# Cooperation of transportation and Logistics among Northeast Asia In Perspective of China & Mongolia



College of Economic and Social Development Dean, Professor, Binglian Liu 2010. 8. 26

# PRELIMINARY THINKING

China's Economy and Logistics Development GDP

Financial Crisis

Logistics Market

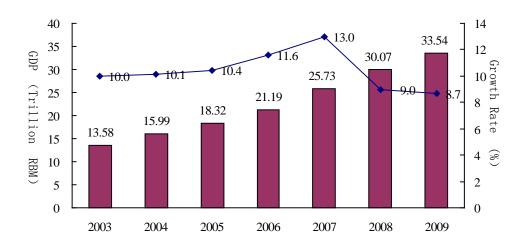
Findings



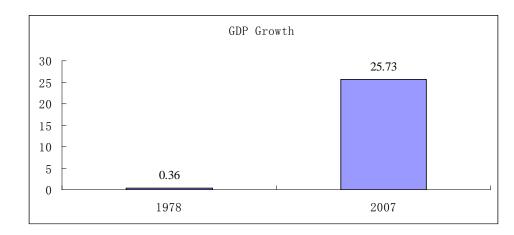
#### Rapid Development of Economic Output

#### • GDP Growth

- China's economy has witnessed more than 30 years of rapid development.
- The GDP was merely RMB 0.36 trillion in 1978 but grew to RMB 25.73 trillion in 2007, climbing by 9.8% annually and nearly 7% higher than the average growth rate of global economy.



#### China's GDP and Growth Rate (2003-2009)





#### Under Financial Crisis

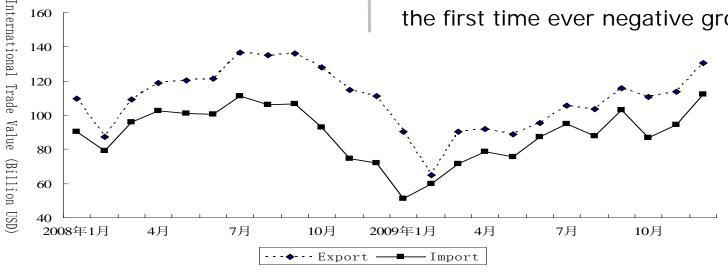
slowed down in 2008

- GDP growth rate 9.0%, 4% down than ٠ 2007
- 2008.9-2008.12 China foreign trade value has successively declined

160

tough time in 2009

- GDP growth rate 8.7, 4.3% down than 2007
- Total value of import and export in 2009 was USD 2.21 trillion dollars, a 13.9% drop compared with that of 2008, and the first time ever negative growth



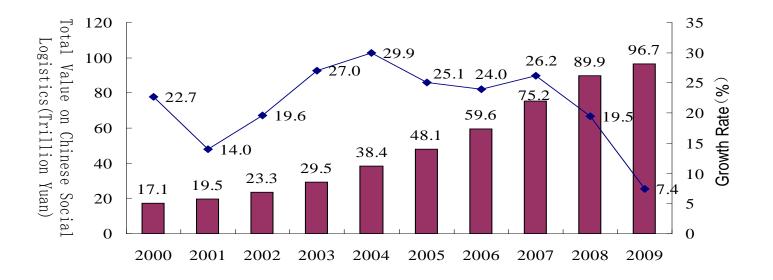
Trend of Monthly Import and Export Values for 2008-2009



#### Logistics Market

#### General Situation

- From 2000 to 2007, overall development of China logistics market has represented rapid improvement with rapid enlargement of market scale due to constant and fast development of China economy.
- But after the year 2008, China's logistics market has slowed down its growth speed owing to impact from international financial crisis on China's economy.





#### Logistics Market

#### Total Expense on Logistics

Year	Total Expense on Logistics	Growth Rate (%)	The Share on GDP (%)
2005	3.39	12.9	18.6
2006	3.84	13.5	18.3
2007	4.54	18.2	18.4
2008	5.45	16.2	18.1
2009	6.08	7.2	18.1

Added Value of Logistics Industry in China

Year	Added Value in Logistics (trillion)	Growth Rate (%)	The Share on Service Industry (%)
2005	1.21	12.7	16.6
2006	1.41	15.1	17.1
2007	1.70	20.3	17.6
2008	2.00	15.4	16.5
2009	2.31	7.3	16.1

A



#### Government Policy



Chinese government is always taking an active role in logistics development.
 Under the Financial crisis time, logistics industry is encouraged by the issuance of Program of *Adjusting and Revitalizing Logistics Industry*.
 So far, China's logistics industry

keeps a good trend in development.



### Findings

- We found that during the financial storm, the obvious decrease of import and export was the main factor on leading to negative impact on demand of China's logistics increment.
- Statistics of Customs of China showed that the negative growth appeared on both import and export of November and December of 2008, which were seriously effected by the crisis.
- Total value of import and export in 2009 suffered 13.9% downward compared with that of 2008. This explains much of the slowdown of China's logistics in the recent two years.
- China welcomes worldwide business.

# PRELIMINARY THINKING Railway **China's Infrastructure** Waterway Development Airway Highway Ports



## Infrastructure development

#### Operation of Railway in China in 2005- 2009

Project	Unit	2005	2006	2007	2008	2009
Mileage in Service	1000km	75.4	77.1	78.0	79.7	86
Passenger Volume	Million	1155.83	1256.56	1356.70	1461.93	1520
Freight Volume	Million ton	2692.96	2882.24	3142.37	3303.54	3330

#### Operation of Waterway in China in 2005-2009

Project	Unit	2005	2006	2007	2008	2009
Passenger Transportation	Million	202.27	220.47	228.35	203.34	223
Passenger Flows	Billion person km	6.78	7.36	7.78	5.92	6.94
Freight Traffic	Million ton	2196.48	2487.03	2811.99	2945.10	3190
Freight Flows	Billion ton km	4967.23	5548.58	6428.49	5026.27	5755.67
Container Transportation	Million TEU	19.40	23.30	29.53	_	30.11



## Infrastructure development

#### Operation of Chinese Civil Aviation in 2005-2009

Project		2005	2006	2007	2008	2009
Passenger Transportation	Million	138.27	159.68	185.76	192.51	—
Passenger Throughput	Million People/times	_	331.97	287.59	405.76	486.06
Freight Transportation	1000 Tons	3067	3494	4018	4076	4455
Freight Throughput	Million tons	_	7.53	8.61	8.83	9.46
Taking-off Number of Airplane	Million flights		3.49	3.94	4.23	4.84



# Infrastructure development

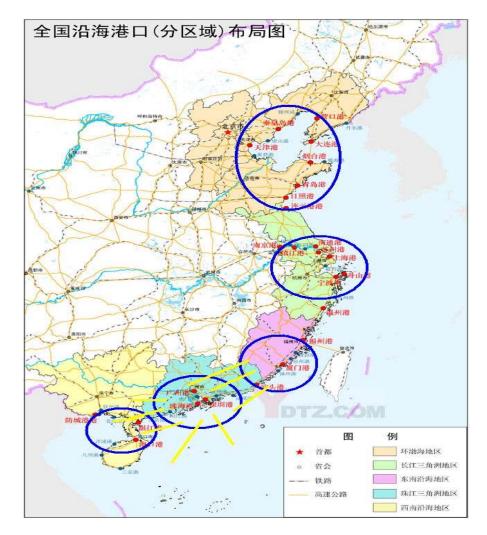
#### Operation of China Highway in 2005-2009

Project	Unit	2005	2006	2007	2008	2009
Passenger Transportation of Commercial Vehicle	Billion	16.97	18.61	20.51	26.82	27.79
Passenger Flows	Billion person. km	929.21	1013.0 9	1150.68	1247.61	1351.14
Freight Volume of Commercial Vehicle	Billion ton	13.42	14.66	16.39	19.17*	21.28*
Freight Flows	Billion ton. km	869.32	975.43	1135.47	3286.82*	3718.88*
Average Transportation Distance of Freight	km	64.79	66.50	69.30	171.48*	174.77*



#### Seaport of China

- Seaport plays an important role in China's international logistics system. Most Chinaforeign economic activities are occurred in the east and coastal regions.
- These ports have formed five major ports clusters, from North to South they are located in Bohai Rim Region, the Yangtze River Delta, Fujian coastal region, Pearl River Delta and the North Bay region





#### Highway/Railway/airway port of China

- Chinese government had signed 11 bilateral highway transport agreements with neighboring governments, which greatly promoted the bilateral trade and road transport of Highway port development.
- Railway ports witness sustained and rapid development of international rail transport. China's main Railway border, like Manchurian Suifenhe, Hunchun, Erenhot, Alashankou, Dandong, Tumen, set security, Pingxiang, leading separately to Russia, Mongolia, Kazakhstan, Korea, Vietnam. In 2009, China's national railway port reached 44 million tons cargo throughput, which is an increase of 6.9 times compared with 1978.
- Airway ports are also experiencing the increasing size of international shipping. Before applying reform policy, There are only 8 opening air harbors in China, that's Beijing, Shanghai, Guangzhou, Shenyang, Kunming, Nanning, Harbin, Urumqi. Now China opens 59 air ports, each province has more than one air port.

# PRELIMINARY THINKING

**Tianjin in Northeast Asia** 

Role of Northeast Asia

Role of Tianjin City

Seaport of Tianjin



#### Role of Northeast Asia

- Northeast Asia is one of the most active areas in the world on export-oriented economic development. Now the international trade of Northeast Asian countries accounts for about 40% of Asia and 10% of the world.
- But the trade between Northeast Asian countries accounts for only about 20% of Asia. That shows on one hand, the economy of Northeast Asian has fully integrated into the world economy, on the other hand, there is still a great room for cooperation between Northeast Asia countries.
- For instance, China has a huge growth market and excellent manufacturing capability, Japan and Korea employ capital, management and technical advantages, Mongolia and North Korea gain the endowment of plenty resource and demonstrate great demand on construction of infrastructure.



### Role of Tianjin City

- Tianjin locates on the center part of Bohai Rim Region of China, which showed more and more strong growth speed, gradually become the third pole after Pearl River Delta and Yangtze River Delta in China's economy.
- Tianjin is an important city of northern China with a variety of matured transportation system, seaports, railways, highways, airports. In 2009, Tianjin's GDP grow 16.5%, and reach the 8th consecutive quarters of more than 16%.
- Besides, Tianjin is very close to Beijing, 120 km to the capital. What's more, By taking advantage of the transportation hub, Tianjin gets smooth radiation to the vast hinterland



#### Seaport of Tianjin

- In addition, Tianjin is the major port city of the Northeast Asian region. Tianjin Port is the largest artificial port in China. It is the best seaport of the Eurasian Continental Bridge and the main point for Mongolia and Central Asian countries accessing the ocean.
- At present, the main navigation channel is 35km long with water depth of -19.5m, which is available for ship of 250,000 tons to enter and leave port freely and ship of 300,000 tons with high tide.
- There are totally 134 various berths in the port, including 81 berths over 10,000 tons. The total quay length is 28,000m. Tianjin railway-ocean combined transport of international container is also the gateway to the Mainland Bridge Europe passage.



#### Seaport of Tianjin

- Tianjin Port has become an important part of the international logistics network. In 2009, Tianjin Port accomplished cargo throughput 381 million tons, ranked 5th in the world's ports and 3nd in China's.
- Tianjin Port has broad international connection. Sister port relations have been established with 12 foreign ports in Japan, Korea, USA, Netherlands and so on. The port has trade relation with more than 500 other ports in over 110 countries and regions. Every month, there are about 400 scheduled vessels connecting with the main ports in America, Europe and Asia etc.



# Bilateral trade between China and Mongolia

- Highly complementary are existed between the bilateral economic and trade of China and Mongolia. China has big variety of goods and Mongolia supplies rich mineral resources.
- In addition, China and Mongolia have great chance in labor and technology cooperation.
- For example, Mongolia needs high quality labor force and technology to further develop the cashmere industry since Mongolia has become the world's second largest producer of cashmere. Renew on technology, equipment and human resources through cooperation with China will be an alternative way for upgrading both production and the logistics.
- China and Mongolia economic and trade continue to develop towards mutually beneficial and complementary direction. Varieties of traditional trade were being processed between the two countries even in the crisis time.



# Bilateral trade between China and Mongolia

- There are still some problems we need to know. The trade volume between China and Mongolia need improving.
- In the year 1999 through 2005, the bilateral trade volume share over China's total foreign trade were 0.79%, 0.84%, 0.69%, 0.58%, 0.53%, 0.55% and 0. 57%, that's no more than 1% for years.
- And what's more, the trend of the volume share is not stable either. We can see a badly fluctuation in the growth rate of China's import and export with Mongolia. These tell us that we can do more for the bilateral business.



#### The Economic and Trade Relation between China and Mongolia

The Economic and Trade Relation between China and Mongolia goes well, and the economic cooperation is developing rapidly

 From 1998 to 2008, the trading volume between the two countries increased from 243 million US dollars to 2.438 billion US dollars, nearly 10 times. By the end of 2009, china has kept the largest trade partner of Mongolia for eleven consecutive years.



#### Table1 Total Amount of Foreign Trade in Mongolia and the Change of Trade Volume between China and Mongolia (Unit:million US dollar)

Year	1990	1994	1999	2000	2003	2004	2005	2006(1—6月 )
Total Amount of Foreign Trade in Mongolia	1584.7	614.5	967.0	1080.6	1416.9	1890.8	2249.2	1228.8
Trade Volume between China and Mongolia	33.6	97.1	285.8	400.1	483.3	671.1	821.5	612.3
Proportion of Mongolia Foreign Trade %	2.1	15.8	29.5	37.0	34.1	35.5	36.5	49.8
export of it	11.3	73.2	208.2	274.3	287.0	413.9	514.2	431.5
Proportion of Mongolia Export %	1.7	20.5	45.8	51.1	46.5	47.6	48.3	70.5
import of it	22.3	23.9	77.6	125.8	196.3	257.2	307.3	180.8
Proportion of Mongolia Import %	2.0	9.2	15.1	20.5	21.8	25.2	25.9	29.3



The Economic and Trade Relation between China and Mongolia

China has been the largest trade partner of Mongolia for 12 consecutive years.

According to the data provided by British 'Economist' Information Department, China invested 116 million U.S. dollars in Mongolia in 2009, and China's stock of investment reached 1.011 billion U.S. dollars in Mongolia.

#### Table2 The Foreign Investment in Mongolia (By the end of 2005)

counties	75 counties	China	Canada	South Korea	Japan	USA	Russia	Other
%	100	47.3	12.2	7.3	5.0	3.6	3.2	21.4



	]	Investment Project	s	Volume of Investment			
Years	Foreign	Chi	na	Total Foreign	Chi	na	
	Investme nt Project in Mongolia	Projects	Proportion (%)	Volume of Investmen t in Mongolia	Volume of Investment	Proportion (%)	
1998	276	108	38.7	45.9	24.7	53.7	
2003	635	323	50.9	205.4	46.9	22.8	
2004	805	438	54.4	237.1	112.6	50.2	
2005	988	568	57.5	311.7	235.8	75.6	
1990-2005	4814	2166	45.0	1441.0	681.1	47.3	

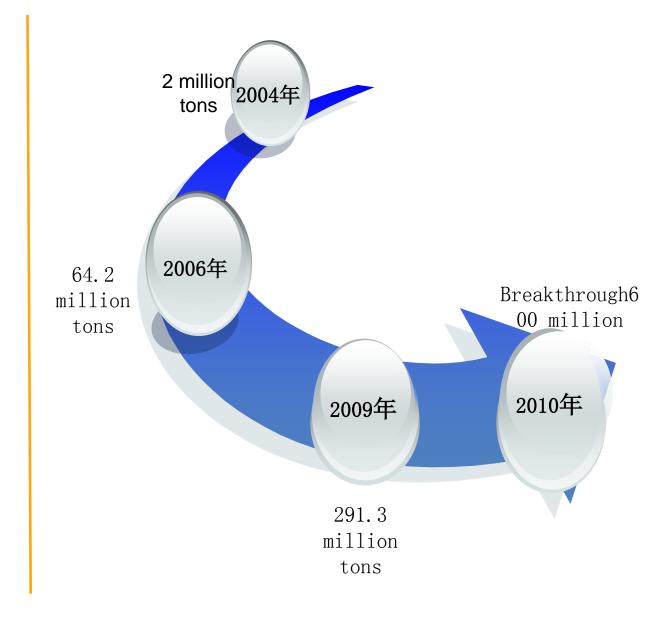
# PRELIMINARY THINKING

Port Logistics Situation of Cina and Mongolia



ogistics Volume of Sino-Mongolia Port Increases Rapidly (Gan Qi Mao Du as an Example)

- The incoming and outgoing vehicles reached 9.2605 million times in 2009, 61.4% year-onyear increase, and its growth rate of cargo ranked the first in domestic inland ports;
- The road freight was 2.9103 million tons, accounted for 9.1% in domestic port road freight, ranked the third in domestic, and accounted for 34.96% in Inner Mongolia port road freight, ranked the second in the region.





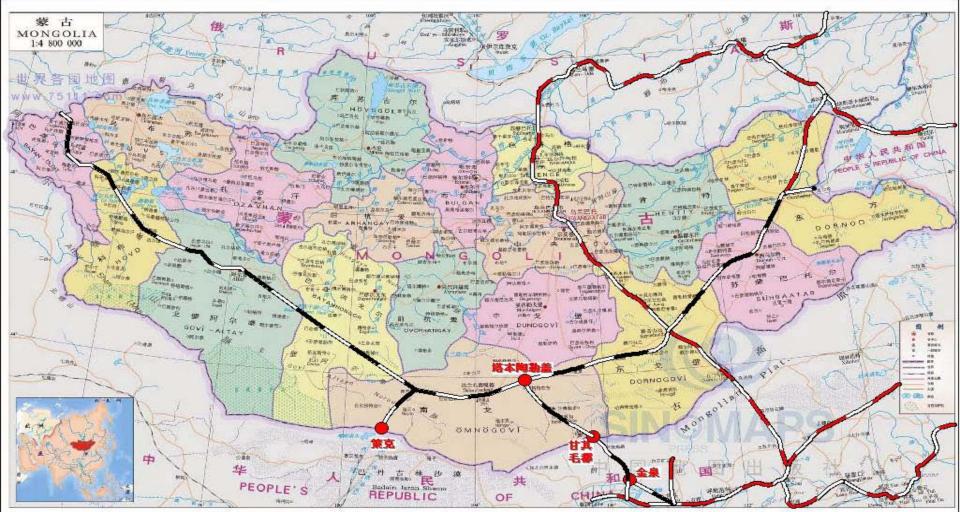
# Ganqimaodu Port: Superior Geographical Positional and convenient transportation in China

 Ganqimaodu Port is used on the Chinese Mid-and-Long Term railway network planning, Quanxi railway is constructed by china railway and will be completed by the end of this year, while Ganquan railway planned by ShenHua company is under preparation of construction.





## Ganqimaodu Port: Superior Geographical Positional and convenient transportation in Mongolia



- Existing railways in red and white
- Planning railways in blank and white.



# Forecasting of ganqimaodu port logistics market

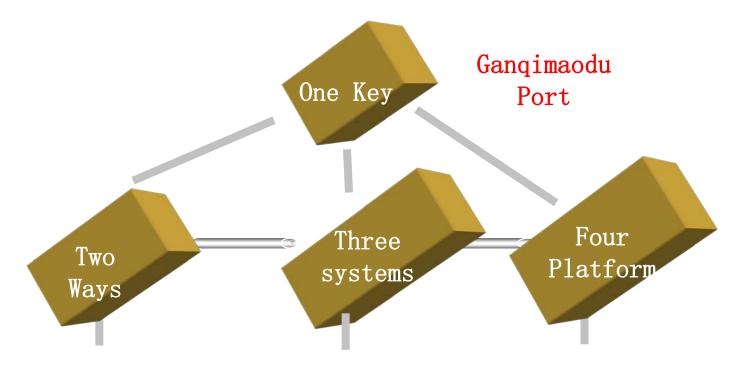
- >conservative estimation(kilotons/year)
- short-term forcast(inthe following 3 years): 20,000~25,000
- mid-term forcast(in the follwing 6 years): 25,000~30,000
- long-term forcast(in the following 10 years): 40,000~45,000
- ➢Optimistic estimation
- short-term forcast(inthe following 3 years): 40,000~45,000
- mid-term forcast(in the follwing 6 years): 60,000~80,000
- long-term forcast(in the following 10 years): 90,000~100,000

# PRELIMINARY THINKING

Logistics Planning of Ganqimaodu Port



# Logistics Planning Content of Ganqimaodu Port



✓ government's plan and supervision
✓ corpotations' building and operation

✓ bonded logistics center system ✓ comprehensive accessary service system ✓ business service system

✓Infrastructure facilities platform

✓logistics information platform

✓ clearance service platform ✓ policies ,financing and

investment platform





北