

TL SERIES, ISSUE 1

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Strategic Leadership

Improving 3PL sales & Revenues

Hidden Costs: Warehouse Operations

Globalization: The Driving Force of Today's Marketspace

Operational Excellence for Sustained Competitive Advantage

CHINA: THE LOGISTICS DRAGON

INTRODUCTION

Despite the excitement and press coverage, China remains an enigma for many US and western businesses. For western managers China has been and remains a complex country full of promises and paradoxes and ever so difficult to understand.



Understanding China and its enormous potential requires living in China and assimilating its culture. However, for the majority of US managers such ac-

tions are impractical. Rather than engaging in some lengthy dissertation about China, let's accept the obvious that China is a vast and complex country with different business rules.

This briefing paper dispenses with any of the philosophical discussions of ideologies and offers a perspective on China and its logistical challenges.

DID YOU KNOW?

China's 2003 GDP grew at 9.1%
 China's 10-year GDP grew at 10% annually
 China is the 4th largest US trading partner
 China is the 6th largest economy in the world
 China is the world's 3rd largest importer
 China has the most aluminum plants in the world

A TRANSFORMATION!

To appreciate the present, let's briefly look at the history. Beginning in 1978, with the Third Plenary Session of the 11th Central Committee of the Communist Party of China, China began a systemic shift in its economy marked by a series of reforms that called for modernization and an opening up to the outside world.

What exists today is a curious, but seemingly effective mix of socialist political doctrine and economic capitalism. This combination of ideologies has created a turbulent environment where capitalism and socialism interact, coun-

teract, and coexist to stimulate tremendous economic growth with social order.

The result is a **transformation** of profound consequences, entrance into the WTO, and the hosting of the 2008 Summer Olympic Games.

China's transformation to a global economic powerhouse is nothing short of staggering. In 1980, China ranked 24th as the US largest trading partner, today with over \$125 billion in merchandise trade, China is the US's 4th largest trading partner behind Canada, Mexico, and Japan.

A TRANSFORMATION-CONT'D.

What took Europe 300 years to do, only took 30 years in China. In the 1970's virtually 100 percent of all industrial output was generated from state owned enterprises (SOE), today it is less than 28 percent. Most of the population was agrarian, or employed in the military, and virtually all real properties were state owned. Today, there are 305,000 SOEs and at least 1.4 million private enterprises. In March 2004 China amended its Constitution to provide recognition for the private ownership of property, a major step from its communist past.

With a \$1.25 trillion economy China is the sixth largest in the world. Thirty percent of China's economy is export based, as compared to 12 percent in the US:

- ⇒ China consumes 25 percent of the world's coal
- ⇒ China is the world's largest importer of iron ore
- ⇒ China is the world's 3rd largest consumer of oil
- ⇒ China is the world's largest producer of wood & furniture products
- ⇒ China is positioned to be the world's 3rd largest auto market
- ⇒ China's capacity to make cars and cellular telephones exceeds its demand by almost two-fold
- ⇒ China is second to US in the production of carbon dioxide emissions.

DID YOU KNOW?

China produces 25% of the world's TVs

China makes 50% of the world's cameras

China manufactures 50% of the world's copiers

China makes 25% of the world's washing machines

China can make 4.9 million cars (about the same as Germany)

In China, \$4,700 buys a new car

In China, \$7,000 in annual earnings is considered middleclass

THE NEW ECONOMIC GIANT

Three factors distinguish China from all other countries: its culture, its population, and its opportunity. *First*, China has a highly disciplined and work centric culture that is motivated, mobilized and engaged. *Second*, China has the most abundant human re-

sources in the world with 12 to 15 million people entering the workforce annually compared to around two million in the US. *Third*, as China transforms its economy, it is becoming a consumer market behemoth of enormous potential from a growing middle-class.

POISED FOR ECONOMIC DOMINANCE

This combination of factors, together with an abundance of funding available for capital projects and exceptionally low labor and operating costs has precipitated a permanent shift in global economics.

ECONOMIC ADVANTAGES

- China has the labor
- China has exceptionally low labor costs
- China produces quality products
- Chinese production costs are lower
- China is acquiring and using advanced manufacturing technology
- A middleclass is emerging in China with great buying power
- China is amassing the capacity

As a result there has been a migration of manufacturing and mass production away from western and developing countries and Japan and South Korea to China. Since China's entry into the WTO in 2001, Mexico has lost 355,500 manufacturing jobs to China. Japan, the US, South Korea and Germany have also experienced a mass migration of manufacturing and structured service jobs to China.

The *displacement* of trade and consequently, jobs, is summarized on the following table. As indicated, China has enjoyed significant growth, while the other major Asian nations have had declines. China is an *ascending* economic and political power.

<u>Sourcing Nation</u>	<u>US IMPORTS</u>		
	<u>1991</u>	<u>2001</u>	<u>% Change</u>
China/Hong Kong	28%	61%	118%
Japan	25%	10%	(60%)
Korean/Taiwan	32%	14%	(56%)
Other Asia/SE Asia	15%	15%	---

Like Canada, Mexico, Germany and many other countries, the US is China's largest export market. The top US imports from China include a broad range of industrial and consumer products, including machinery, toys, consumer electronics, metals, plastics, footwear, textiles, and garments.

Most of these goods flow through the US west coast ports of Los Angeles, Long Beach and Oakland. Seattle and San Diego also handle some of the traffic, but it is limited. Long Beach and Los Angeles are the primary ports of entry.

Western companies investing in China further support the growth and competitive advantages of China. With over \$55 billion in annual foreign direct investment, China is second only to US. Fortune 500 giants General Motors and General Electric have invested \$2.0 billion and \$1.2 billion in China, respectively, while Volkswagen plans to invest \$6.2 billion in automobile manufacturing. In the port of Guangzhou, in southern China, foreign direct investment was over \$47 billion in 2003.

With all of this growth and foreign direct investment, China is confronted with a myriad of social, economic, industrialization, and political challenges. For our purposes two stand out as critically important: *economic vitality* and *logistics*.

China's economy is superheated. Foreign direct investment and China's internal banks are funding much of this growth. However, most of China's banks are or would be considered insolvent by US

banking standards and Beijing recently injected \$45 billion into the Bank of China. China's currency is undervalued 20 to 40 percent relative to the US dollar. Around 70 percent of China's \$400 billion in cash reserves are in US dollars. Nonetheless, lending increased 21 percent in 2003 over 2002 levels to around \$350 billion and the money supply grew at 20 percent in 2003. Standard & Poor's estimates that China has \$860 billion in shaky loans.

In certain sectors, demand is out running supply. In others, supply far exceeds demand. Consequently, inflation in certain raw materials and commodities and financial market stability are concerns.

Although general inflation is a modest 3.2 percent, prices for many raw materials have sky rocketed in recent years. Commodity prices are up 14 percent since mid-2003. Aluminum prices have soared almost 36 percent within the last 12 months. Scrap steel prices are up 35 percent since January 1. Chartering fees for bulk vessels to transport iron ore have increased from less than \$18,000 a day in 2001 to over \$100,000 a day in 2004. Where costs were \$18 a ton in 2002 to ship grain from the US to China in 2002, today it costs \$70 a ton.

China is adding so much steel and aluminum production capacity that when it comes on stream it could flood the world markets, driving prices downward. The combination of capacity and state of the art manufacturing is potentially fatal to older and less efficient manufacturers.

RAIL SYSTEM

Approximately one-third of China's freight volumes moves by rail. Rail remains the most economical means to move vast quantities of goods and material over long distances.

China has a complex system of national and provincial railways. The major capacity is under the direction of the Ministry of Railways, which has structured the rail network and its rolling stock into 12 regions. Each region has its own rolling stock, but locomotives are prohibited from crossing regional boundaries.

The rail system, which is nationalized, is archaic. With less than 28 percent of its 33,500 mile national rail network double tracked, capacity is limited due to shifting between freight and passenger service and line allocations.

The use of rail in moving goods offers users a fixed schedule, high reliability and the least expensive means of transit.

WAREHOUSING

Over 90 percent of China's warehouse capacity is state owned. Consequently, there are very few state-of-the-art warehouses in China. Most warehouse facilities are converted military storage facilities, old rice warehouses, or former offices and factories.

The "typical" warehouse is wood and brick, with low ceiling heights, usually only 11 to 14 feet. Multi-storied facilities have poor floor strength, wooden stairs, and wooden structural supports. Lighting, racking and binning are limited by old construction methods and lack of design and materials.

Pallets are not often used and cartons are stacked, not racked. Many facilities are prone to water damage and lack environmental, fire suppression and anti-theft capabilities.

The warehousing of goods remains a largely manual operation, with the spoilage and damage that is associated with lots of goods handling, little automation, and no specialization. Most warehouses lack advanced equipment such as temperature controls and lack inventory management and automation capabilities.

LOGISTICS IN CHINA

China has significant logistical bottlenecks. The China State Development Planning Commission estimates that logistical activities account for 20 percent of the cost of certain commodities and absorb more than 90 percent of the time it takes to move products to their final destinations. In the ports, it is not uncommon for vessels to wait, at anchor, 4 to 40 days to be unloaded at deepwater ports. At as much as \$100,000 per day in charter fees, a 40-day delay becomes very expensive and the costs eventually find their way into commodity prices and inflation.

Although China has invested an estimated \$100 billion in inland infrastructure in recent years and is aggressively attacking its road and rail capacity, the backlog is created by a combination of inbound traffic and the lack of sufficient rail and truck freight capacity to move goods from the dock to final destinations. These are numbers far in excess of those in the US, western Europe and Japan.

By the standards of an advanced economy, logistics in China are expensive, rudimentary, and inefficient. Depending on mode, transit times vary from a few days for local deliveries to as many as 90 days to China's remote northeast and southern regions and the basic concepts of service and performance are virtually non-existent.

Logistic activities constitute 15 percent of China's total GDP, as compared to around 10 percent in the US. According to the China State Economic and Trade Commission, China has used over \$265 billion in foreign direct investment in building its logistics infrastructure. Despite this investment, logistics is "new" to China. The term, "logistics" has only been recently recognized by Chinese business regulators and authorities in the past few years.

Despite these investments, logistics lags far behind the industrial and economic reforms and has created significant bottlenecks and stresses on the Chinese infrastructure and economy. Logistical challenges in China center on two areas: (1) moving goods *into* China (inbounds), and (2) moving goods *within* China (intermodal and final destination). These challenges can be attributed to many factors, however three stand out:

- China's growth would have taxed any country's logistics capabilities. The rapid economic reforms and explosive industrial growth have placed enormous stress on the logistics infrastructure. China is responding, but it takes time.
- Under legacy political policies, China never placed great emphasis on the efficient movement of goods. It didn't have to. Hence, logistics were underdeveloped and is a relatively new profession and academic discipline. With tens of thousands service providers, the 3PL market has yet to consolidate and stabilize. Even the largest 3PLs have less than 2 percent of the market.
- The majority of Chinese investment in logistics, since major reforms, has been directed to the *exporting* of Chinese made products. Fueled by foreign direct investment, China has extensive export capacity for finished goods compared to inbound and intermodal capacities.

LOGISTICS IN CHINA-CONT'D.

DEEPWATER PORTS

China has six major international modern ports. In addition, it has several under development. The largest port is Shanghai, which handles around 18 percent of total freight. Guangzhou and Ningbo are the next largest with around 10 percent and 9 percent of total freight volume, respectively. Dalian, Tianjin and Qingdao round out the top six. Dalian and Tianjin each have about 8 percent of total volume, while Qingdao has close to 7 percent.

Many of China's older ports are legacies of the post-1949 revolution and the Cold War. As such, they were designed for different purposes than major international freight and trade. Many are located within 100 miles of one another, are shallow and narrow, and lack technology. The placement of these ports make cooperation among them difficult, consequently "hubbing" is virtually impossible.

The newer deepwater ports are largely the result of foreign investment and do have advanced capabilities. Shanghai, which is China's largest international port, recently began construction of the new \$12 billion Yang Shan port. The new port will essentially quadruple Shanghai's capacity from 5.6 mn TEU to over 20 mn TEU at completion. Located in Shengsi, Zhenjiang province, the new deepwater container port is expected to be completed in 2010 and will connect, via 30 mile bridge, to a new network of roads and rails located in the planned town of Luchaogang.

Most of China's modern deepwater ports have been financed and built by western companies. These ports use the standard 40-foot containers and port automation technologies. In contrast, inbound ports for bulk commodities are still largely owned and operated by the public sector. These ports are mostly legacies to "planned economy" and are in need of major renovation.

If Great Britain ruled the seas, China rules the inland waterways. Approximately 54 percent of China's freight volume moves on inland water. Using time tested methods, China has been using waterways for the movement of people and goods for thousands of years. Reservations are available, rates are negotiable, and there is sufficient capacity. Technology is limited and service measurements are rudimentary. Goods get loaded, goods move, and goods are delivered today as they have been for a thousand years, largely manually. Scheduling is "informal" and transit times vary considerably. The major concern has been and remains weather. Waterborne transit is affected by water conditions and the weather.

ROADS AND AIR FREIGHT

Approximately 14 percent of China's freight volume moves by truck and highway. The Chinese road network is best described as primitive. Consequently, China is investing heavily in roads and highways. As with the rail system, there is limited technology in truck freight. Trailer tracking, EDI, and advanced delivery notification are not available. The landscape is highly fragmented with over 70,000 companies registered as shippers and haulers. Scheduling, handling, insurance and transit times are all issues. Despite these negatives, truck freight provides door-to-door delivery, a flexible schedule, has lots of capacity and is generally faster than rail and water.

China is the world's second largest air cargo market following the US, according to Boeing. Air transit is, of course the fastest mode of transit and also the most expensive. Boeing estimates that China's air fleet is expected to grow 300 percent over the next 20 years, adding significant passenger and freight capacity. Air transit is still largely undeveloped in China, but like rail and ports, intermodal constraints limit it due to lack of roads and other facilities that are required to move goods from air terminals to final destinations.

DID YOU KNOW?

- ⇒ **Waterborne** transit times average one to 60 days with an average distance of 1,900 miles.
- ⇒ **Rail** transit times vary from 15 to 60 days, depending on destination with an average distance of between 750 to 800 miles.
- ⇒ **Truck** transit times vary from 1 to 30 days, depending on destination with an average distance of 60 to 70 miles.

THE FUTURE - LOGISTICS OPPORTUNITIES IN CHINA

China represents an exciting market and environment for logistics. With an engaged population, and a government that understands and supports new infrastructures and encourages foreign direct investment, China is positioned for a *logistics transformation*. For example:

- The logistics market in China is expected to exceed \$100 billion by 2010, excluding Hong Kong, Taiwan and Macau.
- China will have to invest at least \$230 billion over the next five years in logistics to support its industrialization and economic reforms.
- Shanghai will account for about 15 percent of total logistics value in terms of freight movement.
- The US west coast ports of Los Angeles and Long Beach will play increasingly greater roles in US-Chinese trade.

DOING BUSINESS IN CHINA—HINTS & TIPS

Doing business in China requires intimate knowledge of the issues, opportunities and culture. For westerners, this means creating and cultivating relationships with Chinese logistics providers, governmental agencies and officials, and Chinese bankers. When doing business in China, keep the following in mind:

- Personal relationships and personal reputation are everything in China. Credentials, resumes, education, etc., are secondary to personal relationships.
- Patience is a virtue. Chinese people are patient, introspective and “quietly demanding.”
- China is slow to change, but once China commits to change, it can move with speed and precision.
- China has a highly disciplined, motivated and engaging society where premiums are placed on fitting in rather on standing out.
- What is private and what is owned by the state are, at best, ambiguous and “murky.”
- Chinese people place great emphasis on education and learning and have great reverence for teachers, educational institutions, and learning new things.
- Overt conflict and self-promotion are seen as improper and self-serving.
- Chinese communications are indirect, subtle, and implicit.
- Contracts in China are best thought of as “snapshots” of the relationship in time and are subject to change and continuous interpretation and reinterpretation.
- In China, trust is earned through personal reputation, personal association, and personal knowledge.

Understanding logistics also requires that the Chinese further develop and strengthen their understanding of US policies and capabilities, especially those related to the local ports and related infrastructure.

ANNOUNCING WCL'S: WHERE IS THE NEXT INLAND EMPIRE?

YOU HAVE QUESTIONS WCL HAS THE ANSWERS

Where is the next Inland Empire?

What's driving demand, growth and restrictions?

Where are the future growth areas in the SoCal? How will these growth areas develop? What about congestion?

What are the key political, environmental and business issues in these areas?

What DC and WH industry specific factors and trends are driving changes in facility design, facility operations and tenet commitment decision making?

What are customers demanding in DC and WH facilities From Owners? What does the Facility of the Future (FOF) look like?

SPONSORS

- Real Estate Industrial Developers
- Corporate Real Estate Departments
- Transportation Providers and Shippers
- Facility Operators (3PLs)
- Commercial Mortgage Brokers and Bankers
- Major Importers, Tenants, and Retailers
- Funders, Investors and Lenders, such as Insurance Companies
- REITs, Syndicates and Venture Capitalists, City Planners, Architects, County Officials, State Officials, CalTrans, Others

THE NEED

THE NEED TO KNOW IS EVERYWHERE:

- ⇒ What impact is congestion having on distribution?
- ⇒ What effect will a 300% growth in import volumes and a 6 million growth in population have on SoCal?
- ⇒ Is the Logistics industry driving shorter or longer facility leases?
- ⇒ What will the implementation of extended gate hours at the Ports and intermodal shuttle trains from the Ports to an inland distribution center be on your business?
- ⇒ Where are warehouse and distribution centers going after the Inland Empire?

These are just a few of the questions that developers, importers, transporta-

THE 2004 STUDY

Currently, information regarding the "state of the market" for warehousing, distribution and logistics centers is fragmented, under developed and often inconsistent. **WCL Consulting** has organized the:

WHERE IS THE NEXT INLAND EMPIRE? LOGISTICS CHALLENGES, TRENDS AND OPPORTUNITIES IN THE SoCal MARKET-2004 (Study).

This is a comprehensive study to fully identify, clarify and assess the major trends, developments and requirements for supply chain management, warehousing and distribution site selection and placement in the SoCal marketplace.

YOUR INVITATION

You are invited! WCL is pleased to present this **proposal** inviting you to join other developers, importers, operators/3PL's, lenders, brokers, corporate real estate departments, and other interested parties as a **sponsor** in this cooperative Study for the SoCal logistical, warehousing, and distribution marketplace.

WCL has **value priced** the Study to make it attractive to your budget:
The total cost of becoming a **Charter Sponsor** is only \$7,500.00
The total cost of becoming a **Direct Sponsor** is only \$5,000.00
The total cost of becoming a **Study Subscriber** is only \$3,000.00

**DON'T DELAY...THE STUDY IS STARTING
FOR FURTHER INFORMATION CALL US AT: 562.435.2600**

Introducing...**WCL CONSULTING**

“Delivering results, not promises.”

WCL Consulting provides logistics, supply chain management, warehousing, and distribution management advisory services to major corporations, shippers, third-party logistics providers, industrial real estate development/brokerage companies and the public sector. As a privately owned firm, we are independent of any conflicts and are fully committed to our clients to create sustainable competitive advantage, improved financial results, and optimized stakeholder value.

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