Liberating Nepali Enterprises

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Vol I: Understanding why cartels exist and sustain in public transportation services

Arpita Nepal
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About the Author

Arpita Nepal

Arpita Nepal is the co-founder and Director of Research & Development at Samriddhi, The Prosperity Foundation. She has been a part time faculty member of two colleges in Nepal for over five years teaching economics and has been involved in activism for democracy and economic policy reforms. She holds double Master degree in Economics from George Mason University (USA) and Tribhuvan University (Nepal).

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The paper in a glance...

This paper looks into the theory behind cartels, its behavior in public transportation system of Nepal and why they exist in spite of the Supreme Court’s decision in favor of ending the syndicate system, and attempts to draw inferences for anti-competitive policy in Nepal.

The theory behind cartel formation is explained by Bittlingmayer (in Grossman, 2004) and by Greif, Milogram and Weingast (1994). The former argues that industries where no competitive equilibrium exists, it is beneficial to have one agency that controls demand and supply; therefore we see its emergence. The later analyzes the case of Merchant Guilds that formed cross-border association to facilitate foreign trade when property rights were vulnerable.

Reduction of average costs in terms of insurance, repair and maintenance and availing of parking spaces all for a minimal fee called ‘trip fee’; increase in collective bargaining power in a country whose political history is marred by revolution and turbulences; higher return on investment attributed to lowered cost are some of the motives behind joining an association.

Ideally, the entrepreneurs in the syndicate have no incentive to cheat, as the cost of punishment is greater than the expected benefit from cheating. This makes the syndicate a durable endeavor. Its long history since 1975 is attributed to the lobbying power with the government, better position to engage in a multi-market price war, and higher return on investment.

From the analysis, a logical question would be why haven’t the entrepreneurs formed a public limited company (PLC) if the benefits stem from economies of scale? Agency problems in terms of higher managerial cost, the Nepal Company Act, 1991 provision that requires PLC to publish its balance sheets annually; and the power of collective bargaining and political presence are some of the major reasons for not forming a PLC.

The study points out that policy attempts to dismantle cartels in Nepal mostly look into it from a simple lens of monopoly profit motive and ignore the other factors mentioned in the paper such as economies of scale, collective bargaining, fixed cost faced by firms based on regulatory and political environment to name a few. This narrow perspective might be at the heart of the lack of success that these corrective measures have been facing. Therefore the study draws a conclusion that the sources and causes of cartel formation should be identified and acknowledged and the success of ensuing policy measures will depend to the extent of how well they address these other factors.
Introduction

On February 2nd, 2011 Nepal’s Supreme Court made a landmark decision in favor of ending the syndicate system (cartel) in the public transportation industry and instructed the Government of Nepal to null all it’s agreement with the cartel organizations that helped sustain this anti-competitive practice. However, cartels in the public transportation sector of Nepal, continue to this day. Despite the apex court’s order and almost every political party’s public commitment to end the transportation cartel in Nepal, why does the system persist? This paper looks into the theory behind cartels, and behavior of transport cartels in Nepal and attempts to draw inferences for anti-competitive policy in Nepal.

Two possible explanations from economic theory...

There are specific industries where no competitive equilibrium exists if the U-shaped average cost curves faced by all the enterprises are identical (Bittlingmayer in Grossman, 2004). Since all the firms face the same average minimum cost curve in the long run, ‘….actual long-run price and output for the industry would oscillate above and below stable points of equilibrium price output’ (Viner, 1931 quoted by Bittlingmayer in Grossman, 2004). Bittlingmayer (in Grossman, 2004) further expands this notion of an industry without a competitive equilibrium and adds increasing returns with uncertainty in demand to the mix concluding that ‘under more realistic circumstances it will be necessary for plants to operate below capacity or for some demand in excess of minimum average cost to go unsatisfied’. Similarly, he draws out from this that no competitive equilibrium is possible and therefore the ‘globally optimal solution’ would be to have some unsatisfied demand and some plants functioning with excess capacity or underutilization. He also notes that transportation and heavy manufacturing industries typically have this sort of cost structure. He concludes that in such an industry, one way of having a stable equilibrium is for one agency to control demand or supply and therefore, we see an emergence of anti-competitive practices. Owing to the policy and regulatory environment that the transport entrepreneurs’ of Nepal face, this forms a major basis of explaining certain characteristics of the public transport syndicate system in Nepal.

3 William Sharkey (1982) and Lester Tesler (1978) have extensive work that validates these results. Sharkey expands the case of the natural monopoly in describing an industry without competitive equilibrium while Tesler uses the theory of the core to analyze implications of an industry where firms face identical U-shaped average cost curves.
Greif, Milogram and Weingast (1994) analyze the case of Merchant Guild existent in the medieval period and argue that the guilds were useful in overcoming a coordination problem, which could not be solved simply by multilateral credibility in repeated games. They argue that the uncertainties in pre modern long distance trade required a concentrated response from the merchants in case of property rights violations and threats by the rulers of a particular market. The response by a single victim merchant would not be adequate to prevent further perpetration by the rulers. Therefore, a concentrated effort in terms of guilds took part in collective bargaining and ensured smooth operation of long distance trade. The rulers' support of these guilds also demonstrated a credible commitment on their part. This is also the case of what Root (2006) calls a conversion of uncertainty into manageable risk such that the guilds facilitated expansion of long distance trade. This framework is also useful in explaining certain aspects of the public transport syndicate in Nepal.

Why do the Cartels behave the way they do...

I. Motives behind joining cartels: Why do public transport entrepreneurs join cartels in Nepal?

Based on the response received during interviews taken over a period of time, this paper analyzes the motives of entrepreneurs behind joining cartels in this section:

Declining average costs: The public transportation sector of Nepal seems to incur several fixed costs. Chief among these is the insurance administration cost. ‘Insurance claim process is the most cumbersome in Nepal. As an individual entrepreneur, I had to have a staff team fully dedicated to claiming insurance. Given the road conditions in Nepal, accidents are frequent and I would spend about 25% of my income just on claiming insurance. The association brings down the cost for me. Once I joined the association, all the insurance handling including filing for claims and the administrative process was taken care of by the association.’ – Transport Entrepreneur.

Beside insurance, other fixed costs including advertising and ticketing services are pooled by the respective association and the association takes care of setting up and

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‘Once I joined the association, all the insurance handling including filing for claims and the administrative process was taken care of by the association.’ – Transport Entrepreneur

4 Greif, Milogram and Weingast (1994) further expand their analysis using a game theoretic model and also explain specific behaviors of guilds, which include imposing sanctions on perpetrating rulers as well as on members effectively reducing incentives to cheat. They also point out that simply labeling these guilds as cartels misses the bigger point of coordination mechanism at play during that time.

5 The names and the company of the transport entrepreneurs and government official reached during the course of this research have been withheld based on their request.

6 This claim was reiterated by all seven transport entrepreneurs that were interviewed as well as by the government official.
staffing these facilities. Similarly, other costs pooled by associations include monitoring staffs for buses, repairs and maintenance workshops for the vehicles, managing parking spaces and uploading and downloading zones. All these fixed costs would be burdensome for entrepreneurs with single or a few number of vehicles but are significantly lowered once the entrepreneurs pool their resources into the association. Reduction in average costs also supports economy of scale argument i.e. there are economies of scale out of coordinating buses amongst various entrepreneurs through the association.

‘For a minimal fee per trip called ‘trip fee’ the association takes care of all our needs including insurance handling, ticketing, staff monitoring and even maintenance of the vehicle. Imagine if I had to put up with all those costs by myself. I’d barely make any money out of this business!’ –Transport Entrepreneur.

Collective bargaining in an uncertain environment: It is important to analyze the environment that existed during the formation of these cartels and during the turbulent times. Nepal has had a very turbulent political history mared by revolutions and civil wars. It is difficult to contemplate a smooth functioning business in such an environment. The grouping and re-grouping of the cartel association coincides with major political changes and turbulence. When the first association was registered in 1975 and the national federation in 1982, Nepal was undergoing a major change from a direct monarchy to a multiparty democracy. By 1982, the disgruntlement with the direct monarchy was high and there were hints of another revolution brewing (Upeti, 1983). Similarly, the the split and later reunion in the federation during 1995/96 was at the time when the civil war with the Maoist broke out. In 2006, once the Maoists came to the peace process (BBC, 2012) the national federation also regrouped and formed in its current structure. The coincidence of these events indicates that there may be another story of collective bargaining here as argued by Grief, Milogram and Weingast (1994) about medieval merchants of Europe. The political uncertainty meant that property rights were never secure and the rulers could act as perpetrators at any point of time. The fact that political parties have time and again threatened and extorted money from the business community in general supports this view. Therefore, the association acts as a collective bargaining forum for the entrepreneurs and also negotiates with the authorities to establish protection for individual entrepreneurs. The entrepreneurs individually would not be able to do this especially if one is a small entrepreneur (which is characterized by ownership of a single vehicle like the

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7 Nepal’s political history shows unstable governments being formed with high corruption penetration especially at the lower level of governance. It is this lower level of government that the transport entrepreneurs have to deal with the most.

8 There are many newspaper accounts of land grab and extortion practiced by various political parties during several democratic revolutions.
majority of the transport entrepreneurs of Nepal). The FNNTE today boasts of being able to shut down the country as it is an umbrella organization of all the various associations including not just public transport entrepreneurs but also entrepreneurs of several other forms of public transit such as taxi owners, entrepreneurs of goods transportation and cargoes. This has strengthened the position of FNNTE as a major force even in political negotiations and the transport entrepreneurs can certainly wield power over policies. Collective bargaining is not just limited to maintaining relations with the political parties though. It is useful to have the association to deal with the police (traffic police particularly), bureaucracy (tax filing, registration, license renewal issues) and labor unions (drivers’ and conductors unions). According to Sheth and Parvatiyar (1992), business alliance formation is a factor of two features – uncertainty and trust among the competitors. They describe a cartel as a form of business alliance that would form when external uncertainties are low and the trust level between competitors is low as well. Given their description of trust and uncertainty, the public transport syndicates in Nepal fall more under their definition of a collaborative enterprise (external uncertainty is high but the competitors trust each other).

Safety Net: ‘The Association provides us with additional insurance even in areas that typically insurance companies do not cover like when our buses are vandalized during general strikes. We don’t have to pay extra for this. All these expenses are covered from the trip charge that we pay. Also it gives us additional funding (arranging loans) for expansion, repair and maintenance loans. So in general, we are taken care of by the association.’ – Transport Entrepreneur. In an environment of uncertainty with a large number of general strikes called by different quarters (from September 2012 to August 2013, as per the Campaign for a Livable Nepal, there were 57 days of general strike in Nepal), the association acts as a safety net for the transport entrepreneurs. Entrepreneurs individually would have to put up with severe losses of personal wealth if they were operating separately. However, the protection by association brings down the cost of covering these losses.

Higher Return on Investment: Individual entrepreneurs gain a higher return on investment once they join associations. This is primarily due to lower costs. There were three major companies that started out as private limited companies outside of the association, However, after certain time, they joined the association. ‘We started out as a private limited company. We functioned separately from the association for a time. Our return on investment was about 20% at that time. However, once we

‘In an environment of uncertainty... the association acts as a safety net for the transport entrepreneurs. Entrepreneurs individually would have to put up with severe losses of personal wealth if they were operating separately.’
joined the association our return on investment jumped to 50%.’ - Transport Entrepreneur. The return on investment in other industries characterized by small individual entrepreneurs and functioning in an environment with very low insurance facilities is generally around 20%. 

II. Cartel sustainability: Why don’t the entrepreneurs cheat?

It is difficult to define cartel success and failure. Traditional microeconomics describes cartels as inherently unstable organization pointing out game theory strategies that demonstrate better pay-offs for cheating (Rubinfeld & Pyndick, 1998). However, a lot of studies use cartel duration as an indication of its success or failure (Fear, 2006; Grossman; Levenstein and Suslow in Grossman 2004). Since the public transport syndicate in Nepal has been around since 1982 in one form or another it can be called a durable endeavor. However, the period has been fraught with break up of agreements and separations at the national level. At the same time, at the regional level where these cartels mostly function cartel association have been quite persistent and individual entrepreneurs rarely break away from these. ‘There have been instances in which individual entrepreneurs break away from the association but these are very rare. Even then they eventually come back to join us. We provide so many benefits that the individual entrepreneurs soon realize that it is more profitable to be within the association than to be outside of it.’ – Transport Entrepreneur, Representative of FNNE. The following paragraphs try and explain this persistence of cartel in Nepal:

Enforcement collaboration with administrative and police agencies:
The cartel association has devised efficient enforcement mechanism in collaboration with existing bureaucracy, political forces and police agencies. Grossman (2004) explains that when the expected cost of punishment is greater than the expected benefit from cheating, cartels sustain. This seems to be the case in Nepal. Government of Nepal fixes the price of public transport. The FNNE with its’ threat of halting the country has a powerful say with the government in terms of price fixing. Even if we assume that the price is exogenous (since it is fixed by the government), the cartel still uses a queue system to control supply. The buses that do not run on queue face multiple problems. Entrepreneurs who dare to “cheat” find that their vehicles are often vandalised and it is very difficult to operate. In case of loss to their property, they also find that it is very difficult to take any legal recourse. Tilton (in Grossman, 2004) takes the case of Japan and argues that cartel enforcement is stronger when government policy implicitly supports

‘We provide so many benefits that the individual entrepreneurs soon realize that it is more profitable to be within the association than to be outside of it.’ – Transport Entrepreneur Representative FNNE

9 This is especially true for agro based industries and small retail stores (Kuber Chalise, The Himalayan Times, 2012).
cartels. ‘The transport entrepreneurs come together as an association. When they do that, it is easier for us to deal with them and their demands. After all how many individual entrepreneurs would we deal with otherwise? Besides, it is beneficial for the entrepreneurs also to join the association. Their needs like insurance claims, ticketing is all taken care of by the association. As such there is no legal provision barring individual entrepreneurs but they have themselves devised a system of syndicate which seems to be working well for them’ – Employee of Transport Management Department, Government of Nepal.10

Repercussions associated with multimarket contact: In case of long distance bus service, there is bound to be multimarket contact. In such a scenario, the cartel is in a much better position to cross subsidize and engage in a price war with the cheating or individual entrepreneur (who runs only along a certain route). Grossman (2004) identifies multimarket contact as one of the major reasons behind success of the express firm in contrast to the failure of Joint Executive Committee railroads in the US in the late nineteenth century. The cartels with their higher investment and connections also have easier access to credit if it comes to a price war situation compared to the lack of finances for the individual entrepreneur.

Higher return on investment and lower cost: As mentioned above, the return on investment goes up and the fixed cost is lowered once the individual entrepreneur joins the association. This is a powerful incentive not to cheat. The benefits gained from joining the association are much higher than the benefits that would be gained by cheating.

III. Economies of scale in Ownership: Why haven’t the transport entrepreneurs just formed a public limited company?

From the analysis so far, a logical question would be why the entrepreneurs have not formed a public limited company. Most of the benefits that they derive from lower cost and high returns seem to stem from economies of scale. In other words, why are there no economies of scale in ownership and only in coordination amongst different entrepreneurs? There are a couple of reasons that stand out while analyzing the public transport industry from this perspective:

Agency problems: Bittlingmayer (1985) discusses the merger wave in the US and argues that merger is a substitute for collusion. However, he also argues that merger’s face

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10 There is an implicit understanding that the transportation cartels are protected by political parties. Although, any kind of evidence for this is hard to come by, it is often reported in the media. These links provide such reports: http://sapkotac.blogspot.com/2012/04/market-manipulation-by-syndicates-and.html and http://www.ekantipur.com/the-kathmandu-post/2011/01/11/money/transport-syndicates/217137/ and http://www.myrepublica.com/portal/index.php?action=news_details&news_id=88735
agency costs. The transformation of a transportation cartel of Nepal into a public limited company would result in agency problems. Primarily, qualified managers would need to be hired. Besides this, a long distance bus route gives ample opportunities of shirking – the drivers and the staffs on the bus can add in passengers en route and not report this income. ‘If the bus route is supposed to generate Rs.14,000 (USD 200) revenue then the entrepreneur only gets about Rs.10,000 (USD 143). The rest is taken by the driver and other staffs but what to do? You have to live with it. That’s why so many entrepreneurs keep one family member as bus staff or they are themselves on the bus every chance that they get.’ – Former Transport Entrepreneur. The government fixes the price a bus driver is allowed to charge for his service. In order to maximize his profits, the bus driver carries more persons than the vehicle is equipped for, resulting in heavy safety issues. Bus drivers enjoy a more gentle treatment in front of the law since they pay lower fines and their licenses are never suspended. In addition, the bus drivers and conductors are unionized resulting in a strong bargaining power on the employee’s side.\textsuperscript{11} Agency problem compounds when contract enforcement is lax. The legal system of contract enforcement is lengthy and will generally result in laborer’s favor as Nepal has strong labor laws (ADB, 2009; Samriddhi, 2013). Doing Business report (World Bank, 2015) reports that Nepal stands on 134th position in terms of contract enforcement and that the procedure takes 910 days. A public limited company in this scenario would have to spend a large amount of money simply on contract enforcement when the functioning of the long distance route presents opportunities to cheat. Miller (1993) also describes this kind of agency problem as horizontal dilemmas and presents piece rate system as a possible solution. However, as Miller points out piece rate system is not plausible in every scenario and team efforts always suffer from shirking problems. Agency problem is one of the primary reasons why there are no economies of scale to be gained in ownership and therefore, public transport entrepreneurs prefer to remain a syndicate and not convert into a public limited company. By remaining in a cartel, the small entrepreneurs are able to individually supervise their own buses mostly through family member involvement and monitoring costs are low for the cartel as a whole.

Publicly audited accounts: One of the other reasons that a cartel typically would not turn into a public limited company is transparency. ‘Currently every association and individual entrepreneur has to be registered with the Transport Management Department. If you want to open a company, however, you will have to

\textsuperscript{11} The hazardous situation resulting from the regulatory regime of public vehicles is also covered here: http://www.economist.com/blogs/banyan/2012/08/public-transport-nepal
also register with Company Registrar Office and with the tax authorities’-Transport Entrepreneur. Nepali law requires public limited company registered under the Nepal Company Act, 1991 to publish their balance sheet in a national daily annually. This also means there are lesser possibilities of tax evasion. However, an association like the public transport cartel does not maintain the book of entire fleet it controls. The individual own pay a presumptive tax at the transport management office and do not have to disclose their income and expenditure there of under the current system.

Collective bargaining & political presence: As mentioned earlier, a national federation of associations has much more political power than a public limited company of a certain size. The FNNTE has called nation wide strikes (The Himalayan Times, 2012) to ensure that its demands are met by the government agency time and again. When the Federation goes on a strike, all public transport halt and therefore, the country is crippled. This kind of power would not be possible with a couple of public limited corporations competing against each other.

And the policy implications of this analysis...

This study is indicative of how a simple monopoly profit motive is not enough to explain cartel formation in the case of public transport entrepreneurs of Nepal. Having said this, the study also does not deny monopoly profit motive completely. However, if we find that there are economies of scale in association formation and collective bargaining argument is valid then this will have some policy implications in terms of anti-trust legislation in Nepal.

Anti-trust legislation is at a starting phase in Nepal. Competition Act has been formulated and promulgated yet the mechanism of competition law enforcement has not been worked out (Adhikari, 2002). The most important implication of this kind of study on anti-trust legislation is on the definition of cartels and the measurement of cartel behavior in Nepalese industries. The question remains on how a cartel behavior is identified and measured. Although Herfindahl-Hirschman index based on industry concentration and market share is used in anti-trust legislation in countries like the United States, this case study is indicative that such measures may not accurately predict collusive behavior in cases like this of Nepal. At the same time, it is also important to identify sources and causes behind collusive behavior. If the fixed cost faced by industry is based on regulatory and political environment as this study indicates then policy measures directed towards reforming these constraints on the regulatory and political environment may be more effective.
Above all, policy makers need to differentiate between the efficiency gains due to collaborative efforts and monopoly benefits that arises out of collusive behaviour.

If this study is considered indicative of other motives behind transport entrepreneurs’ association formation then it is important for Nepali policy to reorient its outlook on FNNTE. It needs to move away from the narrow view of FNNTE as a cartel set on monopoly profits at the cost of consumers and analyze broader environmental constraints that give rise to and help sustain cartels in Nepal.
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Known for bringing together entrepreneurs, politicians, business leaders, bureaucrats, experts, journalists and other groups and individuals to make an impact on the policy discourse of Nepal, Samriddhi works with a three-tier approach - Research and Publication, Educational and Training, Advocacy and Public Outreach. Some of its highly successful efforts include the annual economic policy reform initiative named “Nepal Economic Growth Agenda (NEGA)”, a sharing platform for entrepreneurs named “Last Thursdays with an entrepreneur” and a regular discussion forum on contemporary political economic agendas named “Econ-ity”. Samriddhi also hosts the secretariat of ‘Campaign for a Livable Nepal’, popularly known as Gari Khana Deu campaign.

One of Samriddhi’s award winning programs is a five day residential workshop on economics and entrepreneurship named Arthalya, which has produced over 400 graduates over the past few years, among which more than two dozen run their own enterprises now.

The organization is also committed towards developing a resource center on political economic issues with its Political Economic Resource Center (PERC). Besides this, Samriddhi also undertakes localization of international publications on the core areas of its work. Samriddhi was the recipient of the Dorian & Antony Fisher Venture Grant Award in 2009 and the Templeton Freedom Award in 2011.

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Samriddhi, The Prosperity Foundation
P. O. Box: 8973, NPC 678 416, Bhimsengola Marga,
Minbhawan Kharibot, Kathmandu, Nepal
Tel.: (+977)-1-446-4616/448-4016 | Fax: (+977)-1-448-5391
E-mail: info@samriddhi.org | www.samriddhi.org