What is the country doing to ensure the efficiency and effectiveness of those global supply chain networks that have tapped its resources and fueled its rise to power?
To varying degrees, China has become the world’s factory: supplying North America, Europe, and other locales with all manner of apparel, electronics, food products, appliances, and components for manufactured goods. But how is China’s transportation and logistics infrastructure coping with such rapid growth? Even more important, what is the country doing to ensure the efficiency and effectiveness of those global supply chain networks that have tapped its resources and fueled its rise to power?

Despite China’s huge successes, it’s never been a smooth ride. According to the China Federation of Logistics and Purchasing, logistics costs accounted for 18 percent of the country’s GDP in 2010. This is twice the level of most developed countries. Tax burdens, expensive tolls, and chaotic competition in the logistics market are the main reasons logistics costs are so high. In fact, some of the country’s manufacturing concerns are moving to nearby lower-cost countries as China’s costs—particularly labor—continue to rise.

Still, China’s logistics infrastructure has improved significantly during the implementation of the country’s eleventh Five-Year Plan (2006-2010). Acknowledging that economical labor wouldn’t be enough to ensure long-term growth, China has increased its investments in highways, railways, and other transportation facilities.

However, logistical inadequacies still exist, including sub-par distribution facilities, roads, and railway networks—especially in the western (less developed) provinces. This is a clear reflection of China’s unbalanced economic growth and a major detriment to its ongoing competitiveness.

TRENDS AND DEVELOPMENTS
In a logistics context, China is clearly thinking ahead. On June 8, 2011, Premier Wen Jia Bao announced that “we must make a complete set of policies and measures, and promote the healthy development of the logistics industry.” The resulting logistics improvement initiatives, known as the Eight State Regulations, focus on:

- tax preference;
- land policy support;
- road traffic improvement;

View of cargo containers at Hong Kong harbor.
Global Logistics: China Update

The high-speed railway network (in operation) in China, 2011

- business environment improvement;
- resource integration;
- technology innovation and application;
- government investment and bank credit support; and
- logistics support for agriculture.

These initiatives should help buoy logistics and transportation performance in at least seven major supply chain areas:

1. **Domestic freight.** The domestic freight market, while very fragmented, is making progress in procedure standardization and oversight. As noted above, China’s State Council promulgated the new Eight State Regulations to stabilize and reinforce development discipline in the logistics industry. China also is making efforts to regulate the freight market—a potentially impactful move designed to deal with rising labor costs and more expensive fuel.

Thus far, pending regulatory increases haven’t dissuaded some Chinese transport companies from becoming competitive players in the global logistics market. The emergence of domestic 3PL providers is also viewed as a step toward better efficiency in the freight market.

2. **Marine freight.** China’s investment in ports has been unrivaled globally, with more than $357 billion Yuan invested during the last Five-Year Plan alone. These investments have enabled China to experience strong and sustained progress in spite of poor global economic conditions.

The top Chinese mainland ports handled 13.5 million twenty-foot equivalent units (TEUs) in January 2011. This translates to 17 percent year-on-year growth, which is relatively consistent with increases at major coastal ports from 2001 to 2010. During this period, Shanghai became the largest port in the world, with 29.06 million TEUs exported in 2010.

In the bulk cargo markets, surplus capacity resulted in a drop in freight rates, especially for oil tankers and dry bulk cargo. The problem here is simply an imbalance of supply and demand. On the one hand, numerous Chinese ships have come on-line, thus increasing capacity. On the other hand, debt crises in many developed countries have suppressed global demand.

As a result, port investments are actually going down relative to China’s previous Five-Year Plan. In fact, enough capacity already exists to handle reduced demand from the European Union and the U.S.

3. **Rail transport.** China has invested heavily in its railway...
infrastructure for both freight and high-speed passenger services, and this is playing a critical role in the growth of the country’s logistics industry. In the first half of 2011, total goods transported by rail in China increased to 1.94 billion tons—an 8 percent year-on-year increase.

By the end of 2011, China’s total miles of rail is expected to top 99,000 km. The volume of goods transported by rail should also increase, given accelerated railway construction and expansion, and more high-speed railways. Longer term rises in rail freight are also expected, even though military traffic, resources, and passenger rail take precedence over the transport of goods.

4. Road transport. The largest portion of Chinese domestic freight—as is the case in North America and the EU—moves by highway. To accommodate these high volumes, China’s road-transport network is improving gradually, especially in the country’s second- and third-tier cities. Road transport network expansion is a particularly high priority among local governments. Road-oriented service levels are also improving, due largely to fierce competition in the logistics market. More multinationals in China, including more U.S. conglomerates, are sourcing logistics services locally.

Despite the popularity and rising demand for road transport, cost concerns keep topping the list of development stress points. Rail transport prices are 20 percent to 30 percent cheaper than road transport. Barge shipments are approximately 50 percent cheaper. For these reasons, many believe that better-integrated transportation networks will become the dominant new trend in the Chinese freight market.

5. Air freight. While air cargo volume has risen steadily, approximately 6 percent annually, the increase is not dramatic when compared to China’s overall logistics market. Like many countries, China uses air transport mainly to move high-value or highly compact goods.

In this sector, international logistics giants are facing fierce competition from local Chinese air companies. China Southern, the leading Chinese air-freight carrier, reported revenue of 42.4 billion Yuan for the first half of 2011—a year-on-year increase of 22.3 percent. UPS achieved 10 percent revenue growth in the China air-freight market.

6. Inland and short-sea shipping. Short-haul waterborne transport is taking a more important position in the economic growth of mid western China. A primary reason is that traditional manufacturing is moving west due to increasing costs in China’s eastern cities, and supply chain decision makers are striving to carve new channels into inland areas.

7. Forwarding. Forwarding and brokerage services are enjoying sustained growth. Chinese forwarders, for example, are providing more complete, more customized supply chain

Container exports from major Chinese ports in 2010

<table>
<thead>
<tr>
<th>Port</th>
<th>Thousand TEU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanghai</td>
<td>29,069</td>
</tr>
<tr>
<td>Shenzhen</td>
<td>22,509</td>
</tr>
<tr>
<td>Ningbo</td>
<td>13,144</td>
</tr>
<tr>
<td>Guangzhou</td>
<td>12,555</td>
</tr>
<tr>
<td>Qingdao</td>
<td>12,012</td>
</tr>
<tr>
<td>Tianjin</td>
<td>10,080</td>
</tr>
<tr>
<td>Xiamen</td>
<td>5,820</td>
</tr>
<tr>
<td>Dalian</td>
<td>5,242</td>
</tr>
</tbody>
</table>

Source: China Container Industry Association, 2010

Hong Kong Container Terminal.
solutions for international customers and thus reaping the benefits. They’re also opening new branches in the U.S., Europe, and elsewhere. These moves should help foreign companies trade more closely and effectively with China. Kerry Logistics, headquartered in Hong Kong, is a good example of a China-based 3PL expanding within China, across APAC countries, and in the EU.

DOWN THE ROAD
China’s logistics industry faces great opportunities and challenges. However strong support exists throughout China’s government, and this could allow new domestic entrants to compete more effectively against the country’s traditional players and perhaps even on the global stage.

But established companies should enjoy success as well. Take China Ocean Shipping (Group) Company—China’s largest global shipping and logistics specialist. China Ocean Shipping was the sixth largest shipping company in the world at the beginning of 2011. Within six months, it had jumped to fourth place, with a capacity of 650 thousand TEUs.

Integrated transport will likely be an increasingly hot logistics topic in China. Combined marine and road freight is being used more and more to move goods to inland provinces. Transport from inland locations to major ports is also growing fast, thanks to construction of improved road networks, river routes, and logistics facilities. Other forms of integration could become more prominent. In some Chinese coastal cities, for example, buyer consolidation is being used by major logistics companies to optimize costs and efficiency.

Traditional transport modes, such as rail and water, are already seeing a significant revival as viable modal choices, with large-scale investments enabling expansion and improvement. Rail transport volumes, however, will probably grow faster than ever, given rapid rail-system expansion and significant progress in railway technologies. More supportive policies will be issued and more positive measures will be taken by the Chinese government for development of rail transport.

Another significant logistics influencer may be tax relief. In China’s recently issued Eight State Regulations, tax rationalization is a top priority and could bring welcome changes to the logistics industry. A uniform tax rate for the logistics industry is not out of the question. Logistics enterprises could also receive more tax incentives due to a series of accommodative government policies. In fact, for promoting export, preferential tariff rates are now provided by some local governments. Companies will need strong local knowledge and deep local relationships to keep on top of emerging incentives and regulatory changes.

It’s also a given that positive moves in China’s logistics industry will be driven by factors that many westerners find unfamiliar or even distasteful: extensive government guidance and intervention. Chances are good, in fact, that governmental policies and supervision will strongly favor logistics.

Constructions of logistics parks, rail tracks, and ports will be given priority in terms of funding, credit, and permissions. Not surprisingly, domestic companies will be the principal beneficiaries. Nonetheless, non-Chinese companies will also have myriad chances to leverage improvements in China’s logistical underpinnings. China clearly recognizes its growth potential and wants a world-class transportation and logistics infrastructure to support its progress.

Toward this end, 700 billion Yuan will be invested annually in rail projects, according to the country’s twelfth Five-Year Plan. By the end of 2015, road networks will connect 90 percent of all municipalities. More than 1.5 trillion Yuan will be invested in aviation. The net effect is extensive opportunities for any company with strong ambition, strategies, and operational capabilities—combined with serious supply chain smarts.□

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