

Role of Urban Public Transport Subsidy in Indonesia

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Abstract:

The subsidies for public transport entails a controversial discussion on the pros and cons. On one hand mode share of public transport will decrease with increasing income levels towards private motor vehicle use. Considering the poor attractiveness and quality of public transport advocates say that subsidies are intended to improve the performance of public transport as well as controlling the growth of private vehicles, particularly the growth of the motorcycle. On the other hand refer to the fact that subsidies for urban public transport, particularly in countries with high population density are not necessary because of its high passengers demand and the possibility to cover operational costs by fare revenues.

This paper seeks to explain the need for government subsidies for the development of public transport but in the strategy to reduce the amount of subsidy to be gradually relocated to other places that are more in need.

Key Words : *public transport, subsidy, fuel price*

1. INTRODUCTION

Urbanization and economic developments proceeds very rapid in Indonesia. With rising income and prosperity various problems appear. In the transport sector traffic congestion and environmental pollution has become a daily appearance and is not a problem of megacities anymore, but also affecting smaller cities. Urban quality of life decreases, caused by a disproportional high growth of private motor vehicles. It is estimated that the annual average growth rate of motorcycles and cars in Indonesia has accounted for 15% over the last three years. Traffic jams and accidents increase just as much as air and noise pollution from motor vehicles and worsening conditions for pedestrians and cyclists and for public transport pick up the pace.

One governmental instrument to improve the situation is subsidies for public transport. Generally subsidy policies on public transport are implemented under two major premises. First they may be motivated because of the “social function”. Vulnerable groups such as low income households, persons without a driver license, elderly and persons with a handicap, need public transport to take part in daily routine and to avoid problems of social exclusion. Second, public transport subsidies may be motivated as an instrument to increase the share of public transport and to address urban transport problems caused by private motor vehicle use. Like depict above these problems are e.g. air pollution, noise or congestion. Subsidizing public transport may aim to encourage a modal shift away from private motor vehicle use towards the utilization of more environmentally friendly modes like busses. Subsidies are

provided, particularly in Indonesia, by central Governments in remote areas aiming e.g. to provide bus services with fares below market price on pioneer routes to ensure the junction and (economic) exchange between deprived and wealthy areas of the country.

Beneath these positive objectives public transport subsidies in Indonesia often lacks of incoherent and intransparent policies causing an inefficient allocation and application of public funds. Results are e.g. an economic unnecessary high stock of staff in public transport companies.

1.1 Vehicles

The number of vehicles continues to increase. Data on the number of vehicles in 2008 from the National Statistic Bureau shows the total number of vehicles reached 65,273,451 consisting of compositions 9859,926 private automobile, bus 2,583,170, 5,146,674 trucks and motorcycles 47,683,681. The ratio of the number of vehicles on the population the vehicle ratio to population is increases dramatically from 92.5 (2000) to 285.7 (2010) or triple during 10 years. Judging from these parameters, the city including the cities with the highest rate of growth in vehicle along with the cities of Tokyo, Taipei, Seoul, Manila, Shanghai and Bangkok.

1.2 Role of Public Transport

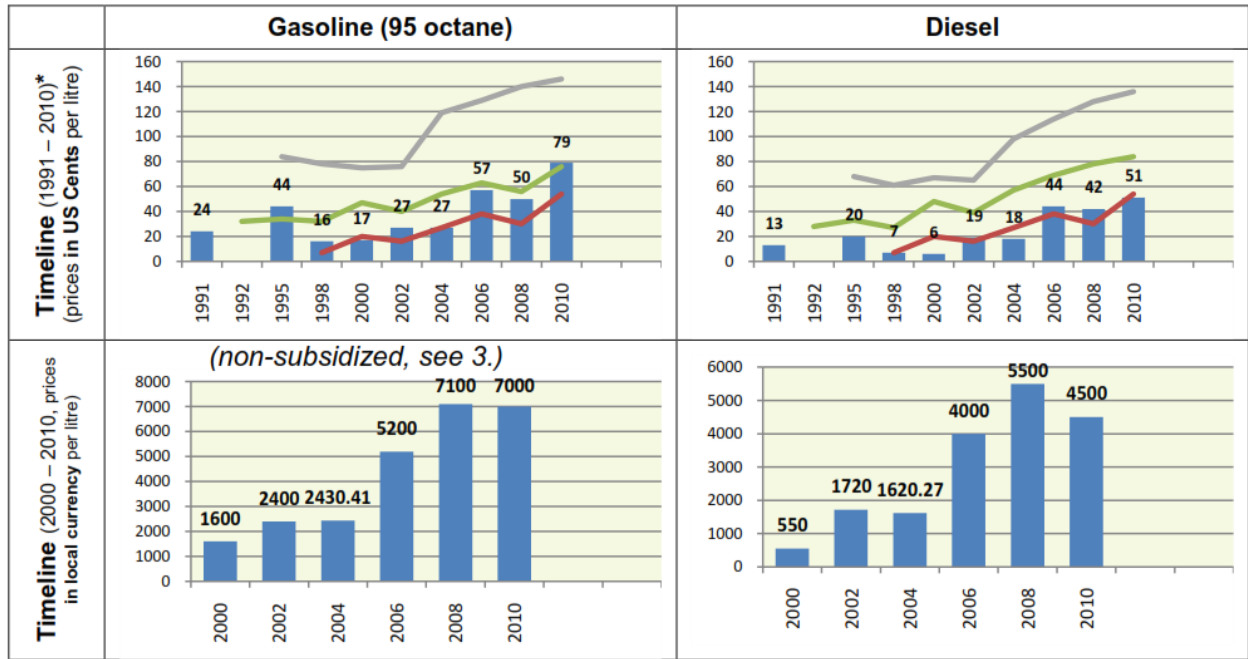
Public transport is the backbone of the movement of urban transport. Metropolitan cities such as Jakarta, Surabaya, Bandung, Medan and Makassar relying role to transport freight for more than 30-60% of trips each day. Modes of transportation ranging from public transportation, bus medium, large buses, BRT, rail and even rickshaws and taxis and shuttles moving river transport accessibility between urban corners fast, easy and inexpensive.

1.3 Fuel price

Indonesia has quite a lot of energy resources. Transport fuels are highly subsidized in Indonesia, resulting in fuel prices that are among the lowest in Asia. As of February 2011, about 43% of the actual costs of 88 octance gasoline are covered by the government through subsidies.

The government should work hard to improve the society welfare, where transport sector is mostly to produce economic value added, the government should then improve transport sector services. One of them has been allocating transport subsidies for public transport. Because the subsidies mean an immense burden for the national budget, several ways of how subsidies can be reduced were investigated. A proposal in early 2011 was to limit the amount of subsidized fuels sold, e.g. by stopping subsidies for private car owners while mass transit, industries, etc. still receive subsidies.

The fuel price of Indonesia is far less than US price and the lowest European prices, as in figure 1 (BMZ, 2012).



*benchmark lines: red=price of crude oil; green=US-price; grey=lowest EU price (see full report for more information)

Figure 1. Indonesia Oil Price 2011

Comparison among Asian countries, Indonesia is a highly subsidies country where retail price of gasoline and diesel below price of crude oil on the world market (BMZ, 2011), as in figure 2.

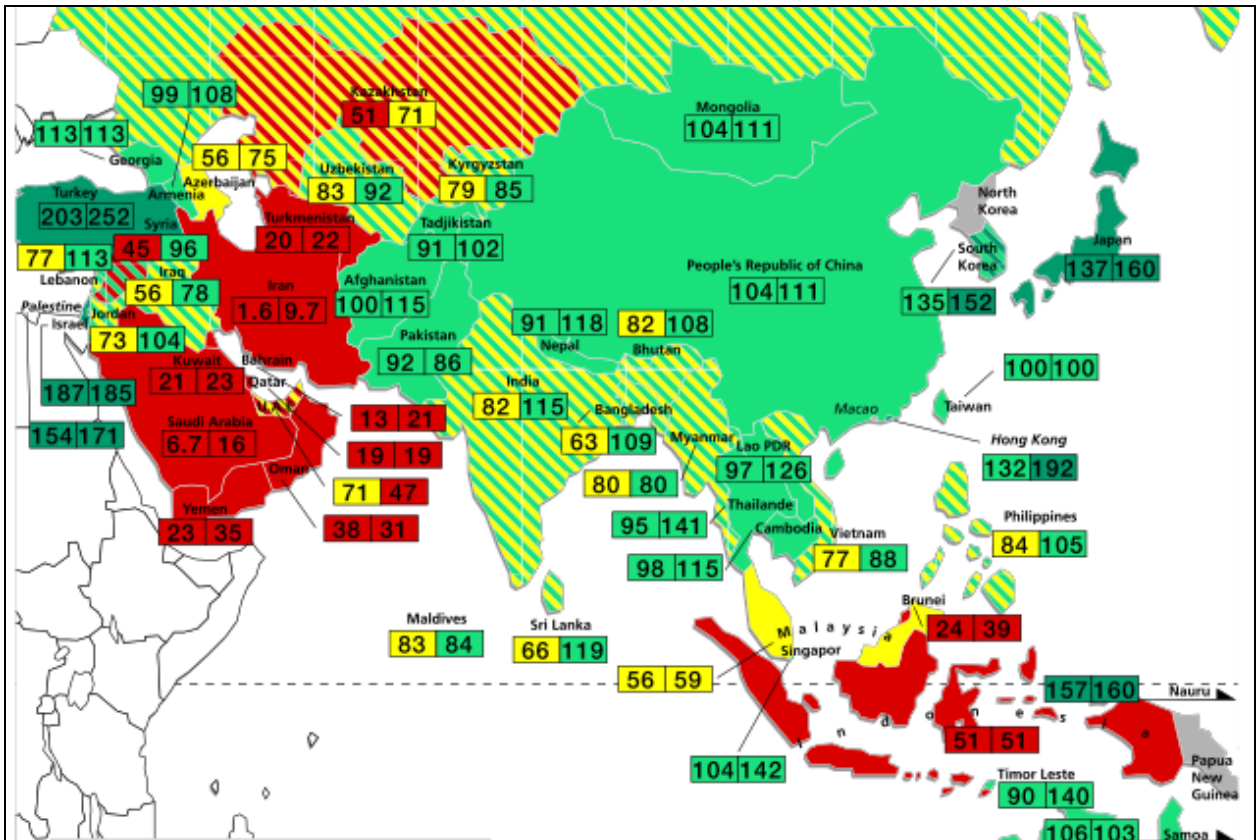


Figure 2. Retail oil price in Asia (in US cent/liter)

Retail oil price is categorised by 4 groups: very high fuel subsidies, fuel subsidies, fuel taxation and very high fuel taxation. Figure 3 explains the price category.

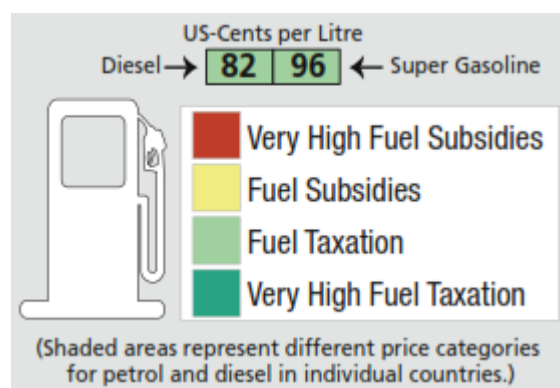


Figure 3. Retail oil price category

1.4 Fuel Consumption

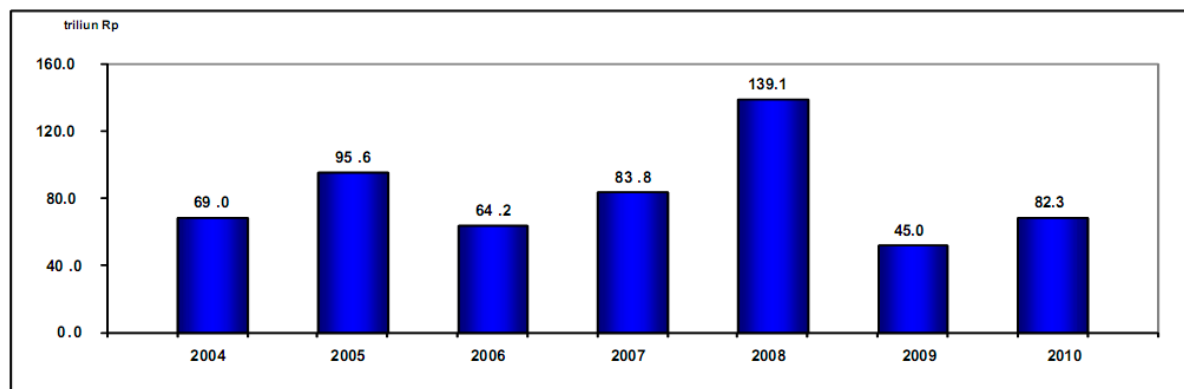
In Indonesia, public spending is much smaller on mass transit than on fuel subsidies. Fuel subsidies encourage driving, making Jakarta's, and many other cities', terrible traffic worse, and leave most stuck in traffic, relying on an underfunded transit system, and arriving late to school.

Road-based modes of land transportation is the largest consumer of the fuel needs of national (DG DGLT, 2010). Needs of the road sector movement consumes 88% of all fuel needs, while the rest is consumed by the air transport sector (4%), marine transportation (7%) and rail (1%). Estimated future consumption trends roads sector will also remain dominant. The number of vehicle bus reached 3.35% of the population of vehicles but motorcycles skyrocketed reached 74.12%. In the land transport sector, consumption of premium is 61.17% and diesel is 38.83%.

Indonesia, and as nations such as Iran, India, China, Nigeria, Venezuela, Mexico, and the US, spends about 15 percent of its entire budget, USD \$18.5 billion, subsidizing fuel prices. That's more than Indonesia's government spends on infrastructure, the military, or public health and education together. This does not include the costs incurred by pollution, congestion, accidents, infrastructure, or the funding lost to more equitable transportation modes like bus rapid transit or cycling.

According to the International Energy Agency, 37 nations in 2010 spent \$409 billion artificially lowering the price of fossil fuels. These massive subsidies boost oil and gas consumption and impede investment in more efficient, environmentally conscious and equitable modes, which benefit the poor. Only eight percent of fossil fuel subsidies go to the poorest 20 percent of the population, and ending fuel subsidies would promote efficiency as well as equity. The IEA estimates that phasing out fossil fuel subsidies alone would reduce carbon dioxide emissions by 4.7 percent by 2020.

Actual fuel subsidies in 2005 reached Rp95, 6 trillion, an increase of 38.6% over the previous year. The increase occurred as a result of rising oil prices ICP in 2005 reached an average of U.S. \$ 53.4 / barrel compared to the previous year average of U.S. \$ 37.6 USD / barrel. As consequences, in 2005 the Government has taken the option to raise fuel prices in March and October. The increase in fuel prices will impact on the reduction of fuel subsidies in 2006 where the fuel subsidy reached Rp64, 2 trillion. In order to save on fuel subsidies in 2007, the government executes conversion / transfer program of kerosene to LPG 3 kg. The policy continues to this day.



Source: Ministry of Finance, 2010

Figure 4 Fuel Subsidy (USD)

2. SUBSIDIES IN PUBLIC TRANSPORT

According to the Law No. 22/2009 Indonesia has established a national transport policy on subsidies. Article 185 says that subsidies for public passenger transport (covering bus, rail and sea transport) can be given by the Government or the Local Government on particular routes with economic class fares. Subsidy provisions for any other aspects of public transport are specified and regulated by Government (GoI, 2010). Based on this quite rough regulation a detailed regulation is currently drafted by the Ministry to detail the subsidy aspects (GoI, 2010).

Based on the laws and regulations in place subsidies for public transport is used in various ways:

2.1 Public Service Obligations (PSO)

In general subsidies for public transport have been provided for land, air and sea (including inter islands ferries) in Indonesia. Strategic transportation routes are often organized by private operators while outside these corridors and for pioneer routes, the government provides support in the form of public service obligations (PSO) in the rail and sea transport.

PSO is an arrangement in which a governing body or other authority offers an auction for subsidies, permit the winning company a monopoly to operate a specified service of public transport for a specified period of time for the given subsidy. This is done in cases where there is not enough revenue for routes to be profitable in a free market, but where there is a socially desirable advantage in this transport being available. For example, according to the decision of Director General of Civil Aviation's approximately 118 air transport routes (pioneer in 14 provinces) have received air transport operating- and fuel subsidies. Every year the Ministry of Transport (MoT) evaluates the routes and determines the pioneer routes and which will become subsidized. In land transport POS are not used but just called subsidies. In 2009 subsidies in the form of Public Service Obligation (PSO) was allocated for IDR 1.485 trillion (USD 166 million) for the sea (600million IDR) and rail (585 million IDR) sector.

2.2 Fuel Price Subsidies

Vehicle growth in Indonesia's cities is the highest compared to other cities in the world. Total motorcycle production in 2010 is estimated to be around 6 million units. The total car production also aims to increase, from 464,000 units in 2009 to 700,000 units this year.

Contributed by the subsidization of fuel the high demand for motorized vehicles leads to traffic infarcts in most Indonesian major cities. As a step towards the reduction of private motor vehicle usage government has planned to remove fuel subsidies for private vehicles, including motorcycles and redirect the money for public transport. However the removal of subsidies for motorcycles was cancelled, due to the pressure from society considering a large part of motorcycle users belong to low-income communities. In the revised state budget of 2010 the contingent of subsidized fuel was determined at 36.5 million kilo litres which corresponds a cost position of IDR 89.3 trillion (USD 9.9 billion).

2.3 Import Duty Subsidies

A fuel price hike and a decreasing value of the Indonesian exchange rate increased the costs for public transport operators. In addition public transport tariffs are inflexible and set by the Government. Public transport operators are not able to react on price changes by adjusting their fares appropriately. For this reason the Ministry of Finance passed a regulation in 2005 to disburden operators by granting import duty exemptions. These subsidies are appointed for specific types of spare parts, of buses, bus chassis and engines used for public transport (GoI, 2010).

2.4 Urban Public Transport Subsidies

Public road land transport is generally operated by governmental companies and private enterprises. Social sensitive routes like pioneer routes are run by state operators using subsidies to some extent where operation is not economical cost-effective. Since the past six years a fleet of 340 buses used to serve a transport pioneer network of 128 routes in 21 provinces all over the country.

Others routes are served under market conditions by private companies and partly by governmental enterprises. A typical characteristic of private companies is that the services they provide suffer from a lack of quality however fares have remained affordable without subsidies. The following passages give a short overview on the situation:

2.4.1 State-Owned Company

DAMRI (Djawatan Angkoetan Motor Repoeblik Indonesia) is the state owned bus operator in Indonesia. It was created on November 25, 1946 and operates under the mandate of the Ministry of Transportation. DAMRI operates urban bus services through subsidiaries in 14 of the largest cities in Indonesia. Its main task according to its statute is to provide transport services for people but the company is also expected to act as a “stabilizer” and “dynamizer” in the passenger transport sector.

It is subsidized for losses on pioneer routes. The company has exclusive rights to many urban trunk corridors but also operates within the city, on inter-city, inter-province and cross country routes. Within most cities DAMRI only operates a small amount of busses, however often on cost-effective routes, for example Jakarta City – Jakarta Airport, and is competing with other private public transport companies under market conditions.

2.4.2 Private Companies

Additionally to the governmental owned company private operators serve the market. In General the public bus transport sector suffers from an unrestricted access and a lack of

regulation. This results in a very fragmented, intransparent market that is hard to monitor. Private operators are provided with route permits, issued by the Local Transport Bureau to operate for a certain period of time.

However they are not obliged to provide a minimum service standard and they are not awarded with (operational) subsidies (only for import duty subsidies). Tariff setting for economy class fares is done by government based on vehicle operating costs. For business class services (e.g. trips with air conditioner) tariffs are based on market prices and private companies can set their own tariffs within an upper and lower level. To maximise their profits they often possess only a very low level of service quality with bad maintained buses and high passenger load making public transport very unattractive and amplify the use of private vehicles.



Figure 5 Different types of public transport modes operated by private companies

2.4.3 BRT-Trans Jakarta

Indonesia implemented successfully the first full Bus Rapid Transit (BRT) System in Asia. The TransJakarta BRT system was started in February 2004 and is operated by the Public Service Agency (BLU) which is a part of the Jakarta local government transportation agency. The ticket price of IDR 3,500 (USD 38 cents) is subsidized by local government so that it is affordable for the whole community. In the end of 2012, the number of subsidies was approximately 50 million USD (Directorate BSTP, 2010). BLU aims to stop subsidization until 2014. The management of Trans Jakarta Busway has estimated that the entity of subsidy will be reduced until 2014 (figure 6). The efforts to reduce subsidy are by: a) increasing tariff from 3,500 to 5,000 (about \$0.5) and b) increasing passenger demand from transport modal shift and natural population growth.

2.4.4 Pre BRT- in many cities

Various cities like the City of Bogor, Palembang, Yogyakarta and Solo established mass transit systems similar to the one in Jakarta. Partly they are financed by subsidies and partly not. Experiences made in these cities give a good indication how to deal with the subsidy topic for mass transit systems.

The city of **Bogor** has invested IDR 10 billion (USD 1.1 million) to establish the local transport service company PDJT that is operating the local transit system TransPakuan. The transit service was started in 2006 and PDJT manages operation and maintenance. There is no subsidy for operational cost, however PDJT cross-subsidizes operational costs of TransPakuan with other business areas (e.g. vehicle workshops, vehicle crane). One main problem of TransPakuan, occurred due to poor planning and project management, is that only 18 out of 30 buses are in operation for both corridors. The other 12 buses are not in use and are determined as depreciation values.

Similar to Bogor, the city of **Palembang** has also established SP2J as local transport company operating TransMusi, the new public transport system. TransMusi was set up in the beginning of 2010 and covers besides the urban bus transit system with two corridors also a

water bus (ferry). The ticket has been integrated for both transit systems. No subsidy is the principle for the TransMusi, except for determining the appropriate route, giving Intermodal with river transport facilities.

Another example is the city of **Yogyakarta**. The transport agency UPTD operates Trans Yogya. This new bus transit system replaced the old “deposit” system. Within the new bus transit system a so called “buy the service” system is used. The operator will only concentrate on service performance without taking charge to be profitable. The risk of profit or loss will be borne by local government. This subsidy system is implemented since 2006 when Trans Yogya started operation. Similar to TransJakarta, the subsidy is also limited until 2013, so the local UPTD is now improving and preparing their system though a cost recovery program. The following figure shows the comparison of Trans Yogya operational cost and revenue from 2008 to 2010. It shows a decreasing gap between operational cost and revenues. Along with the improvement program it is aimed to decrease the gap every year to be a profitable asset in 2013.

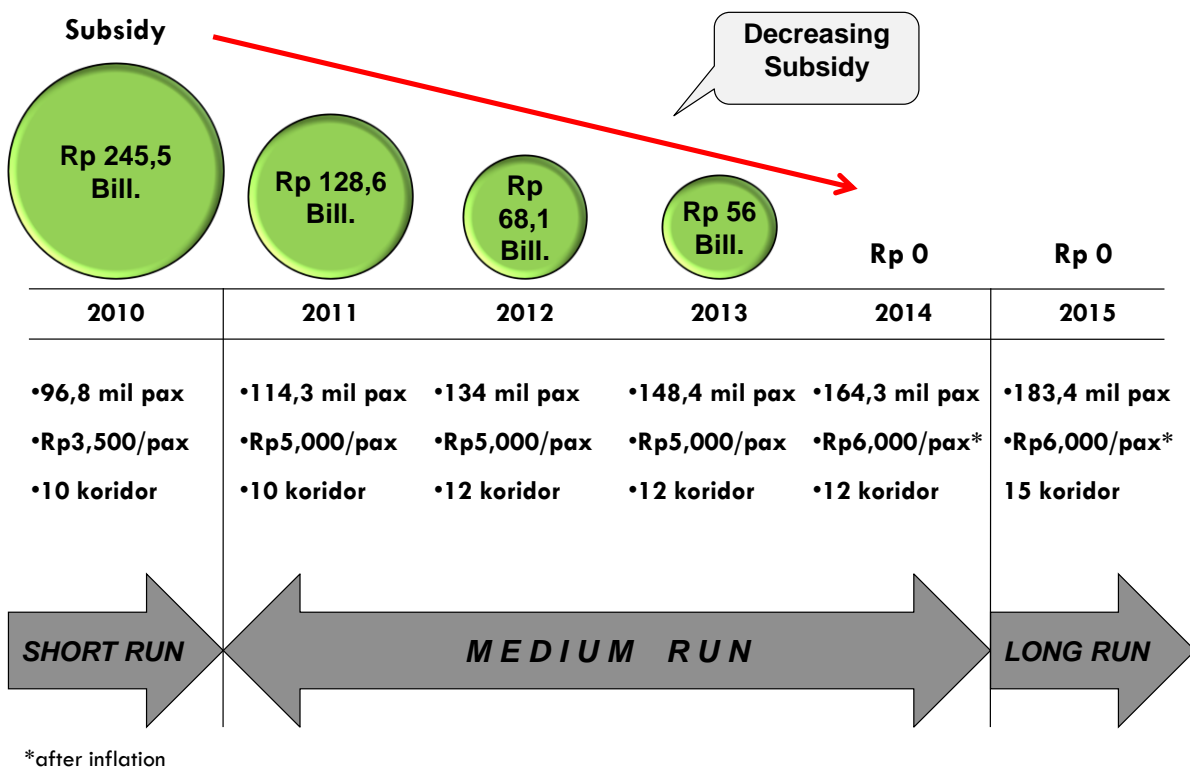


Figure 6 Target of Subsidy by Trans Jakarta Busway

3. DISCUSSION

On principle subsidies for public transport need to be restricted to the supply of public transport infrastructure and facilities. Subsidies dedicated to cover operational costs may be misused to a high extend (e.g. to finance an economic unnecessary high stock of staff) and may be allowed only under exceptional circumstances and for a limited period of time. This aims to avoid the inefficient and wasteful use of financial resources. Particularly in countries like Indonesia with high population densities and a high demand for public transport it is

possible to cover operational costs by fare revenues making operational subsidization unnecessary.

Concrete recommendations are:

- Define minimum service standards for privately operated public transport enterprises to increase standard and attractiveness of public transport
- Restrict the number of public transport operators in the market
- Establish a transport authority responsible for the management of public funds to procure transport services, distribute subsidy and secure the best value for money. The authority supervises that / is responsible for:
 - the provision of subsidies is allowed for the creation of public transport infrastructure and facilities
 - Existing subsidies for operation will be abolished. This can be done by phasing out programs like aspired in the case of Jakarta's TransJakarta BRT system

Drafting, adopting and maintaining a coherent and realistic public transport policy, which is within the constraints of available resources, is fundamental to public transport planning and regulation. Subsidies require sophisticated administrative mechanisms to ensure they are allocated efficiently and agencies are accountable. Therefore it is unavoidable to strengthen capacities responsible for urban (public) transport and public funds. Hence the following is recommended:

3.1 Strengthened Urban Transport Institutions at the National and Local Government Levels

Aimed at improving urban public transport services, what is needed is to strengthen the abilities of the Ministry to, first, advance urban passenger transport reforms, and second, advance best practices in urban public transport policy, planning and engineering. Part of this capability is expected to develop within the Ministry, and part in educational institutions that could be contracted by the Ministry to conduct training programs for city officials in urban transport. It is also expected that, as a result of this approach, cities would attain an improved institutional ability and practical knowledge to plan, design, budget, and implement urban public transport services and urban transport infrastructure and traffic management on a sustainable basis.

3.2 Improved Quality and Financial Sustainability of Urban Public Transport Services

This is to be achieved principally through implementing reforms in those cities that are willing to provide core urban public transport services on a well-managed, competitive basis. More specifically, for exclusive provision of urban public transport services on selected routes or sections of the participating city, under contracts of sufficient length to attract serious bidders.

Accompanied by all these recommendations it is necessary to phase out fuel subsidies. This has to be done in small steps over a period of several years to create a smooth switch to a higher share of public transport. This is particularly important for low and lower-middle income groups who have to use up to 20% of their income for public transport. This is often the reason why many of them shift to motorcycles. Savings from fuel price subsidy reduction need to be redirected for the improvement of public transport systems.

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