

Road Funds: Do We Have Strong Reasons To Apply Them ?

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Abstrak

Road Funds, suatu cara pembiayaan pembangunan jalan oleh pengguna jalan sendiri, sudah diaplikasikan di banyak negara di dunia untuk menjamin tersedianya pembiayaan jalan yang lebih pasti. Road Funds akan jauh lebih efektif apabila diterapkan sebagai bagian integral dari strategi yang lebih makro, yakni bagaimana mengelola jaringan jalan dengan cara-cara yang lebih komersial dan "business-like" berdasarkan prinsip "fee-for-service basis" dimana tercipta keterpautan antara tarif penggunaan jalan (user charges) dengan pembiayaan jalan. Keterpautan ini diperkuat dengan sistem pengawasan oleh publik, yang selanjutnya membangkitkan rasa memiliki oleh publik, dan akhirnya memacu transparansi, efisiensi, dan akuntabilitas di sisi pengelola jalan. Ini sejalan dengan gerakan reformasi menuju pemerintahan yang baik dan demokratis, dalam tatanan desentralisasi. Makalah ini membahas perubahan paradigma yang saat ini terjadi di Indonesia dan melihatnya sebagai argumentasi yang dapat dipergunakan dalam mencari sumber pembiayaan alternatif bagi pembangunan jalan di Indonesia.

Abstract

Road Funds, financed from user charges, have been practiced in many countries in securing more reliable funding for roads. The idea of an off-budget source of funding is appealing. But they are most effective where they form part of a broader strategy to manage roads in a more business-like way on a fee-for-service basis: the link between user charges – tariffs for road use – and road expenditures, reinforced by user participation in their oversight, creates a sense of ownership and puts pressure on road agencies for greater transparency, accountability, and efficiency. This is in tune with Indonesia's moves towards better governance and democratic accountability under decentralization. This paper discusses the paradigm shifts that are now taking place and considers them as the rationales behind the attempt to establish a road fund in Indonesia.

1. Introduction

1.1 Background

In recent years, particularly since the economic crisis of 1997, road maintenance and development in Indonesia have been under-funded. With the Government's priorities focussed on macroeconomic stabilization, financial restructuring, and social safety nets, budget allocations for roads have fallen. For the 9-month fiscal year 2000, only Rp 3.5 trillion (including foreign assistance) was allocated to road works from the national budget. This is well below the average of Rp 6 to 7 trillion estimated to be the minimum needed

annually to prevent further deterioration of the roads, let alone add new links or expand capacity. Poorly maintained roads has resulted in the higher road user costs, worsened road congestion, raised prices throughout the country, and hindered economic development.

With little prospect of a substantial increase in future government spending, alternative ways of securing sustainable road funding are examined. One possibility is to get road users themselves to contribute. Under this concept, the user charges are in the nature of a fee or tariff for road use, rather than a general tax – a

way for road users to secure a level of funding that would guarantee better-quality roads and lower user costs. And provided the revenues were allocated and used effectively for roads alone and not any other purpose, users should benefit overall; their own cost savings should be greater than any extra charges they face. This is important in justifying the concept to decision-makers and the public.

1.2 Objectives and Role of Road Funds

Figure 1 schematically shows the difference between conventional road funding and road fund scheme based on the road user charge. Currently, like many other sectors, road development in Indonesia is funded through state general budget (APBN) which consists of project list budget (DIP) for national roads, *presidential instruction*, or Inpres, grants for provincial and district roads, and external loans that can be used for any road works in needed. In Road Fund scheme, in addition to APBN, alternative funding is created from road user charge as the source of revenues. The objective of Road Fund, therefore, is to secure road development budget, particularly for road maintenance, without too much relying on general budget.

After a stable 7-percent average economic growth for more than two decades before the crisis, Indonesia has now come to realize the difficulties of meeting rapidly growing demand for road development and maintenance through normal budget channels. Although road expenditures have grown more than 330 percent in the ten years between 1984/85 and 1994/95, it was not sufficient to accommodate a 7-10 percent annual growth in road traffic. In 2000 about 63 percent of the district road network is in poor or bad condition and only 19 percent of the whole network is in good and stable condition. Budget allocations have consistently been less than estimates of funding needs. In 2000, according to estimates made using the Strategic Expenditure Planning Module of the Indonesia Integrated Road Management System (SEPM-IIRMS), road

users in Indonesia spent some Rp 186 trillion travelling on the road system. This is far more than the Rp 4.3 trillion budgeted by national, provincial and local governments, excluding toll roads. And relatively small increases in the level of road funding, particularly for maintenance, can achieve disproportionate savings in user costs: the rate of return from a marginal increase in funding at an annual budget level of Rp 5 trillion is over 60 percent per annum.

Establishing a stable, adequate source of maintenance funds undoubtedly offers high economic returns. Under the right conditions, Road Funds can help secure this reliable funding. But they are only one of the broader strategy to reform the management of roads. Apart from the difficult practical problems of introducing them, a key question is whether, as in other countries, the introduction of Road Funds could also help secure these wider sector reforms in Indonesia. With appropriate legal framework, management arrangements, and financial controls, they could potentially be a powerful tool for promoting transparency, accountability, and efficiency in road sector management. Moreover, through the participation of user representatives in their oversight, they could conceivably make road management in Indonesia more responsive to the needs of roads' "customers", whose willingness to pay for better roads could be reflected in a fee-for-service link between revenues and expenditures. This would be in tune with moves towards better governance and greater accountability under decentralization.

But the question remains : if Road Funds are to be implemented in Indonesia, are there strong rationales behind them that can justify the implementation? The following sessions discuss the phenomena in recent Indonesia's political and economic settings that could presumably provide the justification for Road Fund.

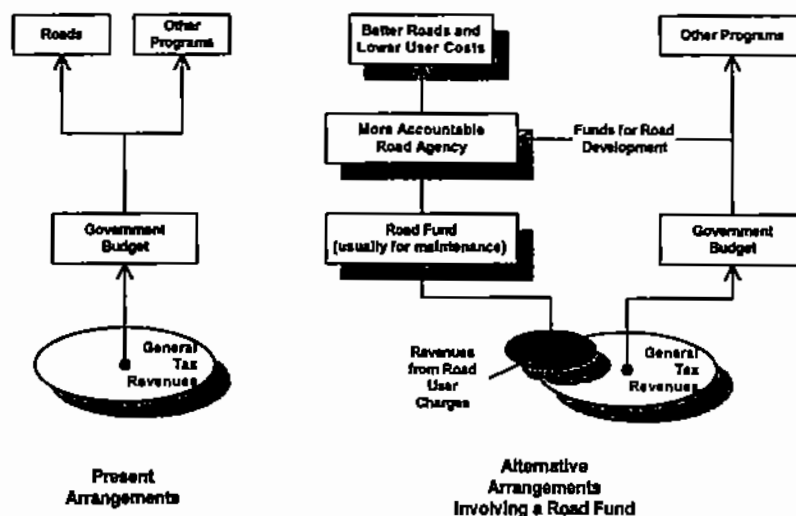


Figure 1. Road Funding : Present Condition and Road Fund Mechanism

2. The Economic Downturn

2.1 The Phenomenal Economic Crisis

In August 1993, the World Bank published its policy research report entitled *"The East Asian Miracle : Economic Growth and Public Policy"*. In the study, eight East Asian countries were categorized as *High Performing Asian Economies* (HPAEs). Led by Japan, the HPAs, based on the duration of their successful record of economic growth, were further subclassified into *The Four Tigers* (Hongkong, Korea, Singapore, Taiwan) and the *New Industrialized Economies* (NIEs), consisted of Malaysia, Indonesia, and Thailand. The report stated that since 1960, the eight HPAs have grown more than twice as fast as the rest of East Asia and significantly outperformed the industrial economies and the oil-rich Middle East-North Africa region. Between 1960 and 1985, real income per capita increased more than four times in Japan and the *Four Tigers* and more than doubled in the Southeast Asian NIEs.

With that high growth of global economy, the performance of Indonesia's economy until the first quarter of 1997 showed no major signs of impending trouble. It still grew by 7.9 percent between

1994-1996; manufacturing industry grew even higher, by 11.6 percent, supported by a relatively low inflation rate of 7.8 percent. Approved domestic investments increased significantly from Rp. 53 trillion in 1994 to Rp. 105.3 trillion in 1996. Foreign direct investment rose from US\$ 2.6 billion to US\$ 6.5 billion.

Everything seemed all right, until the trouble began in July 1997. Preceded by the worst El-Nino drought, the trouble which was initially emerged as a rapid currency depreciation, quickly turned into economic crisis that changed Indonesia's economic development picture substantially. The economy that had been previously progressing on the basis of about 7.0 percent growth for over two decades, shifted its course to a mere survival of how to keep food and job security to the people. The economic paradigm has changed from growth to survival. This in turn has severe impacts on the production sectors of goods and services. Property and construction sector was the first casualty; it had come to a full stop in the beginning of the crisis. This was followed by other economic sectors such as trade, tourism, industry, and services.

2.2 How Bad is the Damage?

Just before the crisis, in two year period of 1994-1996, Asia's economy grew on the average of 9.0 percent per year. In 1997, when the crisis began, it slowed down to 6.7 percent. Likewise, world's economy which in 1997 grew by 4.1 percent slowed down to 3.1 percent in 1998. But international trade in 1997 still showed a growth of 9.4 percent in which exports in developed countries grew by 9.8 percent and imports grew by 8.6 percent. When Asia Crisis originally emerged in Thailand in mid 1997, Indonesia was still believed to be unaffected. Although some observers and analysts have expressed their concern about the growing vulnerability of Indonesia's economy due mainly to mounting external debt, slowing down of export growth, and declining competitiveness, very few, especially at the government and monetary authority sides, predicted that the crisis will hit Indonesia so severe. Table 1 shows that economy during the last four years before the crisis was relatively stable without symptoms of troubles. Real GDP grew stable at an average 7.8 percent per annum. Consumption rates, national saving, inflation rate, and gross fixed investment were all indicating internal economic stability. Perhaps, the discouraging figures can be found in the current account deficit which has been growing larger from US\$ 2.94 billion in 1993 to almost US\$ 7.0 billion in 1995 and further to US\$ 8.1

billion in 1996. This growing deficit can be seen from the facts that although oil and non-oil exports grew steadily during the period of 1993-1997, non-oil imports and services associated with it grew even larger than exports.

Another hints probably came from the banking and financial sector. High interest rate combined with insufficient domestic capital market has forced private investors to borrow massively from international money market. As a result, total foreign debt soared from US\$ 66.9 billion in 1990 to US\$ 99.6 billion in 1996; accordingly, debt service ratio (DSR), as a percentage of exports, increased from 30.9 percent in 1990 to 33.0 percent in 1996. The bad story of this massive, short terms borrowing, was that much of the private money was invested in such economic sectors that are most vulnerable to monetary fluctuations as property and real estates. Bad practices of private banking in which loans and credits were circulated among their own groups of business hurt the finance sector deeply as the numbers of bad debts and non-performing loans accumulated.

Before the crisis, Indonesia's economic fundamentals had been performing remarkably well. But the contagious effect of the crisis spread very rapidly. On July 2, 1997, Thai government decided to float Baht, followed by Philippines Peso on July 11.

Table 1. Selected Key Indicators (Pre-Crisis)

Indicators	1993	1994	1995	1996	1997
<i>(1993 constant Rp billion)</i>					
Real GDP	329,776	354,641	383,792	414,419	433,685
Government Consumption	29,757	30,443	30,851	31,681	31,740
Private Consumption	192,958	202,038	234,245	254,500	273,593
Gross Fixed Investment	86,667	98,589	112,386	128,699	134,034
GDP growth (%)	7.3	7.5	8.2	7.9	4.7
Inflation (CPI, %)	4.9	9.8	9.2	8.6	6.5
<i>(US\$ million)</i>					
Oil & Gas Exports (Net)	2,534	3,787	3,473	4,538	1,557
Non Oil Exports (Net)	-5,474	-7,275	-10,460	-12,606	-4,049
. Exports, fob	27,170	31,716	37,138	39,267	45,829
. Imports, cif	-25,410	-30,815	-37,597	-41,126	-39,067
. Services (non freight)	-7,234	-8,176	-10,001	-10,747	-10,811
Current Account Balance	-2,940	-3,488	-6,987	-8,068	-2,492

Source : World Bank (1998); 1997 figures are preliminary

In response, the Indonesian authorities widened the exchange rate band from 8 to 12 percent. However, this seemed to be the beginning of the crisis. Rupiah immediately dropped by 7 percent. Subsequently after that, it was realized that exchange rate band was too expensive to defend that on August 14, the authorities floated the Rupiah and simultaneously tightened monetary policy, so much as to push overnight interest rate to a deadly 81 percent. But depreciation of Rupiah to dollar continued unabated. At the end of July the value of Rupiah to US dollar has fallen by 10.7 percent, then continued falling by 25.7 percent in August, 39.8 percent in September, and 109.6 percent in December. On January 1998, the declining rupiah had reached the level of Rp.13,500 per US dollar, fluctuated again to a level of about Rp. 12,500 in May, and on June 28 reached the peak of Rp. 16,500.

The degree of economic crisis was projected by the World Bank for fiscal years 1997/98 and 1998/99 as shown in *Table 2* below. Although there are some signs of economic revival after 2000, the overall pictures are not so promising. From a 7.8 percent growth in 1996/97, real GDP grew much slower to only 1.0 percent in 1997/98, plunged to a recession level of minus 15.0 percent in 1998/99, and remained stagnant in fiscal year 1999/2000. Similarly, because of the shrinkage of level of investment by 55.0 percent, the collapse of banks and corporates, and dwindling real incomes, domestic demand would decline very sharply. Consequently, imports are expected to shrink considerably to a level of about 14 percent in 1998/99 before starting to recover in 1999/2000. All the economic contraction will result in rapidly rising unemployment, a decline in social welfare,

and a doubling in the incidence and depth of poverty.

Road sector was badly damaged by the downturn. Due mainly to deferred maintenance and rehabilitation resulting from a drastic budget cut, almost 50 percent of about 291,000 kilometers of national, provincial, and district road networks has deteriorated into unstable condition, reducing travel speed significantly, worsening congestion, and resulting in big economic losses to the users. More than 63 percent of 213,000 km kabupaten roads are in poor and bad condition. It will need about Rp. 6 to 7 trillion per year to bring the roads back to a maintainable condition.

However, it is predicted that government budget for road sector will not recover to the pre-crisis level, even after the economy has probably grown to 7 percent sometime in this decade. This condition provides a strong reason for finding an alternative means for securing road funding. Therefore, Road Fund is considered crucial for maintaining the stability of road networks and hence supporting efficient economic mobility for the nation.

3. The Declining Role Of Government Budget

3.1. Road and Transport Expenditures

Long before the crisis emerged, road infrastructures provision has been a major commitment in government investment. Beginning in Repelita V (1989-1993), transport sector, with the assistance of foreign loans, spent Rp 27,810 billion or 24.8 percent of the total development expenditure of Rp 112,053 billion, an average of more than Rp 5,562 billion a year.

Table 2. Macroeconomic Outlook During the Crisis

	Actual	Projected			
	1996-1997	1997-1998	1998-1999	1999-2000	2000-2001
Real GDP (% p.a.)	7.8	1.0	-15.0	-2 to +2	+2 to +4
Investment	10.2	-11.0	-55.0	4.0	6.0
Imports	11.3	-5.8	-14.0	5.0	9.0
Current Account Balance/GDP	-3.5	-1.0	1.7	1.8	1.5
Total Debt Service/Export	34.2	39.5	38.0	35.0	34.0
Gross Reserve (months of imports)	7.0	4.6	5.1	5.1	5.1

Source : World Bank Report (1998)

The importance of transport sector in economic development was continuously represented by its share in the development expenditures during the first three years of Repelita VI (1994/95-1996/97). Again, with the assistance of multilateral and bilateral loans, transport sector has been the second biggest recipient of government expenditures after regional development, with total expenditures of Rp.34,7 trillion, constituted about 18.8 percent of the total state development budget. In fiscal year 1998/99, after a year of economic crisis, government shifted its budget focus to social safety net and other poverty alleviation programs channelled through regional development and agricultural programs. *Figure 2* graphically shows the road expenditure as compared with total development expenditure during the fiscal years 1984/1985 to 1999/2000.

Table 3 shows road and transport sector expenditures financed by Rupiah only over the years of Repelita V and Repelita VI. One can see a consistent trend of budget rising in transport sector development during the ten fiscal years, starting with

only around Rp. 952 billion in 1989/90 and ending up with Rp. 4.608 billion in 1997/98, although budget was decreasing to Rp.3,846 billion in 1998/99 due to the economic downturn. The biggest part of this expenditure has been the road subsector with an average of about 82 percent of the total sector expenditure. *Table 3* indicated that both DIP and Inpres have also been increased steadily.

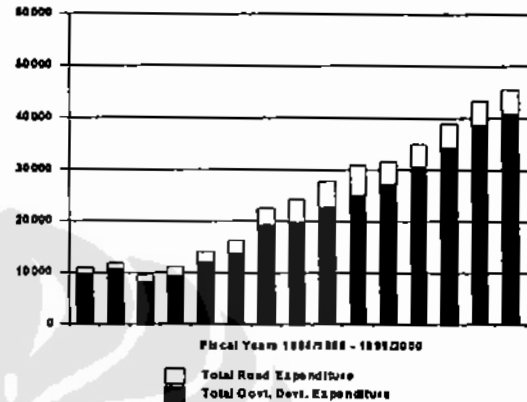


Figure 2. Road Expenditure as compared with Total Government Expenditures (Rp.billion)

Table 3. Road and Transport Expenditures During Repelita V & VI (Rounded up to the nearest Rp.million, current market price)

Fiscal Years	DIP Budget	Inpres Grant	Total Subsector	Total Sector	% Road to Total
Repelita V					
1989/90	338,133	463,975	802,108	951,998	84.15
1990/91	703,782	798,489	1,502,271	1,800,914	83.42
1991/92	1,120,815	1,188,188	2,309,003	2,753,825	83.85
1992/93	1,371,404	1,336,760	2,708,164	3,263,295	83.00
1993/94	1,527,322	1,555,310	3,082,632	3,985,911	77.34
Repelita VI					
1994/95	1,598,000	1,403,260	3,003,460	3,678,224	81.65
1995/96	1,689,024	1,508,260	3,197,284	3,850,048	83.05
1996/97	1,712,565	1,623,303	3,239,632	4,039,473	80.20
1997/98	1,835,738	1,812,727	3,648,465	4,607,885	79.18
1998/99	1,227,542	1,816,136	3,043,678	3,846,637	79.12

Source : Transportation Bureau, Bappenas, 1998. DIP Budget is devoted for national road, Inpres Grant is given to regions for funding of provincial and *kabupaten/kotamadya* roads.

3.2. Road Sector Performance

As a result of adequate funding, total length of national road network has reached 291,569 km in fiscal year 2000, consists of 25,919 km national roads, 37,372 km

provincial roads, 15,214 km urban roads, and 213,064 km district/urban roads. Government investment focused on preservation and betterment of the existing road networks as well as developing new

corridors Major arterial roads across big islands had also been developed, including 2,900 km Trans Kalimantan, 3,526 km Trans Sulawesi, 651 km Flores North Corridor, 446 km in Ceram Island, and 1,610 km Trans Irian along the border line. During the same period, more than 176 km bridges has been rehabilitated and upgraded and more than 15 km new bridges had been built.

3.3 The Declining Budget

A disturbing feature of road expenditure trends has been a fall in the budget for national and provincial road maintenance and betterment since fiscal year 1993/1994. *Figure 3* shows that government expenditures on roads have increased steadily during the last 16 years from Rp. 946.6 billion in 1984/85 to Rp.5,683.9 billion in 1999/2000, including investment in toll roads. Roads have always accounted for a significant share of government development expenditure, a share that has rarely been below 10 percent but has been as high as 22.1 percent in 1993/94.

After 1993/94 there was a fall in expenditures on road maintenance and betterment. Only in the last years have budgets picked up, with some evidence of recovery from the crisis of 1997. With several recent years of cuts also in the betterment budget, a further deterioration in road conditions can be expected. The cuts have been necessitated by the need to focus on social safety net, food security and basic health, education and job creation programs since 1997. The reduction of road maintenance budget has a significant impact on the rise of road user cost. This provides another reason to establish a road fund.

4. The Decentralization Process

4.1. The Decentralization Laws of 1999

Law 22/1999 concerning decentralization was issued on May 7, 1999, followed by Law 25/1999 regarding a fiscal balancing between central and regional governments. Both laws mandated the implementation of decentralization in Indonesia. Article 7 of

Law 22 states that except for foreign policy, defense, justice, fiscal and monetary system, religion affair, and macro strategic planning, all conducts of administration and governance authority will be transferred from central government to regional governments. Article 8 states that the transfer of power from central government to local governments will be accompanied by its corresponding budget, infrastructures, and human resources capable of undertaking the conducts of decentralization. Articles 3 to 16 of Law 25 describe various sources of revenue and its balancing between central and local administrations.

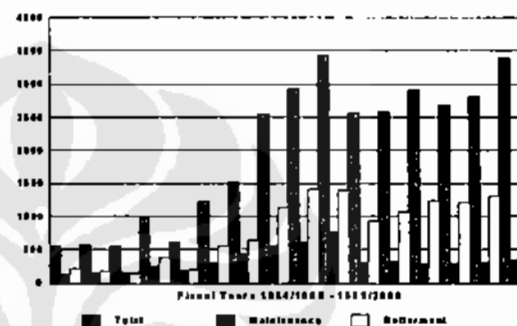


Figure 3. Government Expenditure on National & Provincial Roads (Rp.milion, current price)

The Laws that take effect in January 1, 2001, mark an unprecedented big reforms in the Indonesian modern history of political and administrative aspects of public governance. The pendulum is swinging vigorously from one side of massive centralization to the other side of decentralization. The role of central government in the socio-economic development would somehow be diminishing while local governments would be playing a much greater role in determining and navigating their own socio-economic courses.

Decentralization will create or strengthen, both financially and legally, subnational units of government, the activities of which are substantially outside the control of central government.

4.2. Democracy and Accountability

Decentralization is one of the paradigm shifts that is now taking place in Indonesia besides great public pressures for a democratic society, and an increasing demand for compatibility, complementarity, and compliances to the so-called economic globalization. While the process of fiscal decentralization seems to be a critical path to a smooth financial reform, what more important than that, however, is whether local governments would, especially in the district and municipality levels, be able to engineer and manage the expenditures in such a way that local resources would be optimized and regional economy would grow to increase the social welfare of the people. It is logical to postulate that with more political and financial powers at hands, local governments would be able to accelerate their regional economic development. Nevertheless, it is also legitimate to question whether fiscal decentralization would eventually lead to a more rapid regional development and narrowing regional disparity. These, however, remain to be seen.

Decentralization by itself is not the final goal. It should be regarded as a vehicle to regional prosperity and increasing social welfare of the local people. Therefore, not only decentralization brings with it power and authority for local governments, but in the same time also responsibility and public accountability. Decentralization has two sides : transfer of authority and transfer of economic sources. Transfer of authority is actually a process of relinquishing power to regional governments to carry out public administration and other development tasks in order to better serve the public. Transfer of economic sources is giving power to regional governments to manage economic sources and revenues, and development expenditures.

4.3 Preparations for Decentralization

Government has decided to implement the fiscal balancing mechanism contained in Law 25/1999 in fiscal year 2001. The mechanism establishes Balancing Budget

(*Dana Perimbangan*), consists of 3 elements : (1) part of revenues from Land and Property Tax (PBB), Fee on Transfer of Right of Land and Property (BPHTB), and revenues from natural resources; (2) DAU (*Dana Alokasi Umum*, General Allocation Fund); (3) DAK (*Dana Alokasi Khusus*, Special Allocation Fund). Balancing Budget is defined as APBN budget that is allocated to the regions for them to carry out decentralization. DAU is APBN budget allocated to the regions with the purpose to create equity in fiscal ability of the regions. DAK is APBN budget allocated to the regions for funding specific development activities. Authority of regional governments in managing regional taxes and retributions is determined according to Law 18/1997, which has been replaced by Law 34/2000.

In supporting the implementation of decentralization, government has also issued several Government Regulations (*Table 4*). GR 25/2000 explicitly states the authority of central government and specifically describes its boundaries within each sectoral portfolios, and the authority of provincial governments for the administration of inter-kabupaten/ intercity matters, such as regional macro planning, regional ports management, and provincial spatial planning.

The sectoral portfolios under the authority of provincial governments were also stated by GR 25/2000. GR 104/2000 provides detail explanation and formulation of Article 10 Law 25/1999. GR 107/2000 regulates the possibility of regions to receive both domestic and foreign loans (bilateral or multilateral), subject to approval by DPRD.

Table 4. Government Regulations Issued to Support Decentralization

GR Numbers	Regarding
25/2000	Authority of Central Government and Provincial Government as Autonomous Regions
104/2000	Balancing Budget
105/2000	Management and Accountability of Regional Budget
106/2000	Financial Management and Accountability in the Conduct of Deconcentration and Assistance
107/2000	Loans to Regions
108/2000	Reporting Procedures by Governor, Bupati, and City Major
110/2000	Financial Status of Regional Legislative Council (DPRD)

4.4 Decentralized Road Management

Road is one sector in which most portfolios in both sides of revenue and expenditure will be decentralized. Planning, financing, and executing the rehabilitation, maintenance, and building provincial and local road networks will be carried out by autonomous governments with or without the assistance from central government. In the past, although decentralization had somewhat been practiced in planning provincial and district roads through Inpres Grants (IPJP and IPJK), in general, planning process and investment strategy have been centrally based on a micro, sectoral consideration. Although this approach has been successful in providing access and outlets for people and goods movements in the country, nevertheless, sectoral approach has failed to recognize the true economic and social relationship that transport facilities have created with the regional development and the social welfare of the people in the region. So far, no effort has been made to investigate the economic linkages between road infrastructures and the economy of the region in a more quantitative manner.

Under decentralization, there is a need for local governments to conduct a regional economic analysis to examine economic characteristics in their regions. It is important for them to understand fully how the mechanism of economic interactions works. These include the sectoral interactions within and between regions, inter-and intraregional trades, the capacity of infrastructures to carry out the economic movements, the quality of human resources, the quality and amount of natural resources,

the existing law and regulations, and the expected laws and regulations capable to speed up regional economic development.

5. Fiscal Decentralization

5.1 Review of APBN

The most explanatory indicator to measure the financial relationship between central and regional governments is probably the national state budget (APBN) which is legalized annually by the parliament to become a law. *Table 5* shows expenditure sides of APBN during Repelita V and Repelita VI. Sources of revenue are oil and gas, taxes, non-tax revenue, program aids, and project aids. The last two sources are originated from external loans. There are two parts of expenditures : routine and development expenditures. Part of routine expenditure is transferred directly to regions and part of development expenditures are also transferred to regions in the forms of block and specified grants (Inpres).

5.2 Balancing Budget of APBN

Table 5 reveals the fact that money transferred to regions in the pre-decentralization era was only about 20.5 percent in the average of total national revenue of APBN. Things will change significantly under decentralization. Law 25/1999 requires the implementation of fiscal decentralization by 2001. Consequently, APBN 2001 is the first fiscal year to apply the distribution of balancing budget between central and regional governments. This budget consists of : (1) revenue sharing on taxes and natural resources; (2) general allocation fund

(DAU); and (3) special allocation fund (DAK). In the past, revenue sharing between central and regional governments had in fact been implemented on land and building tax (PBB), fee on the right to land and building (BPHTB), and on some revenues of natural resources, excluding oil and gas. Law 25/1999 extended the balancing budget to include revenues from oil and gas, mining, forestry, and fishing. Table 6 illustrates the structure of the balancing budget as stated in Law 25/1999. In addition, the new income tax law (Law

17/2000) extends Revenue Sharing to regions to also include personal income tax (PPH Article 21 for employees and Article 25/29 for individual). Based on the provision of Law 25/1999, Law 17/2000, and Government Regulation 16/2000 in revenue sharing, it was calculated that in 2001 regional governments will get Rp.18.25 trillion or 24.4 percent of total balancing budget (Rp. 4.09 trillion for provinces and Rp. 14.16 trillion for Kabupaten/Kota).

Table 5. Expenditure Side of APBN During Repelita V and VI (Rp.billion)

Fiscal Years	Routine Expenditures		Development Expenditures			Total Expenditures	
	Sectoral	Subsidy to Regions	Sectoral	Regions	Project Assistance	Sectoral & PA	Regions
Repelita V							
1989/1990	20,757.9	3,577.3	3,153.7	1,763.3	7,364.5	31,276.1	5,340.6
1990/1991	25,233.6	3,887.5	5,134.1	2,999.7	7,034.8	37,402.5	6,887.2
1991/1992	24,676.6	4,376.4	7,483.7	4,113.4	8,589.6	40,749.9	8,489.8
1992/1993	28,221.9	5,383.5	10,032.8	5,036.0	10,581.4	48,836.1	10,419.5
1993/1994	33,381.2	6,908.7	10,915.7	5,515.8	10,752.5	55,049.4	12,424.5
Repelita VI							
1994/1995	36,796.6	7,272.4	11,239.2	7,353.0	9,837.8	57,873.6	14,625.4
1995/1996	42,208.4	8,226.6	10,980.3	7,211.6	9,008.8	62,197.5	15,438.2
1996/1997	53,203.6	9,357.5	12,159.2	8,868.6	11,900.1	77,262.9	18,226.1
1997/1998	74,734.0	9,872.2	11,576.9	10,024.8	23,817.0	110,127.9	19,897.0
1998/1999	117,526.8	13,289.7	14,397.0	13,806.3	40,540.9	212,853.3	27,096.0

Source : GOI, Fiscal Note & APBN 1999/2000

Other sources are coming from DAU and DAK. Based on Article 7 Law 25/1999, at least 25 percent of total gross domestic income must be devoted for DAU. Since only a few regions are resource-rich regions, Revenue Sharings tend to create imbalances among regions. The strategic role of DAU, therefore, is its ability to create fiscal balances among regions based on the real needs of the regions. For FY 2001, DAU allocation is Rp.56,033.5 billion, constitutes the biggest component (74.8 percent) in balancing budget.

According to Article 8 Law 25/1999, 40 percent of Reforestation Fund shall be allocated to DAK. Unlike Revenue Sharing and DAU, local governments have a limited freedom to use DAK which is somewhat "earmarked" for specific activities, including reforestation. To get DAK funds, Regions will have to propose a specific project to the related technical department and there must be a local

counterpart funding available in the APBD to carry out the project. For FY 2001, the amount of DAK is Rp.607.9 billion. Table 7 shows the composition of balancing budget for fiscal year 2001. A total of Rp.74.9 trillion balancing budget was transferred to regions in FY 2001 (Rp.9.7 trillion for provinces and Rp.65.2 trillion to kabupaten/kota).

5.3 Funding Regional Roads

With fiscal decentralization has already taken place and road planning and financing has been decentralized, it is now the responsibility of regional governments to establish a funding mechanism for securing road maintenance budget. In addition to Revenue Sharing, DAU, and DAK, regions are now free, with legislation approved by DPRD, to finance their own road network through road user charge and accordingly establish a Regional Road Fund mechanism.

Table 6. The Structure of Balancing Budget 2001

Sources of Revenue	Proportion of Central Government	Proportion of Regional Governments		Remarks
		Province	Kabupaten/Kota	
Revenue Sharing				
PBB	-	16.2%	79.5%	4.3% of PBB was used for operation cost
BPHTB	-	16.0%	84.0%	64.0% of mining revenue is distributed to the Kabupaten of producers
Forestry	20.0%	16.0%	64.0%	
General Mining	20.0%	16.0%	64.0%	
Fishery	20.0%	-	80.0%	Fishing revenue is distributed evenly
Oil	85.0%	3.0%	12.0%	
Natural Gas	70.0%	6.0%	24.0%	
DAU	75.0%	2.5%	22.5%	
DAK	60.0%	40.0%	-	

Source : Fiscal Note and APBN 2001

Table 7. Balancing Budget 2001 (Rp.billion)

Sources of Revenue	Budget	Memorandum Items
Revenue Sharing	18,254.9	Balancing Budget for Provinces : Rp. 9,690.1 billion
• PBB & BPHTB	5,348.2	Balancing Budget for Kabupaten/Kota : Rp. 65,206.2 billion
Kabupaten/Kota	4,416.8	> GDP : Rp. 1,408,561.2 billion
Province	931.4	> Revenue from Natural Resources : Rp. 53,167.1 billion
• Natural Resources	1,700.0	> Revenue from PBB and BPHTB : Rp. 5,539.0 billion
Kabupaten/Kota	1,406.7	> Gross Domestic Income : Rp. 242,996.7 billion
Province	293.3	Revenue sharing for PBB & BPHTB is based on the provision of Government Regulation 16/2000
• Oil & Gas	8,103.1	Revenue sharing for Natural Resources and Oil & Gas are based on the provision of Law 25/1999
Kabupaten/Kota	6,482.5	Revenue sharing for Income Tax is based on the draft GR of Law 17/2000
Province	1,620.6	
• Income Tax	3,103.6	
Kabupaten/Kota	1,862.2	
Province	1,241.4	
DAU	56,033.5	Law 25/1999 : 25% of total domestic income to create fiscal balancing among regions
• Kabupaten/Kota	50,430.1	
• Province	5,603.4	
DAK	607.9	Earmarking fund for specific activities in the regions
Total Balancing Budget	74,896.3	Rp.9.7 trillion for provinces and Rp.65.2 trillion for districts/cities

Source : Fiscal Note and APBN 2001

The capability of regions to collect revenues from road users, however, varies significantly from province to province. *Figure 4* depicts the provincial revenues that were collected through vehicle registration tax (PKB), vehicle ownership transfer fee (BBN-KB), and fuel levy (PBB-KB) for fiscal year 1999/2000 for Jawa Bali region. Shown also the corresponding expenditures on roads. Not shown in the figure are revenues from vehicle inspection and route permits which are not significant. The amount of fuel levy is also insignificant. *Figure 5* displays the corresponding numbers for the region of Eastern Islands. The two regions represent two extremes. Provinces in Jawa Bali

collected Rp.1,57 trillion in road revenue but only spent Rp.247.8 billion (15.7 percent) on road expenditure. Eastern Islands, on the other hand, were only able to collect about Rp. 50.7 billion or 25.7 percent from what they spent on road. These revealed the facts that transport sector in Jawa Bali region was subsidizing other sectors while in Eastern Islands, road sector was subsidized heavily by other sectors. Regardless of the variation, however, there exists a financial capability of provinces in financing road works, if there is political will to do so. Accordingly, Road Fund at regional level is a plausible option for securing stable road funding.

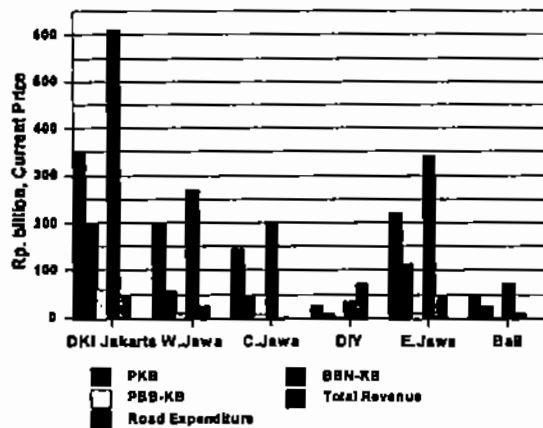


Figure 4 : Road Revenue and Expenditure Jawa Bali, 1999/2000

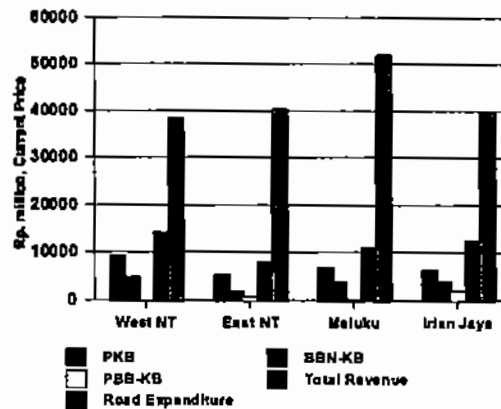


Figure 5 : Road Revenue and Expenditure Eastern Islands, 1999/2000

6. Conclusions

Road sector policy after the economic downturn would be strongly influenced by the process of paradigm shifts described above. First, macroeconomic condition in the next several years to come. Despite political tension and regional conflicts that have been occurring during the last 15 months, Bappenas, in its economic projection (Propenas), indicated a continuous growth of 3.8 percent in 2000, and subsequently rise to 6 to 7 percent in 2005. This growth is triggered by the lowering inflation rate from 6-8 percent in 2000 to around 3-5 percent in 2005. Bappenas also indicated that the start of economic recovery is stimulated by consumption expenditures of both government and the general consumers. In line with the progress of bank restructuring and partial settlement of private debt, it is also predicted that private investors will resume their investments in 2001 and thereafter up to 2005. Consumption rate will also high during the period representing higher purchasing power and reflected in the increasing income per capita up to US\$ 1,400 in 2005. It is also projected that private investors would resume investment activities in 2001 as banking restructuring and private debts have been partially done. With 7 percent economic growth and only 19 percent of national road network is in good condition, road sector will need to be restructured accordingly to meet the demand

of economic mobility. Somewhere along the line, Road Fund will be a plausible option for the restructuring.

Road network in Indonesia is a multi-billion dollar public assets that has been accumulated over many years of capital investment and development efforts. This huge assets must be maintained. However, in the future, even after the economy has recovered, it is almost impossible to expect a Rp. 7 trillion per year funding from APBN for road maintenance and rehabilitation program. Road user charge is a logical solution to it. Let the users pay for a better road that in turn will save their cost of travel. Road Fund is a mechanism to link this user cost with the better road that is perceivable to the users.

Decentralization in which local governments will have a full authority on the planning, financing, and implementing road works in their regions provides another reason for Road Fund. This is also in accordance with the authority of local governments to collect taxes and retributions that are related with roads such as PKB, BBN-KB, and Fuel Tax (PBB-KB). These are regional revenues from road users that can be used as a source for Regional Road Fund.

More than just securing a stable source of funds for road maintenance and rehabilitation programs, Road Funds has the other side of importance. That is the road

sector reform itself, in which road will be managed in a professional and efficient way by a transparent road agency accountable to the public. In the ultimate form, Road Fund can be run by an independent, multi stakeholders road agency, free from intervention from government and politicians.

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