

Competition for the market: A policy framework for improving bus operation along EDSA

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The infamous traffic logjam along Epifanio de los Santos Avenue (EDSA), Metro Manila's most important road artery and, perhaps, the country's busiest highway, has imposed tremendous costs in terms of losses in productivity, unnecessary fuel consumption, inefficient outcomes, and frayed nerves and anxiety among commuters. The government, in particular, the Metro Manila Development Authority (MMDA), has tried various yet unsuccessful solutions—from stricter traffic management and number coding of vehicles to restrict passage on certain days of the week, to perennial drives to apprehend and impound buses found to be operating in that highway without a franchise ("colorum" buses in local parlance).¹

Some quarters have proposed a strategy of consolidating bus transport operators as a

possible solution to create more traffic space and ease movement along EDSA. Through consolidation, fewer but more efficient bus transport operators could provide better bus services and improve the quality of road travel while maintaining profitability. Consolidation will also enable the regulators—LTFRB and MMDA—to monitor and regulate buses, which

¹ Joint Administrative Order No. 2014-01 issued by the Department of Transportation and Communications (DOTC) on June 2, 2014, states that if a private motor vehicle operates as a public utility vehicle without proper authority from the Land Transportation Franchising and Regulatory Board (LTFRB), it is also considered a "colorum" vehicle (UP Forum 2015).

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will improve the traffic flow along EDSA. Consolidation into fewer formal bus transport companies could also address the practice of some unscrupulous franchised operators of allowing a smaller operator (i.e., with one or a few buses) to operate using their franchise for a fee.²

This *Policy Note* invites policymakers to consider applying “competition for the market” as a policy framework for rationalizing bus operation along EDSA.

Competition in the market

The EDSA bus market is fiercely competitive. Bus operators operate under a franchise given by the authorities, which vests them the right to convey passengers along routes either identified by the regulator or by the bus operators themselves.³ They can continue to operate as long as they have the requisite buses that can satisfy the registration and other requirements (e.g., road worthiness) established by the regulator. In theory, allowing competition among many bus operators is expected to result in cost-effective and reliable transport services, and efficient use of roads. Was this expectation realized in actual practice?

In the early 1970s, many big and small, independent private bus operators competed

² In local parlance, this practice is known as kabit system.

³ Per LTFRB, the onus of identifying new routes often rests with the bus operators.

⁴ Jeepneys were previously allowed to operate along EDSA but were later banned from EDSA when the Metro Rail Transit and the Light Rail Transit link was completed in 2010.

to serve Metro Manila commuters. However, in general, the quality of the service was poor and inadequate. The government tried to consolidate the bus sector in the late 1970s but the efforts failed for the following reasons (Guariño et al. 2001): (i) insufficiency of the bus fare structure to cover operating and maintenance costs, (ii) stiff competition from thousands of jeepneys allowed to operate along EDSA,⁴ (d) erosion of bus revenues due to high maintenance charges paid to government-accredited contractors, (iii) absence of comprehensive operating guidelines in the implementation of a bus consortium, and (iv) tendency of bus operators to operate independently despite its membership in a bus consortium.

By the 1990s, Metro Manila’s bus sector has expanded with many more private bus operators (those with franchise and the colorums) operating and competing in the provision of bus transport services. However, with poor regulation, the expected efficient and quality service provided by freely competing franchised bus operators did not materialize. There was an oversupply of buses, many of which were old or ill-maintained, owned by numerous operators, franchised and not, providing token services. Despite an apparent oversupply of buses, commuters experienced difficulty in getting a ride and poor service. Bus drivers behaved poorly on the road as they tried to outdo each other in transporting as many passengers as possible because they were paid on commission basis or depending on the volume of

passengers transported (so-called “boundary system”). Poor road behavior contributed to road accidents and obstruction of traffic. Meanwhile, urban commuters suffered from inefficient bus services in the metropolis.

At present, many different bus operators operate and compete in a crowded urban bus market in Metro Manila. However, in the 1990s, despite the proliferation of freely competing bus companies, the quality of bus transport services waxed and waned from year to year. Weak enforcement of traffic rules and transport regulation, allegations of corruption in the bureaucracy, and lack of capacity of regulatory institutions compound these problems. The unprecedented growth in the number of buses plying EDSA worsened road congestion. Their capacity to carry larger number of passengers, in principle, could have helped in decongesting the roads. However, given the poor quality of most buses, private car owners preferred using their own vehicles, further exacerbating the situation.

The sheer number of legal and illegal buses operating along EDSA has contributed to poor air quality and frequent accidents because of poor maintenance of bus units and the lack of discipline of bus drivers. These outcomes are not unique to Metro Manila but typical of bus markets where transport regulation is weak and ineffective, and buses directly compete for passengers on the road (also known as competition *in* the market framework) in order to meet the companies’ profit objectives and the bus drivers’ daily commissions.

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In 2012, MMDA attempted to persuade bus operators to consolidate their operations to address the high volume of buses plying EDSA and other major roads and the deteriorating quality of service. As part of its responsibility for traffic management for Metro Manila, MMDA presented a draft consolidation scheme wherein bus operators would form four to six self-regulating bus consortia based on factors such as travel destination, location of garages, and routes, among others. Many operators, however, felt that the proposed scheme would affect their current franchises or routes and did not take into account the fact that each bus company already has its own garage or depot (Gamil 2013). Thus, despite the benefits of consolidation as described by MMDA, they ignored the consolidation scheme.

A consolidation policy could result in a fewer number of bus operators, but it does not guarantee more efficient bus services unless the emerging bus consortium or consortia are firmly made accountable by the regulator to adhere to predefined service performance standards, such as efficiency, road safety, and air quality. The gains from consolidation might

be limited without effective coordination and regulation. Is there a workable policy framework to make the consolidation policy deliver the expected improvement in bus transport services?

Competition for the market

Many cities in other parts of the globe, which have liberalized bus markets, have opted to modify the way buses operate and compete. Those cities have adopted *competition for the market* or competitive tendering/auctioning as a policy framework to address an excess number of buses in the market. How does it work?

Competition for the market provides an efficient policy framework for the bus consolidation strategy to work. A first step is for the regulator to define the type and quality of bus services that operators are expected to provide. For example, the

regulator can set a service performance standard such as nonstop transport from point A, say Cubao, Quezon City, to point B, Makati City; travel time in x minutes from point y to point z , etc. After defining the type and quality of services expected of operators, the regulator does a competitive tender of the service to be provided. *Competition for the market* policy framework consists of a competitive tender of the right to service commuters along a designated highway or route, meaning, bus operators compete *ex ante* for the right to provide services in a particular bus route.

This can be viewed as a way to restrict undue market entry and is akin to regulating an industry with features of a natural monopoly or similar structural conditions. Direct competition, as described above (i.e., competition *in the market* approach) will not likely result in optimal outcomes in urban bus markets, which are organized differently from other markets and have their own peculiar characteristics. In this type of market, it is more efficient to limit the number of players operating and to define their scope of activity or work.

Below are some of the inherent characteristics of bus markets, and how a *competition for the market* framework can address the organizational characteristics of those markets:

- *Absence of curb rights.* The absence of curb rights means that no one has exclusive use of infrastructure such as road curbs and



Excess demand for curbs and stops leads to congestion and traffic logjams as buses outdo each other in getting to the curbs and stops first to scoop waiting passengers. (Photo from the Philippine Star: www.philstar.com)

bus stops along public roads such as EDSA. If every bus transport operator can use those road curbs anytime and for as long as they wish, it will be difficult to coordinate and bring some semblance of order in the provision of bus services. As it turns out, bus drivers always try to outmaneuver each other to reach the bus stops first to scoop waiting passengers, and prolong their dwell time to maximize use of available space inside the bus to the prejudice of other potential users. Curbs and stops are considered limited or fixed public resources, whose use should be optimized in order to provide reliable and scheduled services. A competitive tender of the right to use the curbs and stops is an efficient way to manage excess demand for such infrastructure. At present, excess demand for curbs and stops leads to congestion and traffic logjams as buses outdo each other in getting as near as possible to the curbs and stops even if this would mean occupying and prolonging their dwell time in the outer lanes of a crowded highway like EDSA. In some countries, the use of the bus rapid transit systems, which provide exclusive lanes and stations, has effectively limited the use of those curbs and stops, and has enabled the regulator to control and monitor the quality and frequency of the service, and the behavior of drivers.

- *Information asymmetry.* Bus companies know the real cost of providing service more than the regulator, which means that they can easily set the level of services above (e.g., deploying a given number of vehicles)

or below (e.g., not minding service quality because the passengers do not have a choice anyway) what is optimum. Given weak regulation and monitoring, bus operators exploit this information asymmetry. They are allowed to identify and select the routes they would like to serve, particularly the profitable routes. As a consequence, more than 30 operational (profitable) routes are identified along EDSA and an oversupply of buses exists on these overlapping routes (JICA 2006). The process of competitive tendering of concession or service contracts motivates operators to self-select and reveal private information. As the owner of public roadways, curbs, and stops, government should take responsibility for traffic demand modeling and planning—including the determination of routes to be served, frequency of service and quality standards, and information needed for setting the appropriate tariffs—and integration of bus services with the transportation system of the entire metropolis, not just of EDSA.

- *Constrained choice.* Passengers incur waiting or search costs if they want to “shop around” for the lowest priced or the highest quality buses (Gomez-Lobo 2007, p. 286). These are usual costs that go with exercising preferences. However, along EDSA, the passengers cannot differentiate whether the next bus will offer a lower fare or high-quality services, and, thus, make an uninformed choice. They would instinctively board the first bus that comes along regardless of the price or quality of the service. It is foolish

to wait for the next bus, which may be as crowded and/or in the same decrepit state as the first one; or worse, it may be another hour before the next one arrives or maybe the next bus, filled to the rafters, would simply pass on. This means that along EDSA, bus operators enjoy some degree of market power. In contrast, through a competitive tendering process, the regulator can set service quality requirements supported by commensurate fares and select only the most responsive bid to the tender.

- *Principal-agent problem.* The boorish behavior of bus drivers on the road is a consequence of the compensation arrangement between the operator (principal) and the driver (agent). Since operator profit is dependent on the number of passengers transported, the operator sets the compensation of the bus driver and the bus conductor⁵ as a percentage of bus ticket sales, thereby providing the driver with the incentive to do whatever it takes to pick up as many passengers as time on the road or space in the bus would allow. Moreover, since the tandem of drivers and conductors is tasked with the collection of passenger fares on behalf of operators, the possibility of fraudulent reporting of actual revenues (the principal-agent problem) compels operators to hire “bus inspectors” to monitor and check ticket sales. This is added cost to the operator. To address the boorish

⁵ The bus conductor takes care of fare collection inside the bus.

and accident-prone behavior of bus drivers, proposals to shift the “boundary” system to a system of wages and other emoluments have recently arisen. However, both bus operators and drivers alike did not seem enthused by the proposed shift. The government has to address this issue in designing a workable policy and institutional framework for urban bus markets. Perhaps, the use of smart card technology could be an effective alternative to the “boundary” system. Commuters can simply buy smart cards similar to those used in urban rail transits and use these to pay for conveyance in buses. Centralizing revenue collection (through beep cards) can also pave the way to shift the basis for paying operators from purely on the number of passengers carried to include performance elements such as kilometers traveled, on-time service, and other service indicators. The use of GPS technology in buses could also make monitoring performance easier. Of course, this will disrupt the current and familiar “boundary” system, which ensures revenue to operators and remuneration to drivers and, at the same time, incentivizes boorish driving behavior and lack of investments in modern facilities by operators. But this will force bus operators to modernize their fleets and install smart card readers, among other changes.

Does competition for the market work as it promises?

This framework acts as an entry regulation device, creating a stronger incentive for numerous operators to consolidate in order to have the financial, managerial, and technical

muscle to compete for the right to service a route or a set of routes. The competitive tendering mechanism also ensures that only the most efficient bidder can provide services in the market at a specified price or condition or criteria. For example, the government may require operators to service non-profitable routes that need, nonetheless, a regular bus service (e.g., poorer sections of the metropolis). In this case, the basis of remuneration could be the lowest gross payment or subsidy for the required service as submitted by the bidders.

The application of the framework does not necessarily result in a monopoly provision (i.e., one operator per route). In some countries, more than one company is allowed to operate a route to maintain competition and drive efficiency. In this case, at a given tariff and vehicle specification, bidders may offer different bids in terms of subsidy or compensation (gross contract) for the service. The bidder that offers the lowest subsidy or compensation for the service is allocated more of the bus service schedule while the next lowest bidder is offered less. The procuring entity would need to set an acceptable range of bids in this case.

Where only one operator per route is appropriate, costs and performance can be benchmarked against the performance of similar bus operators (i.e., yardstick competition). In cities abroad, the competition for the market framework has paved the way for bus consolidation as a component of a hybrid system of public and

private provision, such as in the case of the TransMilenio Bus Rapid Transit system in Bogota, Colombia (Box 1). The competition *for* the market approach has made it possible to improve the service outcomes in a liberalized urban bus market. It was done successfully in Bogota. There is no reason the same approach could not be done in Metro Manila!

The government, in this case, should develop the capacity, if it does not yet have this, to design or define the optimal market structure (e.g., how many operators will be granted franchises to operate, how these operators will be compensated, what service standards to require, among others).

The DOTC's pipeline of BRT projects (i.e., Cebu and Manila Line 1, both approved by the government for implementation, and EDSA BRT Line, which is in progress) will serve as a test case for the competition *for* the market framework in the Philippines. It is expected that political obstacles and influential lobby groups will oppose these reform measures. Given this political risk, it is important to undertake the following risk-mitigating means:

- *Strengthen the capacity of government agencies involved in transport planning, procurement, contract monitoring and management, and regulation.* The new competition framework will entail a more intensive enabling effort on the part of government, including astute coordination and information campaign. The risk of regulatory implementation failures, if

Box 1. TransMilenio Bogota: Consolidation and competition for the market

Prior to reforms, Bogota's bus market was serviced by small private operators, mostly nonformal companies that rent out vehicles to small bus owners or drivers, who also controlled the allocation of routes. Roads were overcrowded with buses, many of which were only partially occupied. The TransMilenio Bus Rapid Transit (BRT) system was established to rationalize bus routes and reduce the number of buses. Bogota's city government transformed the configuration of the bus network into a "trunk and feeder" system simultaneous with the implementation of the TransMilenio BRT system. The consolidation of numerous bus operators was done by competitively tendering concession contracts for TransMilenio trunk and feeder routes, specifically requiring bidders to have certain minimum working capital to be incorporated as a formal business. The selection criteria awarded points for experience, including the presence of existing operators in the bus consortia, bus quality, and emissions. TransMilenio concession contracts also required discarding old buses and allocating equity to individual bus owners in the new companies. New transport firms that were formed are subject to the leadership of a central regulatory authority, the TransMilenio, S.A. Other key elements of the TransMilenio BRT system included the vertical separation of transportation service and fare collection, bus remuneration based on kilometers traveled rather than passengers carried, fare setting based on long-term recovery, and exclusive curbside service in metro-like stations, which constituted an organized system of express and regular routes and facility transfers.

The first phase of the TransMilenio BRT system took only two years to complete. Shortly after its launch in 2001, significant improvements along its corridor were observed, such as fewer number of buses, from 670 buses per hour to 270; increased vehicle occupancy; reduction in travel time of passengers by as much as 32 percent due to the segregated bus lane; abatement of pollution by 9 percent in some areas of the city; and overall improvement in bus transport service in terms of quality of safety, efficiency, and reliability.

Sources: Echeverry et al. 2005 and Hook 2005

realized, would negate gains if institutional capacities to take on these roles are weak and inadequate. Contract design, enforcement, and appropriate regulation are particularly important for the competition *for* the market framework to succeed.

- *Implement complementary reforms that will bolster economies of scale and density, such as route rationalization and organization of the bus network into trunk and feeder routes. It is crucial to view the reforms from a holistic vantage point of establishing a more efficient*

and integrated urban transport network rather than a piecemeal corridor project that is to be implemented only along EDSA or some other part of Metro Manila. Policy reforms are also important for the sustainability of the transport system operations to ensure that operators will earn an appropriate return to cover the costs of service provision and meet their profit objective.

- *Allot resources to manage the transition into a new approach to urban transportation, in order to build consensus among stakeholders,*

and especially to generate the support of even those who will be adversely affected by the reforms. Any reform will likely be unsuccessful or unsustainable without investing in proper stakeholder consultation and communication. Information campaigns can promote collective action of commuters and other beneficiaries. The presence of a strong political leadership and support is also vital in light of varying interests and degrees of influence of key stakeholders in the bus sector. Some operators would have to leave the bus market and, thus, resources would be needed to aid them during the transition. This may include a compensatory program to discard or scrap excess and old vehicles or to generate acceptance of a policy of reassignment of routes. Training in various forms of livelihood can also be a way to ensure that affected operators or drivers will have an alternative means of livelihood or source of income.

- *Reexamine and update the Public Service Act.* A negative legal opinion (dated April 18, 2013) handed down by the Department of Justice (DOJ) interpreted competitive tendering process as inconsistent with the centuries-old Public Service Act (Commonwealth Act 146 of 1936). Fortunately, the proposed BRT projects are unaffected because they are couched as public-private partnerships projects. Applying the competition *for* the market framework to non-BRT bus networks could be stymied by the DOJ legal opinion. There is a need to amend the Public Service Act or, perhaps, pass a new law that would be more responsive to the evolving nature of the markets. 📄

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