Assessing the Impact of Auto-rickshaw Fare Reforms in Chennai

A study by
Roshan Toshniwal and Akshay Mani
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Background

Key statistics on auto-rickshaws in Chennai

- **Market size**: Around 72,000 auto-rickshaws
- **Trips on auto-rickshaws**: 1.5 million daily trips
- **Mode share**: 2.2% in 1992, 6% in 2008
Background – key issues

- No fare reforms from 1996-2007
- Restriction on number of permits till May 2010
- Lack of access to formal sources of financing
- Permit caps leading to undersupply of auto-rickshaws

Reforms in 2007, but not found acceptance with auto-rickshaw drivers
- Hoarding of permits, leading to inflation of overall cost of auto-rickshaw
- High financing costs from informal financiers, leading to unviable costs of ownership
- Undersupply resulting in driver’s market, where drivers call the shots and charge exorbitant fares
# Background on fare reform efforts

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<th>Supreme Court Directive</th>
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<td>• In 2012, this problem of missing meters in auto-rickshaws was represented in the <strong>Supreme Court of India</strong> and in <strong>July 2013</strong> the court directed the Tamil Nadu <strong>government</strong> to revise the fare in four weeks.</td>
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<th>Technical fare reforms committee</th>
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<td>• Thereafter, the transport department of Tamil Nadu instituted an internal Technical Committee to visit and study the fare regulation models from the neighbouring states of Kerala, Karnataka and Andhra Pradesh.</td>
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<th>Scientific approach to fare estimation</th>
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<td>• <strong>EMBARQ India</strong> helped the government in creating parameters to <strong>rationalise the fare</strong> and presented them with an <strong>IPT policy (Inter Para Transit)</strong>, a <strong>comparison of fares across other cities</strong> and a <strong>fare estimation toolkit</strong> was made in July 2013 to assist the government in determining the revised fares.</td>
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<th>Collective decision to revise fares</th>
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<td>• Close door stakeholder meeting between government officials and other stakeholders (auto unions, entrepreneurs, Consumer Association of India (CAI), Chennai City Connect, Embarq India, Times of India, and <strong>Dr. Prahlathan</strong>).</td>
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Revised Auto-rickshaw Fares

Revised fares
• In August 2013, the Tamil Nadu government formally announced the fare revision – now set at Rs 25 for the first 1.8 km, and Rs 12 for every additional km thereafter.

Digital meters
• Auto-rickshaw drivers in the city were given until 15th October 2013 to recalibrate or install a digital meter but the due date was extended to 15th November 2013.

Fare revisions
• It was further agreed that no decisions will be made on the next fare revision until the price of the petrol prices increase by Rs 10, after which it would be the government’s decision on formulating a committee or just revising the fare.
Objectives of the study

**Impacts of fare reforms**
- Understand the impacts of the reforms – from the perspective of drivers and passengers.

**Challenges faced**
- Get insights into the challenges that the fare reform have thrown up

**Recommendations for future reform efforts**
- Develop recommendations for future reform efforts, which can promote a high quality auto-rickshaw service in the city.
Study methodology

Commuter Survey
- Mode shift impact
  - Impact by trip
  - Impact on decision to buy personal vehicle
  - Challenges

Auto Drivers Survey
- Impact on distance travelled and trips
  - Impact on earnings
  - Challenges

Stakeholder Interviews
- Government agencies, private entrepreneurs, activists, unions
  - Challenges and Recommendations
Commuter survey: measuring impacts and challenges

The survey comprised of 522 commuters in residential areas, outside malls, Cineplex, hospitals, famous temples, and market areas.
71% were men and 29% were women
Amongst the respondents who owned 2 vehicles or more, 27% owned only two wheelers, 64% owned both car and two wheeler while 8% owned only cars.
Trip purpose and factors impacting personal vehicle use

Trip purpose

- Amongst the vehicle owners, 82% of them use their vehicles for both work and non-work trips, while 13% use them only for non-work trips.

Factors impacting personal vehicle use

- About 89% of the respondents said they use personal vehicles due to the poor quality of auto-rickshaw and public transport services in Chennai.
80% of the respondents said they have shifted some trips from other modes to auto-rickshaws, as a direct result of the fare reform.

Close to 60% of the shifts occurred from two-wheelers.
68% of the respondents have shifted work and non-work related trips to auto-rickshaws, while 17% have shifted only work related trips to auto rickshaws.
Almost 73% of the vehicle owners are against buying another vehicle while 63% of the respondents who currently do not own a vehicle have vouched for not buying a personal vehicle after the fare reform.
Challenges faced by passengers

Figure 9 Challenges faced by passengers

- Extra over the meter reading: 27%
- Driver still negotiates and do not use meter: 21%
- No change: 1%
- Improper meter: 3%
- Overspeeding: 2%
- Insecurity: 5%
- Bad behaviour and ungroomed drivers: 25%
- Fares are too high: 21%
Auto-rickshaw driver survey: measuring impacts and challenges

- 510 auto drivers were surveyed
- Railway stations (both at the Egmore and Central railway stations), Koyambedu bus terminus and busy commercial belts like T-Nagar, Triplicane, Nungambakkam, Parrys, Saidapet.
Profile of auto-rickshaw drivers

Figure 10 Age of the drivers
- 21-30: 12%
- 31-40: 34%
- 41-50: 17%
- 51 and above: 37%

Figure 11 Number of Working Days
- 15 to 20 days: 43%
- 21 to 25 days: 20%
- 26 to 29 days: 30%
- 30 to 31 days: 7%
- More than 31 days: 1%

Figure 12 Number of working hours
- Upto 8 hours: 37%
- 8 to 12 Hours: 15%
- 12 to 14 Hours: 1%
- 14 to 16 hours: 6%
- More than 16 hours: 41%
Impact of fare reform on distance traveled

**Figure 13** Percentage break up of distance covered by auto drivers before reform

**Figure 14** Percentage break up of distance covered by auto after the reform

- **50-75**
- **76 to 99**
- **100 - 119**
- **120 to 150**

**Before reform**
- 49%
- 18%
- 16%
- 17%

**After reform**
- 35%
- 28%
- 27%
- 10%
Impact of fare reform on trips

Figure 15 Percentage break up of drivers taking number of trips before reform

- Upto 10: 25%
- 11 to 15: 26%
- 16 to 20: 17%
- 21 to 25: 12%
- Above 25: 20%

Figure 16 Percentage break up of drivers taking number of trips after reform

- Upto 10: 24%
- 11 to 15: 32%
- 16 to 20: 9%
- 21 to 25: 12%
- Above 25: 23%
Summary of impacts on distance traveled and trips

- Fare reform has had a disproportionate impact on distance traveled and trips.
- While some drivers saw an increase in average daily trips and trip distance, some section of drivers also saw a reduction in daily trips and trip distances.
- This implies that while a share of drivers have adopted the fare reform, it is clear that there is also a share of drivers who have not adopted the reforms.
Impact on driver earnings before and after fare reforms

Figure 15: Comparison of Daily Earnings of Auto-rickshaw Drivers Before and After the Fare Reform

% of drivers by income earned per day

Earnings before fare reform | Earnings after fare reform

- Upto INR 499: 23% | 45%
- INR 500-749: 36% | 37%
- INR 750-999: 38% | 15%
- INR 1000 & above: 3% | 3%
Impacts of fare reforms on driver earnings

- As seen from the previous slide, the share of drivers making less than INR 500 per day has gone up after the reforms.
- The average earning as reported by the auto drivers has reduced by 24% from Rs 720 before reform to Rs 547 after reform.
Challenges faced by drivers

Figure 16 Challenges faced by the auto drivers

- Competition from other autos, share autos, tata magic (37%)
- Bribe / Fees / Licences / Recalibration / Operating Cost is high (21%)
- More time per trip due to traffic (30%)
- Dead Trips (7%)
- Reduction in earning after the fare reform (4%)
- Fluctuating Petrol price (1%)
## Summary

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<th>Impacts of Fare Reforms</th>
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<td>Passengers</td>
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<td><strong>Impact on modal shift:</strong> Nearly 80% of the respondents said they have <em>shifted some trips from other modes to auto-rickshaws</em>, as a direct result of the fare reform.</td>
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<td><strong>Impact on types of trips:</strong> It is found that 68% of the respondents have shifted both work and non-work related trips to auto-rickshaws, while 17% have <em>shifted only work related</em> trips to auto rickshaws.</td>
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<td><strong>Impact on buying a personal vehicle:</strong> Almost 73% of the vehicle owners are against buying another vehicle while 63% of the respondents who currently <em>do not have a vehicle</em> have vouched for not buying a personal vehicle after the fare reform.</td>
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## Summary

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| Drivers      | • **Impact on the distance travelled by the auto:**  
  • While some auto-rickshaws have seen increases in average daily trips and distance, a notable number of rickshaws have seen reductions in these parameters  
  • This implies that while some have adopted the reforms, there are sizable numbers of drivers who have not adopted the reforms.  
  • **Impact on the earnings of the auto drivers:** The average earning as reported by the auto drivers has reduced by 24% from **Rs 720 before reform** to **Rs 547 after reform.** |
# Recommendations

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<th>Description</th>
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<td>Revision of fare estimation model</td>
<td>• Current distance based model has limitations, as fares earned in peak periods are low, leading to overcharging&lt;br&gt;• Need to move to a distance-duration model, to effectively account for congestion during peak periods</td>
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<td>Better enforcement to ensure meter-use by drivers</td>
<td>• Current enforcement practices have not been able to curtail rampant non-compliance to government regulated fares&lt;br&gt;• Need to enhance enforcement, through a priority based approach, based on identification of hot-spots of non-compliance, and strict fines and license appropriation of non-compliant drivers</td>
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<td>Driver training</td>
<td>• Need for large scale driver-training, to counter the culture of informal fares and overcharging that has developed over decades&lt;br&gt;• Training to focus on the importance of quality of service, and adherence to meter-based fares</td>
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<td>Regulation of other modes of transport</td>
<td>• Need to regulate other modes such as share-autos and share-taxis, which are currently competing with the regular auto-rickshaws through lower fares</td>
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<td>GPS meters</td>
<td>• Installation of GPS meters on all auto-rickshaws to improve vigilance and enforcement</td>
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