Toll Road Industry

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PEFINDO views Indonesia's toll road industry to have positive outlook**,** reflecting its strong potential demand due to limited development of new public road and slow growth of public transportation infrastructure. The government's commitment to encourage participants in toll road industry is shown by the launch of regulatory framework in 2008 for land acquisition to reduce the risks of protracted land negotiation and cost overrun. However, the land acquisition activities still carry social and political risks. In addition, huge capital requirement to develop toll roads with relatively long-term pay back period remains a major constraint for the investors to enter in the industry.

Strong Demand Potential

Demand side in toll road industry is still promising particularly for urban toll road, following the increasing density in urban areas and industrial development in highly growth regions. Traffic congestions have been increasingly severe in Indonesia particularly in big cities and inter city main roads as road users grow much faster than additional length of the roads. Traffic is also worsened by the poor condition of the public roads. Consequently, toll road is certainly needed to make transportation efficient which in turn will support the country's economic growth.

Compared to neighboring countries, Indonesia is far left behind in toll road developments as depicted in Table 1 below.

Table 1: Toll road developments in several countries as of 2008

Country	Population (Million)	Arterial road (km)	Toll road (km)
China	1,300	1,700,000	>100,000
Japan	125	1,166,340	11,520
South Korea	46	88,775	2,600
Malaysia	22	64,949	1,500
Indonesia	220	35,000	648

Source: Toll Road Association, from Investor Daily edition April 14, 2009, processed by PEFINDO

Indonesia only has around 648 km length of toll road that are mostly developed in Jakarta and nearby areas, the most congested section in Indonesia. Capacity of the existing toll roads should not be sufficient to fulfill the increased demand for the toll road. Business activities such as goods distribution are expected to keep increasing which will result in increasing traffic volume. Table 2 shows toll roads operated in Indonesia as per June 2009.

Table 2: Operated toll roads in Indonesia

No.	Section	Length (km)	Commence operation	Operator
1	Jagorawi	46	1978	JSMR
2	Jakarta-Tangerang	28	1983-1998	JSMR
3	Pondok Aren-Ulujami	5.5	2003	JSMR
4	Surabaya-Gempol	39.5	1984	JSMR
5	Jakarta-Cikampek	72	1985	JSMR
6	Padalarang-Cileunyi	63.9	1986	JSMR
7	Cikampek-Padalarang Phase 1	17.5	2003-2004	JSMR
8	Cikampek-Padalarang Phase 2	41	2004-2005	JSMR
9	Prof.Dr. Sedyatmo	14.3	1986	JSMR
10	Lingkar dalam kota	25	1988	JSMR
11	Belmera	34	1989-1996	JSMR
12	Semarang section A, B, C	35.2	2003	JSMR
13	Palimanan-Plumbon-Kanci	28.8	1990	JSMR
14	JORR W2 South	3.7	1991	JSMR
15	JORR E1 South	4	1998	JSMR
16	JORR E2	9.1	2001-2003	JSMR
17	JORR E1-3, W2-S, E3, E1-4	14.7	2005-2007	JSMR
18	JORR S	14.2	1995-1996	JSMR
19	Suramadu	5.4	2009	JSMR
20	Cawang-Tj. Priok	15.5	1990	CMNP
21	Pluit-Ancol-Jembatan Tiga	11.6	1995-1996	CMNP
22	Waru – Juanda	12.8	2008	CMNP
23	Tangerang-Merak	73	1983-1996	Marga Mandalasakti
24	Surabaya-Gresik	20.7	1993-1996	Margabumi Matraraya
25	Ujung Pandang phase 1	6.1	1998	Bosowa Marganusantara
26	Serpong-Pd Aren	7.3	1999	Bintaro Serpong Damai
Total		**648.8**		

Source: www.pu.go.id,www.jasamarga.com

Jembatan Suramadu, which is connected Java island with Madura island, has eventually completed and started in operation in June 2009. There are three other toll roads projected to be in operation this year, i.e. Bogor Ring Road section I (3.8 km), JORR W1: Kb Jeruk – Penjaringan (9.7 km) and Kanci – Pejagan (35 km). Some of other toll projects are still in land acquisition process, including Semarang – Solo (23.1 km), Surabaya-Mojokerto (36.3 km), Makassar Section IV (11.6 km), JORR W2N (7.7 km) and Kanci - Pejagan (34 km).

In addition, there are 13 new toll road priorities in trans Java toll road backed by 10 investors who have signed Toll Road Development Agreement/*Perjanjian Pengusahaan Jalan Tol* (PPJT) to develop toll roads with total length of 763.2 km in all over Java.

Dominant Business Position of JSMR

Currently, PT Jasa Marga Tbk (JSMR), the state-owned toll road operator, remain very dominant by managing around 77% of length of toll roads in Indonesia. Out of 648.8 km length of toll roads, JSMR has developed and operated 501.8 km. The domination of JSMR resulted from the previous regulation which put the company both as the regulator and operator. Although the role as a regulator has been withdrawn in 2004 with the enactment of Law no 38/2004, in the medium term JSMR should remain the most dominant player in toll road industry. There are 7 ongoing projects being built by JSMR: Bogor Outer Ring Road/BORR (11.0 km), Semarang - Solo (75.7 km), Gempol - Pasuruan (32.0 km), JORR W2N (7.7 km), Cengkareng - Kunciran (15.2 km), Kunciran – Serpong (11.2 km) and Surabaya – Mojokerto (36.3 km), all totaling to 179.1 km length.

Other players in the industry include PT Citra Marga Nusaphala Persada Tbk (CMNP), which holds the concession of Cawang–Tanjung Priok and Pluit-Ancol-Jembatan Tiga sections, and Waru – Juanda (Surabaya); PT Marga Mandalasakti (Tangerang – Merak); PT Margabumi Matraraya (Surabaya – Gresik); PT Bosowa Marga Nusantara (Ujung Pandang section I), PT Jalantol Lingkarluar Jakarta (JORR section S) and PT Bintaro Serpong Damai (Serpong – Pondok Aren). These private companies developed their toll roads under build, operate and transfer (BOT) scheme with concession period of 35 to 40 years.

In addition, there are several new private investors which have already won the concession bids to develop toll road projects particularly in Java such as: PT Semesta Marga Raya/Bakrie Toll Road (Kanci – Pejagan), PT Thiess Contractor Indonesia (Solo – Ngawi), and PT Jalan Tol Seksi Empat Makassar/Bosowa (Makassar Section IV).

Favorable New Regulations but the Implementation Still Remains to be Seen

Considering its limited financial capacity, the Government tries to pursue a faster growth in toll road development by strongly encouraging and supporting private parties to participate in the toll road development. The Government has provided some regulatory frameworks which are expected to be attractive for private investors. More favorable regulations offer risk sharing scheme for land acquisition and more flexible tariff adjustment.

Based on Law No.38/2004, GOI lifted the role of Jasa Marga as the regulator and transferred the role to Toll Road Authority Board (*Badan Pengatur Jalan Tol, BPJT*). This new rule is expected to provide fairness and the same level of playing field to all players in the industry.

The new regulation also stipulates that the toll tariff will be reviewed every two years based on regional inflation rates. The tariff increase is now regulated by Minister of Public Works, thus not requiring the approval from the house of representative. More flexible toll tariff adjustment is an important factor for the investors, as the industry has very long-term investment horizon.

Another regulation, President Decree No.36/2005, is intended to ease the land acquisition issues Under this regulation, land which will be used for toll roads is categorized as land for public purpose. The decree is followed by regulation of Minister of Public Works No.04/PRT/M/2007 which gives the investors access to a revolving fund for land acquisition process. The government has set aside a revolving fund of IDR1.44 trillion, taken from the government budget. Under this scheme, the fund for land acquisition will be firstly provided by *Badan Layanan Umum* (BLU-BPJT). The investors will pay the land acquisition cost to BLU upon the completion of the acquisition. This scheme is further strengthened by Minister of Public Works Decree No.12/PRT/M/2008 concerning land capping scheme. The Government is responsible for handling the land release for toll road developments by setting a maximum price (price capping). The investors will bear only up to 110% of land cost as agreed in concession agreement (PPJT). The cost exceeding that amount will become the Government's responsibility. The Government's budget to anticipate the extra cost is around IDR4.89 trillion.

Despite more favorable regulatory framework, the implementation and the enforcement of the regulation remain to be seen. In some cases, cost and timing of the land acquisition process remain uncertain as the processes might involve social and political issues.

Similarly, the consistency of tariff adjustment also remains to be seen due to the political and economical impact of the tariff increase. Although by regulation the tariff will be reviewed every two years in line with the inflation rate, the realization could be lower than expected or there can be a delay on the realization.

Financing Remains a Major Constraint

The main reason for the limited growth of Indonesia's toll road is lack of funding sources. Toll road industry is highly capital intensive, since the development of toll road requires huge capital outlay. Moreover, toll road investors should also have long term investment horizon, in line with the pay back period of the project which can reach more than 10 years. On the other hand, the funding available in domestic banking system and capital market usually has 5-year tenor.

Financial Profile

Financial profiles of PT Jasa Marga (Persero) Tbk (JSMR) and PT Citra Marga Nusaphala Persada Tbk (CMNP) can be regarded as the reflection of the industry's profile as they jointly control about 83.5% of total length of toll in the country.

JSMR's operating margin has strengthened mainly resulting from tariff adjustment and the operation of its new toll roads that have high traffic volume. JSMR gained higher GPM and EBITDA margin of 58.23% and 53.89% respectively in 2008 as compared to 56.61% and 52.16% in 2007. JSMR's debt to equity has lowered to 1.13x at end of 2007 and 1.04x at end of 2008, from as high as 3.64x and 3.03x at end of 2005 and 2006 . The improvement of JSMR's financial leverage mainly resulted from the IPO in late 2007 with total proceeds of IDR3,400 billion. However, in the near future, JSMR's leverage is expected to increase again, as it has five toll road projects to be financed, including Bogor Outer Ring Road (BORR), Semarang - Solo, Gempol – Pasuruan, JORR W2N, and Surabaya – Mojokerto.

JSMR's coverage ratios measured by EBITDA/Debt and EBITDA/IFCCI have been relatively moderate. Future JSMR's cash flow protection is projected to weaken, as it is planning to add new debts for several new toll road projects. Relatively low debt and interest coverage is typical for high capital intensive industry like toll road, as the pay back period of the investment is very long term.

As for CMNP, its financial leverage has increased to 0.96x at end of 2007 from 0.47x in 2006, mainly due to additional debts for Waru – Juanda toll project. Unlike new toll roads operated by JSMR, CMNP's new toll road has not performed as expected. Due to low traffic volume, PT Citra Margatama Surabaya (CMS), CMNP's subsidiary operating the toll road, has defaulted on its loan and now is in negotiation for loan restructuring with its creditors.

Despite the above problem, CMNP's overall financial profile remains healthy supported by very stable revenue stream from JIUT, one of the busiest toll roads in Indonesia. In term of financial leverage, CMNP should be more aggressive if it incurs new debts for its new toll road: Depok – Antasari.

Tabel 3. JSMR's and CMNP's Financial Indicators

JSMR	**5y-Avg.**	**1Q09**	**2008**	**2007**	**2006**	**2005**
EBITDA Margin (%)	49.23	57.50	53.89	52.16	49.85	46.24
ROPC (%)	9.67	10.99	10.70	9.44	9.37	9.26
ROE (%)	14.74	12.31	11.76	6.96	22.65	17.68
Debt to Equity Ratio (x)	2.26	1.05	1.04	1.13	3.03	3.64
EBITDA/Debt (x)	0.19	0.28	0.28	0.21	0.17	0.13
EBITDA/IFCCI (x)	1.68	2.28	2.51	1.67	1.26	1.40
CMNP	**5y-Avg.**	**1Q09**	**2008**	**2007**	**2006**	**2005**
EBITDA Margin (%)	62.49	72.64	65.67	61.81	62.52	58.05
ROPC (%)	11.11	10.52	9.91	9.54	11.98	11.61
ROE (%)	8.03	2.74	5.43	9.44	10.05	7.12
Debt to Equity Ratio (x)	0.59	0.83	0.84	0.96	0.47	0.37
EBITDA/Debt (x)	0.50	0.36	0.32	0.24	0.50	0.59
EBITDA/IFCCI (x)	5.11	2.35	2.91	6.17	5.26	4.65

Source: PEFINDO database

Key Success Factors

Economy of Service Area. Economic of service area is a dominant factor for traffic volumes of toll road. Therefore, demographic factors such as numbers of population within the areas of the toll, number of housing within the areas, number of alternative roads within the area of service, economic condition, business strengths in the cities surrounded by the toll, and etc. are important factors to be considered, as it can be used as a proxy to estimate potential traffic growth. Toll roads are generally built to connect two or more cities or sub-urban areas and many times are integrated with other strategic destination points such as harbor, airport, housing complexes and etc to create sufficient traffic volumes.

Quality of Service. Quality of toll road is very important factor to be considered in an effort to generate more traffic volumes. Poor quality of toll road could cause driving inconveniences or even make high accident rates. Adequacy and conveniences of rest areas are also critical factors to attract users of the toll. Number of bad accidents, safety of the roads and other efforts to enhance the quality of toll road services are other factors that need to be considered.

Cost and Operation Management. Another important factor is the company's operating management in order to achieve the most efficient costs, as none of toll operator has a control on the setting of toll tariffs. In Indonesia, tariffs for toll roads are fully determined by the government. A good management on the company's investment cost, including construction, land acquisition and financing costs is very crucial, as it will affect the magnitude of depreciation cost as well as overall costs that has to be borne by the Company for the entire life of the toll operation. Although it often depends on the complexity of the toll, construction cost per km of toll road is always helpful to measure the efficiency. If the toll road is already in operation, maintenance cost will be the main cash cost for the toll road operator. Maintenance cost will always be related to the quality of toll construction and the company's commitment on the quality of service.

Toll and Business Portfolio. A company with a wider toll portfolio and varieties of demand characteristics is perceived to have more stable revenue stream as compared to those that are dependent only on one toll road or on a number of toll roads with similar characteristics. A company with toll roads located in many cities is expected to be able to minimize the impact from any business deterioration due to economic slowdown in a certain city. During the crisis, it has been shown that despite the currently-strong traffic volume, inner-city toll roads have been more sensitive to political and economic fluctuation compared to inter-city ones. Although it is still insignificant, few toll road operators have diversified their revenues to other related businesses such as advertisement, space rental (rest area), management fee, and etc. The company's abilities and efforts to diversify its revenue stream to other related businesses are also important to stabilize its revenue stream.