ pricing mechanisms, which were difficult to change in the years prior to the global financial crisis when prices were continuously rising. Doing so is ultimately necessary for fulfilling the Third Plenum’s stated goal of establishing the market as the decisive factor in the Chinese economy.

Pricing reform does not have to be a sudden overnight move, but it should be a continuous one.

A model for this approach can be seen with the reforms to the natural gas pricing mechanism: pilots were initiated in Guangdong and Guangxi in 2011; broader price

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adjustments for non-residential users were later implemented in 2013; and a launch of a new pricing mechanism took place in late 2015, with reports that the NDRC will fully liberalise non-residential gas prices as soon as possible.  

5.8 Provide Verified and High-quality Information to Facilitate Industry Decision-making, and Enhance the Independence and Capacity of Industrial Trade Associations

With the notable exception of a couple of sectors, including chemicals and refining, many industry experts express a minor sense of distrust towards the available capacity and production figures for their sectors gathered from Chinese industrial trade associations and the government. In addition, in some sectors such data is not freely available, meaning that manufacturers—in particular smaller manufacturers that might be less inclined to spend capital on research reports from private consultancies—would not have access to accurate and reliable data about basic production, sales and capacity figures for their sector. Ultimately, a lack of access to such data leads to uninformed business decisions.

In recent years, the Chinese Government, notably the MIIT, have stated the need to develop early warning mechanisms for industry to respond to signs of the onset of excess capacity. This speaks to the fact that such early warning mechanisms did not previously exist for most Chinese industrial sectors. The responsibility for developing these mechanisms in the EU is usually held by industrial trade associations. By contrast, in China such associations tend to be quasi-governmental in nature and mostly orientated towards assisting the development and growth of the sectors, as opposed to acting as independent, impartial and industry-led bodies to assist companies in their responses to changes in the business environment.

As such, together with the lack of transparent and reliable data, many companies were unaware of the commencement of excess capacities and over-production in their industries, and consequently further exacerbated overcapacities through continued expansion.

Recommendations
- Publish more reliable and transparent industry data in a timely manner.
- Enhance the independence of industrial trade associations and increase their capacity to provide their members with impartial assistance regarding how to best respond to changes in their industry.

Recommendations
- Continue to adjust input prices by increasing resource and environmental charges.
- Reduce energy price subsidies to industry and continue resource price reform, focusing on areas like coal resource tax, and pricing for electricity, water and natural gas.
- Reform the resource tax system.

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<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>AIIB</td>
<td>Asian Infrastructure Investment Bank</td>
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<tr>
<td>bpd</td>
<td>Barrels Per Day</td>
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<td>CAGR</td>
<td>Compound Annual Growth Rate</td>
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<td>CAPEX</td>
<td>Capital Expenditure</td>
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<td>CCA</td>
<td>China Cement Association</td>
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<td>CCDI</td>
<td>Central Commission for Discipline Inspection</td>
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<td>CICC</td>
<td>The China International Capital Corp</td>
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<tr>
<td>COSTIND</td>
<td>Commission of Science, Technology and Industry for National Defence</td>
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<td>CISA</td>
<td>China Iron and Steel Association</td>
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<td>CIMC</td>
<td>China International Marine Containers Group</td>
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<td>COSTIND</td>
<td>Commission for Science, Technology and Industry for National Defence</td>
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<tr>
<td>CPI</td>
<td>Consumer Price Index</td>
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<td>CPCIA</td>
<td>China Petroleum and Chemical Industry Association</td>
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<td>CLSA</td>
<td>Credit Lyonnais Securities Asia</td>
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<td>DWT</td>
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<td>EHS</td>
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<tr>
<td>EPB</td>
<td>Environmental Protection Bureau</td>
</tr>
<tr>
<td>EPL</td>
<td>Environmental Protection Law</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FAI</td>
<td>Fixed Asset Investment</td>
</tr>
<tr>
<td>FYP</td>
<td>Five-Year Plan</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>G20</td>
<td>Group of 20</td>
</tr>
<tr>
<td>IPO</td>
<td>Initial Public Offering</td>
</tr>
<tr>
<td>ITO</td>
<td>Indium Tin Oxide</td>
</tr>
<tr>
<td>IPR</td>
<td>Intellectual Property Rights</td>
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<tr>
<td>M&amp;A</td>
<td>Mergers and Acquisitions</td>
</tr>
<tr>
<td>MEP</td>
<td>Ministry of Environmental Protection</td>
</tr>
<tr>
<td>MES</td>
<td>Market Economy Status</td>
</tr>
<tr>
<td>MIIT</td>
<td>Ministry of Industry and Information Technology</td>
</tr>
<tr>
<td>MoHRSS</td>
<td>Ministry of Human Resources and Social Security</td>
</tr>
<tr>
<td>NDRC</td>
<td>National Development and Reform Commission</td>
</tr>
<tr>
<td>NPC</td>
<td>National People's Congress</td>
</tr>
<tr>
<td>NPL</td>
<td>Non-performing Loan</td>
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<tr>
<td>NSP</td>
<td>New Suspension Pre-heater</td>
</tr>
<tr>
<td>OBOR</td>
<td>One Belt, One Road</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>PPI</td>
<td>Producer Price Index</td>
</tr>
<tr>
<td>ROE</td>
<td>Return on Equity</td>
</tr>
<tr>
<td>SASAC</td>
<td>State-owned Asset Supervision and Administration Commission</td>
</tr>
<tr>
<td>SME</td>
<td>Small- and Medium-sized Enterprise</td>
</tr>
<tr>
<td>SOE</td>
<td>State-owned Enterprise</td>
</tr>
<tr>
<td>UR</td>
<td>Utilisation Rate</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
<tr>
<td>USD</td>
<td>United States Dollars</td>
</tr>
<tr>
<td>VAT</td>
<td>Value-added Tax</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
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</table>
Important Government Authorities and Associations

State Council

The State Council of the People's Republic of China is the highest executive organ of state power as well as the highest organ of state administration. The State Council is composed of a premier, vice premiers, state councillors, ministers in charge of ministries and commissions, the auditor-general and the secretary general. The premier assumes the overall responsibility for the work of the State Council.

For more information, please refer to: http://www.gov.cn/english/links/statecouncil.htm

Study-relevant Ministries and Commissions

National Development and Reform Commission (NDRC)

The main functions and responsibilities of the NDRC are to formulate and implement strategies of national economic and social development, to monitor macroeconomic and social development trends and provide forecasts and guidance regarding these trends, to direct, promote and coordinate the restructuring of China's economic system.

For more information, please refer to: http://en.ndrc.gov.cn/

Ministry of Industry and Information Technology (MIIT)

The MIIT was created in March 2008, to supersede the Ministry of Information Industry and includes the former Commission of Science, Technology and Industry for National Defence, the State Council Informatisation Office and the State Tobacco Monopoly Bureau. The main functions and responsibilities of the MIIT are to develop strategies and policies for new types of industrialisation, formulate development programmes to support the integration between information and industrialisation and promote scientific research in a broad range of industrial sectors.

For more information, please refer to: http://www.miit.gov.cn (Chinese only)

Ministry of Environmental Protection (MEP)

The MEP is responsible for the formulation and enforcement of national environmental policy as well as the coordination and supervision of major environmental projects. It was upgraded to a full ministry in March 2008, from the ministry-level State Environmental Protection Administration (SEPA), which itself was upgraded in 1998, from the vice-ministry-level National Environmental Protection Administration.

For more information, please refer to: http://english.mep.gov.cn/

Ministry of Human Resources and Social Security (MOHRSS)

The MOHRSS was created in March 2008, from the merger of several government bodies: the Ministry of Labour and Social Security (MLSS); the Ministry of Personnel (MOP), which oversees government employees; and the State Administration of Foreign Experts Affairs. The new ministry is responsible for China's labour and human resources needs and for building and supervising a comprehensive labour and talent market. The MOHRSS took over the functions of its predecessors. From the MLSS, the MOHRSS inherited the task of resettling workers laid off by SOEs and managing national medical care and pension issues, as well as managing the insurance of government employees and reform of medical insurance. From the MOP, the MOHRSS received the responsibility of overseeing management of technical personnel, state civil servants and leading executives in key SOEs.

For more information, please refer to: http://www.mohrss.gov.cn (Chinese only)
About the European Chamber

The European Union Chamber of Commerce in China (European Chamber) was founded in 2000, by 51 member companies that shared a goal of establishing a common voice for the various business sectors of the European Union and European businesses operating in China. It is a members-driven, non-profit, fee-based organisation with a core structure of 45 working groups and fora representing European business in China.

The European Chamber has more than 1,600 members in seven chapters operating in nine cities: Beijing, Nanjing, Shanghai, Shenyang, South China (Guangzhou and Shenzhen), Southwest China (Chengdu and Chongqing) and Tianjin. Each chapter is managed at the local level by local boards reporting directly to the Executive Committee.

The European Chamber is recognised by the European Commission and the Chinese authorities as the official voice of European business in China. It is recognised as a foreign chamber of commerce by the Ministry of Civil Affairs.

The European Chamber is part of the growing network of European Business Organisations (EBO). This network connects European business associations and chambers of commerce from 20 non-EU countries around the world.

Principles

• We are an independent, non-profit organisation governed by our members.
• We work for the benefit of European business as a whole.
• We operate as a single, networked organisation across Mainland China.
• We maintain close, constructive relations with the Chinese and European authorities, while retaining our independence.
• We seek the broadest possible representation of European business in China within our membership: large, medium and small enterprises from all business sectors and European Member States throughout China.
• We operate in accordance with Chinese laws and regulations.
• We treat all our members, business partners and employees with fairness and integrity.

Adam Dunnett
Secretary General
European Union Chamber of Commerce in China