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Toll Road Securitization in China

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Background

China's rapid economic growth over the past 20 years has generated a rising level of demand for road transport. Since the early 1990s, requirements for new highways have exceeded the country's capacity to finance and build. In fact, for most of the past decade, China's road system expanded by only 5%, as compared to an average annual growth of passenger vehicles of 22% and commercial traffic of 10%

In the past several years, China has made significant progress in the development of a National Trunk Highway System (NTHS), which when complete by 2015, should total 35,000 km of toll highways and expressways. Completion cost for the system will approach US$150 billion. China now has more than 10,000 km of trunk highways in operation.

To date, new highway construction in China is largely dependent on public spending, which has increased significantly in the recent past, to a level of US$25 billion annually in 1998 and 1999. These funds have been made available through a combination of direct government loans and grants to implementing agencies at the provincial level. The domestic banking system is also becoming more important as a source of funds for China's highway needs, and through several large commercial banks, limited recourse project financing is now available to the provinces.

Private financing is playing an increasingly important role in the mix of capital for highway construction in China. Almost all high-grade highways, including new expressways, are toll facilities, and generating significant revenues. Since 1994, the highway sector has attracted private capital exceeding US$1 billion per year, now totaling US$6 billion, and expected to increase in the coming years. Compared to other developing countries in Asia, Latin America, and Europe, China remains ahead in attracting private capital to highway projects.

In the absence of a mature legal and regulatory framework, for private investors, long-term debt capital in the international markets is generally not available for new toll road projects, with sizable risks for investors during project development and construction, and particularly in the start-up phase of commercial operation. There are likewise well known issues and concerns involving currency convertibility and repatriation of profit, which have constrained the ability of foreign investors to repay commercial debt, and have generally discouraged the development of new projects.

As an alternative to new BOT-type projects with foreign capital, China is pursuing at the provincial level, the use of its extensive expressway system, of which many segments have mature traffic volumes to raise new equity capital in Hong Kong and the domestic markets through the issuance of equity shares in provincial expressway development companies. Existing highway assets can be pledged or sold to these new companies, with a dedicated toll revenue stream already in place for the purpose of generating new income. These revenues can then be leveraged or securitized to support share issuance through initial public offerings in the equity markets. This technique is now widely used in China, and in several cases, new financings have been supported by the use of existing, revenue-producing toll facilities partially financed by the World Bank.

Private Financing of Toll Highways in China

In few instances, private investors have been able to access long-term debt financing for new highway projects in China. The equity markets, and only recently, the domestic financial markets have supplied capital for new construction. The term of debt financing for private firms is limited to 3-5 years, although provincial agencies are able to secure Bank debt for projects with a term of 10-12 years. The more common approach is to issue equity shares through provincial expressway development companies, whose balance sheets are backed by revenue-producing toll facilities.

Most transactions are centered upon initial public offerings for provincial and municipal expressway development companies. These are special purpose entities which function as financing entities for Provincial Communications Departments (PCDs), which then inject operating assets to give the new entities a high level of creditworthiness from the beginning.

With revenue-producing facilities in place, the new companies can issues shares for the purpose of repaying the PCDs, often major shareholders themselves, for the assets. The new listings are generally intended to raise capital for additional expressways and other high-grade highways. There are also certain benefits and advantages for these companies, as follows: a) preferential or non-competitive access to long-term concessions for operation of existing and new highways; b) rights to the development of future expressways with preferential tax benefits; c) provisions which restrict competing toll and non-toll facilities; and d) minimum traffic and revenue guarantees.

Since mid-1996, a total of at least nine equity issues have been completed by mainland expressway development companies in the domestic and offshore markets, with estimated total capital raised in excess of US$1.6-2.0 billion. This amount does not include significant funding generated in the financial markets by private developers and mainland companies who already own significant toll road assets.

Completed transactions have involved the sale of "A" and "B" shares on the Shenzhen Stock Exchange and "H" shares in the Hong Kong market. Foreign-currency denominated "B" shares account for about 5% of the domestic market in China and are available only to foreign investors. "A" shares are issued to domestic investors in China (Shanghai and Shenzhen) and "H" shares are issued on the Hong Kong exchange for China mainland companies.

World Bank-financed highway assets were used to support equity offerings in Guangdong, Sichuan, and Zhejiang Provinces in four separate transactions. Listings for both the Bank-financed Beijing-Tianjin Expressway and the Jinan-Quingdao Expressway in Shandong Province are under preparation. Future offerings for Bank-financed expressways in Hebei, Henan, and Fujian Provinces may follow. Approval for the use of Bank assets in these transactions is governed by a December 1997 policy guidance approved by the Bank's Board of Directors titled "Securitization and other Capital Mobilization Transactions using Bank-or IDA-Financed Assets."

China's first experience with highway asset securitization occurred in mid-1996, with the completion of a US$62 million "B" share offering in Shenzhen by the Guangdong Provincial Expressway Development Company (GPED). The transaction was completed as the result of the steady, proven growth of toll revenues in the province, a strategic partner from Malaysia, and the injection of two expressways and a major bridge to GPED's balance sheet.

The effects of the Asian financial crisis in regional markets during the period mid-1997 to mid-1999 temporarily suspended new highway equity offerings in Hong Kong. As an alternative, China's provinces demonstrated new interest in the Shenzhen and Shanghai stock markets through "A" share offerings for new development capital. As previously noted, domestic financial markets are maturing in China and providing new sources of capital for highway development, while shielding the country's economy from the regional financial crisis.

Program Challenges and Opportunities

China's highway program has benefited from a combination of maturing domestic financial markets and a large existing toll expressway system, with the opportunity for attracting new sources of private capital. This model provides an institutional or network alternative for generating capital over the medium term as compared to the more traditional approach in developing countries of financing projects on a stand-along basis with private capital, which has not proven sustainable in most instances.

The future of highway asset securitization in China will depend in part on a reliable policy framework which streamlines approval procedures and allocates risks on an equitable basis to the public and private sectors. This objective has not yet been achieved in China as the result of a number of policy and regulatory constraints, described as follows:

- **Risk Allocation Framework:** Most developers are willing to accept some construction risk, so long as they are able to influence design features of the project, construction schedule, and supervision of the work. This is not the case with start-up revenues which pose a different and somewhat unpredictable level of risk in China. Through a combination of asset securitization, minimum income guarantees and exclusive rights to develop future expressways, government has attempted to mitigate the impact of commercial traffic risk for developers. Though successful in the short term, this will certainly prove inefficient and financially unsustainable over the medium term. For example, minimum revenue guarantees by provinces may not be sustainable in the long term, nor will exclusive rights to develop new expressways compare favorably to competition as a means to reduce construction costs over time.
- **Lengthy Approval Process:** Management of highways in China is the responsibility of provincial agencies, who also oversee expressway development companies. At least four central agencies and ministries, including China's Securities Regulatory Commission, have oversight responsibility for any highway share offering planned by a province or municipality. Delays are not uncommon and directly increase project and transaction costs.
- **Tariff Policies:** Road tariffs must be approved by provincial or municipal authorities, operating under central government guidelines. Local and provincial price control bureaus decide toll rates, often without commitments to regular adjustments needed to offset rising costs and inflation. Private investors and lenders thus have no assurance that toll rates will be adequate to meet debt service payments.
- **Currency Convertibility:** Availability of hard currency and exchange rate risk are important concerns to investors and lenders. There is presently no means

to secure guarantees from state agencies and commercial banks for hard currency and foreign investors in several projects have been unable to repatriate profits from their joint ventures on a timely basis.

- **Regional Financial Market Volatility:** China's central agencies have expressed concerns over the volatility of share prices and fluctuating earnings performance of shareholding expressway companies, both of which could affect the level of toll rates and availability of capital for future highway development. As a result, future transactions may experience delays and difficulties due to the complicated and still evolving legal and regulatory structure in China. An earlier placement planned by the Beijing Expressway Co. Ltd., owned by the municipality of Beijing, was cancelled at the last minute because the sponsors could not obtain authorization for foreign currency availability from the central government.

Table 1: Share Performance of Selected China Highway Companies

Share Listing	Amount (US$M)	Revenue Sources	Current Price 01/24/00	52 Week High/Low
Expressway Companies				
Anhui Expressway "H" IPO 11/96 at 1.80/share	100	Hening Expressway	HK$ 0.656	1.13/.60
Guangdong "A" IPO 1/98 at 5.41/share	64	Same assets, with expanded interest in Fokai Expressway	RMB 12.58	12.60/5.23
Guangdong "B" IPO 8/96 at 3.54/share	62	Guangfo and Fokai Expressways; Jiujiang Bridge	HK$ 2.50	3.38/1.31
Hainan Expressway "A" IPO 1/98 at 5.92/share	55	Haikou-Sanya Expressway	RMB 7.35	13.60/5.30
Hunan Expressway "A" IPO 1/99 at 10.45 share	101	Chang Yong Expressway	RMB 10.24	13.56/7.81
Jiangsu Expressway "H" IPO 6/97 at 1.55/share	480	Shanghai-Nanjing Expressway	HK$ 1.04	1.84/1.04
Sichuan Expressway "H" IPO 10/97 at 1.55/share	182	Chengyu Expressway	HK$ 0.49	0.85/0.45
Zhejiang Expressway H IPO 5/97 at 2.29/share	440	Shanghai-Hangzhou-Ningbo Expressway	HK$ 1.15	1.76/0.98

Shenzhen Expressway H IPO 3/97 at 2.20 share	150	Meiguan Expressway, NH-205, and NH-107	HK$ 1.06	1.76/1.01
Infrastructure Developers				
Cheung Kong Infrastructure	IPO-7/96 12.65/share	Infrastructure project portfolio of HK$ 10 billion	HK$ 14.15	16.92/12.41
New World Infrastructure	IPO-10/95 12.75/share	78 infrastructure mainland projects in transport, water, and power sectors	HK$ 8.35	16.15/6.80
Road King Infrastructure	IPO-6/96 8.40/share	974.6 km of toll roads in 8 provinces	HK$ 4.20	6.08/3.12

Future Prospects for Toll Road Securitization

The World Bank Group and China's State Development Planning Commission (SDPC) are undertaking a broad initiative, which is intended ultimately to revise the country's policy, legal, and regulatory framework for privately-financed infrastructure, including toll highways. This effort may result in a new program structure, with increased transparency and competition in the award of highway concessions to private investors.

China's system of highway finance continues to evolve. The People's National Congress recently amended the Highway Law to authorize implementation of a new tax on fuel. The new fuel tax will require State Council approval before implementation, but it could replace several existing revenue sources, such as the road maintenance fee and perhaps tolls on selected secondary roads, but this is unclear at the present time. Through whatever means the fuel levy is implemented and the proceeds shared with the provinces, this initiative is a positive development in the government's effort to broaden and strengthen China's highway revenue base.

As investor confidence in China's framework for privately-financed highways continues to grow, and new revenues become available through public sources to support these projects, securitization in the capital markets of cash flows from existing toll facilities will likely produce new types of securities and opportunities for investors. In China, the combination of growing capital markets, mature expressway systems, and an ambitious, continuing program of new highway construction can only lead to the conclusion that the country must continue to seek capital from all available public and private sources.

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