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Title: State Policy and Mobile Telephony: A Study of Selected Mobile Operators

### **Abstract**

India's services sector growth is attributed to the expansion of modern services like financial services, communication services (a category that include mobile telephone services) and business services (a category that include information technology services), which emerged due to opening of the economy in the early nineties and technological changes over the years. In particular mobile telephone services have emerged as a growth engine of the economy and transformed India as the fastest growing and the second largest network in the world. This sector contributes to economy, foreign investment and generates employment with a high spillover effect to other sectors. Policy makers and their critics often cited the mobile telephone services, where government initiated efficient proactive policies. However after a phase of healthy growth, the Indian telecom or mobile telephone sector appears to be slowing down that may be attributed to regulatory and policy uncertainty. This is an area of great concern and it raises many questions on the future growth of mobile telephone sector. In view of this concern, the main objective of study is to understand the role of state (government) policies and regulations for the development of mobile telephone sector in India. The study examine the impact of telecom policies and regulations at macro (sectoral), meso (operators) and micro (stakeholders) level by using various data sources, which is a new attempts and contribute in the future policy making.

### *Findings:*

The sector faced some bad poor policy decisions in recent times as allocation of spectrum licenses on first cum first basis in 2008 that was cancelled later by the Supreme Court in 2012; The department of telecom granted 3G licenses to public sector operators (BSNL and MTNL) before the auction, and fixation of high reserve price in recent auctions (2012 and 2013) to enhance the government exchequer and subsequent mute response reflects some of the poor regulatory decisions. This reflected from poor economic health of mobile phone sector in terms of declining revenue, investment, subscriber addition in urban market, tariff, minutes of usage, and average revenue per user in the last few years. There is extensive-competition in the market with presence of more than 10 operators. But the concentration index shows that the new or small operators in each telecom circle have a small share of subscribers and it dominated by only two or three operators. Therefore the high number of operators in each circle is not only creating spectrum scarcity but also adversely affecting the quality of services. There is still a huge rural and urban digital divide with tele-density of around 150 per cent in urban areas and only 40 per cent in rural areas. There are high regulatory charges in the mobile phone market that includes license fee, spectrum fee, USO charges, frequent penalties on non-compliances of regulations and high investment for 3G/BWA licenses and its rollout left operators without any capital with rising debt for further investment. The consistent non-utilisation of USO fund also put questions on continuation of such high levies (5 per cent of revenue) to the operators. The granger causality test indicates that the government's proper regulations are responsible for increases in investment, mobile phone subscribers, internet penetration and revenue.

The performance of all the mobile operators in terms of growth of subscriber and revenue has slowed down, while the same for Reliance and BSNL has turned into negative in real term in recent few years. The bad liquidity position or insufficient cash reserve for investment reveal that their recent investment is largely funded by debt. However, Airtel and Idea are still performing better due to adoption of innovative practices, i.e. outsourcing model (IT related services to IBM, tower and other infrastructural maintenance to Indus) by the former and revenue model (focusing more on high revenue generating circles) by the latter, while BSNL turned into loss making entity due to high operating cost on its high manpower of being public sector unit and due to technological obsolescence. Further, Data envelopment analysis also shows that Airtel is fully efficient operator in terms of proper management of assets and expenditure. Therefore efficient operators like Airtel and Idea, who has controlled its expenditure by adopting outsourcing model and invested properly in assets has stayed afloat, while BSNL whose expenditure on its manpower and maintenance of assets was quite high resulted in loss of its revenue and has turned into inefficient operator in recent years.

Finally, stakeholders were unsatisfied with ineffective regulations for anti-competitive and USO policy due to presence of large number of operators in the market and improper management of huge USO fund. They were concerned about high cost of 3G services, intense competition, absence of local content of mobile-application, high prices of smart phone and low penetration of data services. The main concern of digital divide as mobile phone users from underdeveloped area reveal that they faced many barriers while using mobile phones like (i) lack of electricity for charging, (ii) lack of knowledge of MVAS, (iii) high cost of mobile hand set, (iv) poor signals, (v) non-functional base stations or mobile towers in the absence of electricity and (vi) fraudulent money deduction practices of the operators.