



# ILLICIT MARKETS- A THREAT TO OUR NATIONAL INTERESTS

THE MOBILE PHONES INDUSTRY



# About this report:

This report has been prepared by Thought Arbitrage Research Institute (TARI) for FICCI Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE).

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- Corporate Governance
- Whistleblowing / Vigil Mechanism
- CSR & Sustainability
- Economics & Public Policy

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## Foreword

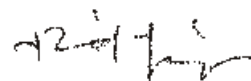


**P**roduct counterfeiting puts consumer safety at a great risk. Counterfeit, fake and smuggled goods are no longer just about luxury items. Today, almost all sorts of products are being copied and smuggled, which lead to fatal consequences for the consumers.

FICCI has been at the forefront of advocating policy framework on various aspects affecting the industry. In 2012, a FICCI-CASCADE study titled "Socio-Economic Impact of Counterfeiting, Smuggling and Tax Evasion in Seven Key Indian Industry Sectors" was released which was the first ever compilation of facts and figures on counterfeiting, smuggling and tax evasion in seven key industry sectors in India. After the earlier comprehensive study, which not only estimated the size of the grey market in the select industry sectors, but also highlighted the losses to the industry in sales and Government in revenue, we have now gone a step further and developed 10 sector specific reports on 'Illicit Markets - A Threat to Our National Interests'. This report is specific to the mobile phones industry and aims at updating the estimates of grey markets in this sector, projecting the resultant losses to the industry and assessing its impact on innovation and investment.

I would like to thank and congratulate all the committee members and stakeholders who have contributed towards this project, particularly Thought Arbitrage Research Institute (TARI). It is hoped that this study would provoke further debate on the extent of this problem and ways and means to mitigate the challenge.

I wish FICCI-CASCADE success in its future initiatives.



**Dr. A. Didar Singh**  
Secretary General  
FICCI

## Chair's Message



I am pleased to present the report on 'Illicit Market: A Threat to Our National Interest' which is specific to the mobile phones industry.

Fake mobile product market in the country is growing at a rapid pace in India, devaluing legitimate brands, posing serious threat to the health and safety of the end users and adversely affecting the economy in terms of loss of revenue for industry and governments.

Mobile phones represent a huge multi-billion dollar industry. However, this industry is witnessing high levels of grey market operations, hindering the incentive to innovate. There have been reports of fatalities from explosions of fake mobile phones. Hence, health issues, for example, from higher levels of radiation, and personal safety are of prime importance. Unlike the hundreds of safety checks genuine mobile phone products must pass before being sold, counterfeit phones are not tested for compliance with industry safety standards and can contain substances which are a danger to the environment and human health.

Consumer awareness is the key as there is a large base of users who knowingly buy low priced fake mobile phones for style and status, without knowing that these fake devices run on inferior operating systems which can not only harm their personal data but can be a part of an illegal nexus leading to terrorist activities.

This report has estimated the size of the illicit market; its adverse impact on innovation and investment in the mobile phones industry. I am certain that the findings from this report would increase consumer awareness, drive support from policy makers in stringent law enforcement mechanisms and step up the industry for greater investment in R&D and encourage innovation.

I hope that this research will be useful for all stakeholders including consumers, industry, policy makers and researchers on the issues in the mobile phones industry, and the challenges ahead if concerted efforts are not taken to curb this twin menace of smuggling and counterfeiting.



**Anil Rajput**  
Chairman  
FICCI CASCADE



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# Executive Summary



In the study titled "Socio-Economic Impact of Counterfeiting, Smuggling and Tax Evasion in Seven Key Indian Industry Sector" (FICCI-CASCADE Study) sales loss to industry and tax loss to the government due to the operation of the grey market in India was estimated for the years 2008 and 2010 using data published by the Government of India on production and consumption for those years.

Taking off from the previous study, FICCI's Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE) has commissioned the present study which also extends to assessing the impact of illicit markets on investments, innovation and tax arbitrage. This report is specifically for the mobile phones industry.

## MOBILE PHONES

GREY MARKET  
ESTIMATES  
INDUSTRY &  
GOVERNMENT LOSS

**IMPACT ON:**

- Innovation
- Investment
- Inter-State Tax Arbitrage
- Terrorism

### *Estimating the Illicit Markets & Loss to Industry and Government*

India is the world's second-largest telecommunications market according to India Brand Equity Foundation (IBEF). The mobile phone industry in India is likely to contribute \$ 400 billion to the country's gross domestic product (GDP) and has the potential to generate about 4.1 million additional jobs by 2020, as per Ms. Anne Bouverot, Director General, Groupe Speciale Mobile Association (GSMA).

Driven by replacement sales, proliferation of smartphones and multi-SIM mobiles and a rapidly growing rural mobile subscription base, the sale of mobile phones in India is continuing its buoyant journey. Mobile phone shipment volumes in the country are anticipated to grow from 198 million units in 2012 to 269 million units by 2015, growing at a compounded annual growth rate (CAGR) of 10.9%.<sup>1</sup>

The mobile phone industry also has one of the highest illicit market percentages amongst all the industries under the review of FICCI CASCADE. For 2012 this study has estimated the illicit markets to be 25.4% vis-à-vis 20.8% in 2010. Estimates are based on latest available data published by the Ministry of Statistics and Planning Implementation (MoSPI), Government of India and Cellular Operators Association of India (COAI).

Based on the percentage of grey market worked out for 2012, the loss to the industry for 2014 has been estimated at ₹ 19,066 crores, an increase of 111% in comparison with the loss of ₹ 9,042 crores determined in the 2012 FICCI CASCADE study. Thus losses to the industry on account of operation of the illicit markets has, in absolute terms increased quite significantly. One of the primary reasons for this is the weak enforcement of laws which do not act as a deterrent to counterfeiters who are out to make a quick buck. Loss to the government has also increased significantly from ₹ 3,174 crores in 2012 to ₹ 6,705 crores in 2014.

Industry	Grey Market %age		Loss to Industry (₹ crores)	
	2012	2010	2014	2012
Mobile Phones	25.4%	20.8%	19,066	9,042

## Impact of Illicit Markets on Innovation

In this study two proxies were used to measure innovation:

- Creation of intellectual property rights (IPR).
- Research & development (R&D) expenditure.

Our analysis did not yield clear results pertaining to creation of IPRs in the mobile phones sector. An assessment of patent applications (filed, examined and granted) in the country shows that in the last 5 years there has been a declining trend in the number of patents granted by the Patent Office. According to a Thomson Reuters report patent applications filed by the computer/electronics industry in India from 2007-08 to 2011-12 has fallen from approximately 5,000 to almost 4,000. A possible reason for this could be lack of IPR protection in India. Specific information is however not provided for the mobile phones industry.



The mobile phones industry is expected to have a high R&D over operating expenditure ratio. As there are many foreign players and non-listed Indian entities in the industry, data of R&D expenditure was not available in the public domain. India's import, our study finds, is around 94% of finished goods over total production in this industry. This could either be because the indigenous technology for developing these goods is completely absent or that imports are cheaper and/or of better quality than domestic goods. Another reason perhaps is that returns on R&D are not sufficient to beat competing and cheaper imitations.

This clearly indicates that as the size of the illicit markets is increasing the scope and incentive for innovation in this highly innovation driven industry is decreasing. In order to encourage innovation, the industry and government need to work towards strengthening the law enforcement process which will discourage IPR infringement and encourage more innovations through rigorous R&D. Returns on successful R&D need to be large enough to compensate for the high proportion of R&D that is bound to turn out to be unsuccessful.

## Impact of Illicit Markets on Investments

Here, our study sought to assess the impact of illicit markets on investments in the mobile phone industry, using the following proxies:

- Gross value added (GVA) as a percentage of total output.
- Ratio of imported and indigenous inputs and imports of goods over total production.
- Sales over capital employed.

These proxies assess whether Indian companies are investing in capacity enhancements or process improvements as warranted by increasing consumer demand rather than simply relying on imports of goods.

***Since there are many foreign players and unlisted Indian entities operating in the Indian mobile phones market, the data for GVA, imported and indigenous inputs and capital employed are not available in the public domain. Hence, we were unable to comment on the relation of these indicators with the illicit market.***

However, the mobile phones sector shows a high percentage of import of finished goods over total production, standing at 94% in 2012. This implies that production and value addition in this industry are happening outside rather than within the country, which calls for the need to invest in indigenous manufacturing capability and utilisation of assets more efficiently.

## Illicit Markets, Terror Organisations and Criminal Networks

While statistical data is available for the number of terrorist attacks that have taken place in India, it is difficult to directly correlate it to the grey market data in the absence of sufficient information and research, which are lacking at present, especially in the Indian context.

The lack of adequate data bases on search and seizure in India makes it difficult to link the increase in illicit markets to terror funding. Establishment and determination of the extent of such a link calls for strategic intelligence gathering and preparation of robust databases, which are clearly missing at present. Given the security implications, if not outright financial considerations, there is little to argue against carrying out such exercises. This would be the first step to contain counterfeiting and its corollary, terror and ensure that genuine business interests do not suffer.

## Conclusion & Way Forward

Our study attempted to establish a relationship between illicit markets and its impact on innovation, investment, terror funding and tax arbitrage. However, limited data is available in the public domain to enable us to measure the proxies used to assess impact on innovation and investment - i.e. data on patents, R&D expenditure, gross value added, sales, capital employed and the extent of indigenous and imported inputs used in production.

Significantly, the study observes that the industry is highly dependent on imports for finished products, implying that value (and jobs) are being added overseas, not domestically. There could be multiple reasons for this - either indigenous technology for developing these goods is absent or imports are cheaper and/or of better quality than domestic goods. The operation of the illicit markets plays a significant role - it kills the incentive to innovate or invest in domestic production. Research is a risky activity. Returns on successful R&D must be large enough to compensate for the high proportion of R&D that is unsuccessful, generating in this way a normal return on R&D as a whole. For an industry sector faced by the challenges of a large and increasing grey market, the returns would be much lower on account of the greater risk of operation of illicit markets.

The reasons for the growth of grey market in the Indian mobile phones industries are varied. Some buy fake products because they are unsuspecting and unaware, some also buy look-alike products because of the high brand value of the original products. The Government of India, in collaboration with various domestic and international organisations and law enforcement agencies, is working towards curbing this menace, however the fact that the illicit markets have grown, across sectors, shows that the regulatory and enforcement mechanisms need to be strengthened in order to boost sustainable economic development and growth.

## SUMMARY OF CONCLUSIONS

- The grey market percentage in the mobile phones industry has increased from 20.8% in 2010 to 25.4% in 2012.
- Loss to the industry has increased in 2014 in comparison with 2012 from ₹9,042 crores to ₹ 19,066 crores to ₹ 15,035 crores, attributable to the increase in the industry size as well as grey market percentage.
- Loss to the government has also increased significantly from ₹ 3,174 crores in 2012 to ₹ 6,705 crores in 2014.
- Not much data is available in the public domain for measuring the proxies used to assess impact on innovation and investment - i.e. data on patents, R&D expenditure, GVA, sales, capital employed and the extent of indigenous and imported inputs in production.
- However, the industry is highly dependent on imports for finished products, implying that value (and jobs) are being added overseas and not domestically.
- Research is a risky activity and returns on successful R&D must be large enough to compensate for the high proportion of R&D that is unsuccessful, generating in this way a normal return on R&D as a whole.
- As far as terror organisations and criminal networks are concerned, the lack of adequate data based on search and seizure in India makes it difficult to link the increase in illicit markets to terror funding. Establishment and determination of the extent of such a link calls for strategic intelligence gathering and preparation of robust databases, which are clearly missing at present.

For sustainable economic growth, investment and innovation are a pre-requisite. The growing illicit markets restrain such growth, reducing business efficiency, profitability and overall development. To curb this menace therefore, collaborative efforts from all the stakeholders are required - industry, government (state, central and international) and consumers.

## Objective of the Study



In a 2012 FICCI CASCADE study titled "Socio-Economic Impact of Counterfeiting, Smuggling and Tax Evasion in Seven Key Indian Industry Sectors" the sales loss to industry and tax loss to the government due to the operation of the grey market was estimated for the years 2008 and 2010.

Two years have elapsed since the last study and since an accurate assessment of the real costs of counterfeiting, smuggling and tax evaded goods is vital to convincing decision-makers that strong action is necessary to curb the growing illicit markets, this study takes off from the earlier one, and sets out to ascertain the percentage of illicit markets in these sectors as on date. FICCI's Committee Against Smuggling and Counterfeiting Activities Destroying the Economy (CASCADE) has commissioned the present study to also assess the impact of grey markets/counterfeit products on investments, innovation and tax arbitrage. This report is specifically for the mobile phones industry.

### MOBILE PHONES

GREY MARKET  
ESTIMATES  
INDUSTRY &  
GOVERNMENT LOSS

#### IMPACT ON:

- Innovation
- Investment
- Inter-State Tax Arbitrage
- Terrorism

Grey market percentages are currently ascertainable for 2012, as reliable government data from the Ministry of Statistics and Planning Implementation (MoSPI) of the Government of India is available for 2012. This data includes the Annual Survey of Industries for 2012 which provides data on factory production across the country and National Sample Survey

Organisation's National Sample Survey 68th round, which provides household consumption data across the country for the year 2012.

Loss to the industries concerned in 2013-14 has then been ascertained by extrapolating the industry size determined for 2011-12 based on assumptions about the growth of the industry over the two year period 2012-13 and 2013-14. These assumptions are obtained from industry reports and discussions with industry experts. Assuming that the grey market percentage remains constant over this two year period, it is applied to the market size so estimated to arrive at the loss to the industry for 2013-14.

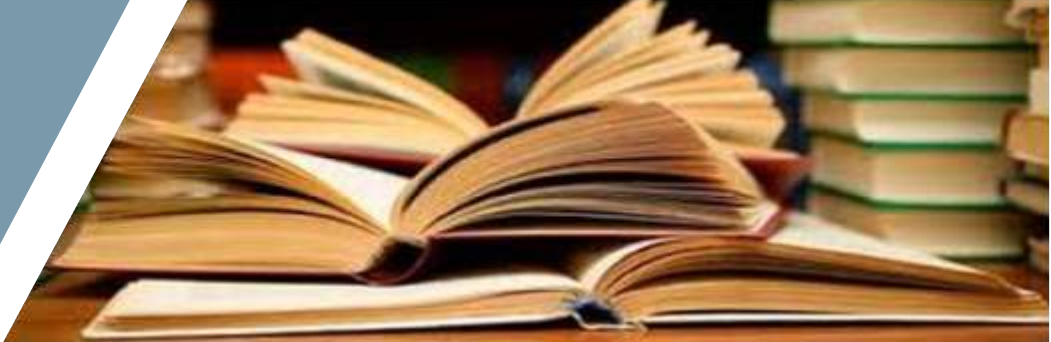
As indicated in several studies including the 2012 FICCI CASCADE study, by their very nature, since counterfeiters operate outside the law, estimating the extent of counterfeiting and piracy and the harm these activities cause is extremely challenging. Illegal businesses do not report information on their activities to any government agency therefore measuring their size must be done using indirect methods.<sup>2</sup>

## Industry Coverage

Taking off from the 2012 FICCI CASCADE study this sector study quantifies estimates of losses due to illicit markets in the mobile phones industry, as well as various aspects of the illicit markets and their impact on factors like investment, innovation, tax arbitrage, consumers, etc. Other sectors are covered in separate sector reports similar to the present report.

These series of studies is perhaps the first quantitative study in India on the impact of illicit markets on the various economic aspects. Depending on the quality and credibility of data available, the study has quantified different types of impacts on various sectors. The study uses latest Government of India data on consumption and production, namely NSSO and ASI, which is available for 2012 (released in 2014).

## Literature Review



**W**e have reviewed past studies and published research on the subject of grey markets including counterfeiting, smuggling and tax evaded goods and their impact on innovation, investment, tax arbitrage and funding terrorist activity.

This review included global studies commissioned by public institutions and agencies of repute, industry associations working on anti-counterfeiting endeavours, academia and major corporates. Such works were reviewed to analyse the scope of research, methodology adopted, analysis techniques and results.

Extracts from some of the significant reports are reproduced in Annexure I to give a broad understanding of global thinking on the subject.

# Mobile Phones - Industry Profile in India



## Introduction

According to a sectoral report from April 2014 released by India Brand Equity Foundation (IBEF), India is the world's second-largest telecommunications market. The mobile phone industry in India is likely to contribute \$ 400 billion to the country's gross domestic product (GDP) and has the potential to generate about 4.1 million additional jobs by 2020, as per Ms. Anne Bouverot, Director General, Groupe Speciale Mobile Association (GSMA).

Driven by replacement sales, proliferation of smartphones and multi-SIM mobiles and a rapidly growing rural mobile subscription base the sale of mobile phones in India is continuing its buoyant journey. Mobile phone shipment volumes in the country are anticipated to grow from 198 million units in 2012 to 269 million units by 2015, growing at a compounded annual growth rate (CAGR) of 10.9%.<sup>3</sup>

Rapid strides in the telecom sector have been facilitated by liberal policies of the Government of India that provides easy market access for telecom equipment and a fair regulatory framework for offering telecom services at affordable prices. The deregulation of foreign direct investment (FDI) norms have made the sector one of the fastest growing and a top five employment opportunity generator in the country.<sup>4</sup> Intense competition among multiple operators, low priced handsets, low tariffs and significant investments in telecom infrastructure and networks have contributed to the growth story.

The overall phone subscriber base in India was 946.40 million at the end of July 2014, of which mobile or wireless segment (GSM, CDMA and Fixed Wireless Phone (FWP)) constituted 918.72 million and the fixed (wireline) the remaining, 27.68 million, as per



the Telecom Regulatory Authority of India (TRAI). The urban to rural mobile subscribers ratio was 58.82% and 41.18%, respectively.<sup>5</sup>

India is flooded with competition from foreign suppliers and indigenous players. Besides the top 4 to 5 players who control almost 60% of the market in India, there are numerous indigenous players with varying capabilities. Most of these indigenous suppliers currently utilise the services of contract manufacturers in China and do limited design activity in-house. Market leaders such as Samsung and Nokia do only the last level low value adding assembly locally. Activities such as PCB assembly, mounting the casing are handled locally, while the board with the key components mounted is imported into the country. Thus there is negligent local sourcing resulting in extremely low local value addition.<sup>6</sup>

The Indian mobile phone market saw significant changes in the second quarter of 2014. For the first time, Indian brand Micromax became the leading supplier, surpassing Samsung, and captured 17% market share from 13% in the first quarter of 2014. In the smartphone category, it became the second largest supplier behind Samsung but overtook Nokia in the feature phone category. Indian brands together captured more than two-thirds of the total mobile phone shipments and more than half of the smartphone shipments.<sup>7</sup>

The use of mobile phones has considerably widened. It is no longer restricted to communication by way of making calls and texting only. The growth of e-commerce and mobile banking has dramatically changed the potential of mobile phones. They are also being used as important tools in education, healthcare and agriculture sectors. Coupled with 3G and 4G enabled handsets, all these new developments present additional opportunities for growth of the mobile phones industry.

The industry is dominated by foreign multinational companies. The second rung comprises of Indian companies.

## Ancillary Industries

As in the case with other industries, the rapid expansion of mobile phones has led to a flourishing ancillary industry around it. Most of the components are imported and then assembled in India. With outsourcing catching up in the sector, mobile phone manufacturers and suppliers have outsourced functions such as network maintenance, IT operations, and customer service.

The surge in the subscriber base has necessitated a network expansion covering a wider area, thereby creating a need for significant investment in telecom infrastructure. To cut costs and focus on core operations, telecom companies have been segregating their



tower assets into separate companies. As a result a whole new sub-sector - telecom tower industry - has emerged.

Creating separate tower companies has helped telecom companies lower operating costs and improve capital structure. It has also provided an additional revenue stream. The growing need for towers and rise in tower sharing has led to the emergence of independent telecom tower companies (ITTCs) along with the telecos-owned tower companies.

## SWOT Analysis

Though India has witnessed a high consumption volume in mobile phones, local manufacturing has been rather limited. The top five players, which include both foreign multinationals and Indian players, control nearly 60% of the handset market. The foreign players carry out only last level low value additions, assembling and packaging in India. Their research and development work and patenting are mostly abroad. The domestic players utilise the contract manufacturers in China and do limited design activity themselves.

Presented briefly in the chart below are the strengths, weaknesses, opportunities and threats faced by the industry in India currently.



# Counterfeiting in the Mobile Phones Industry



Followings are the features of counterfeit/duplicate mobile phones:

- Phones are counterfeited by using fake/incorrect IMEI (International Mobile Equipment Identity).
- Name of the phone may be misspelt.
- Using different colours that are not provided by the original manufacturer.
- Providing features that are not provided by the original manufacturer.
- Batteries sold without packing in the aftermarket.

## How to identity fake products:

- Phone may be extremely light in weight
- IMEI (International Mobile Equipment Identity) can be verified from the manufacturers' website
- Batteries of counterfeited mobiles may over-heat and explode during calls or while being charged
- A misspelt name on the phone
- Phones sold without a warranty

## Factors Driving Illicit Trade in Mobile Phones



**M**obile phones have an active counterfeit markets. Many consumers are fooled into buying fakes due to similarity in appearances with genuine handsets. Others may purchase a fake because of the relative price difference or preference for the unusual functions that a fake phone has, such as dual SIMs or analogue TV.

There are many other reasons that encourage production and consumption of counterfeiting mobile phones. Those can be:

- People buy counterfeit/substandard mobiles by social influence.
- Desire to have more complex gadgets.
- Rapid changes in the technology and the need to keep up with such changes.
- Availability of latest technology at lower cost.
- Higher profit margins for the counterfeiters.
- Limited life of mobile phone and need for frequent replacement.

# Size of the Illicit Market in the Mobile Phones Industry



## Data Sources

In order to calculate the grey market percentage for 2011-12, the gap between supply and demand will be derived. Listed below are the various sources of information that have been used to arrive at these numbers.

For ascertaining supply and demand we have to determine the different kinds of products that have to be considered under the industry category. They remain the same as in the earlier study, which were identified separately for each sector through literature reviews, consultation with FICCI-CASCADE members and industry representatives.

This study has used a combination of data analytics on Government of India statistics, corporate information from data aggregators and industry validations to estimate the extent and level of grey market operations. The key data sources are the Annual Survey of Industries (ASI) and National Sample Survey (NSS) published by the Ministry of Statistics and Programme Implementation (MoSPI) of the Government of India. This has been supplemented with data from the Directorate General of Commercial Intelligence (DGCIS) under the Ministry of Commerce and Industries and Ministry of Micro, Small and Medium Enterprises (MSME) and information extracted from PROWESS database for companies.

**Table: ASI Data Points Analysed**

Particulars	Description of data series	Data Points evaluated
Annual Survey of Industries 2011-2012	Factory wise details of manufacturing activities pan India for the period April, 2011 to March 2012.	Block A and Block J, gross sales value, multiplier, NPCMS Code etc.

## Supply Side Estimation

**ASI - Gross Sales Value:** The Central Statistical Organisation (CSO) of the MoSPI collects national data on manufacturing activity for each district (rural and urban) to compile the Annual Survey of Industries (ASI) statistics. Gross Sales Value (GSV) in ASI data includes product cost, excise duty, sales tax and other distribution expenses.

GSV data of selected products identified for domestic sales was for 2012 as well. The data (after taking the multiplier effect as suggested by CSO) covered the ASI survey for the financial year 2011-12. 13.33 lakh data points were analysed. Data was extracted from Block A and Block J. Details are provided in the following.

ASI 2011-2012 has changed its coding structure and now uses the NPCMS code structure for product classification and industry grouping which is a 7 digit classification. The previous FICCI-CASCADE study used ASICC code classification (5 digits) to determine the product classification under various industry heads.

In order to maintain consistency and comparability with the previous FICCI-CASCADE study results, a similar product classification has to be followed to under the NPCMS code structure. Hence NPCMS codes have been mapped with ASICC codes and then allocated to the industry sector concerned. Additional NPCMS codes identified post mapping with ASICC codes have been further deciphered to allocate to the industry sector concerned.

**Annual Production Amounts of MSME:** ASI data captures production of units registered under the Factories Act. Broadly according to the Factories Act, 1949, a factory means any premises where ten or more people are working where manufacturing process is carried on with the aid of power or otherwise where twenty or more workers are working.

There are also a large number of micro, small and medium enterprises (MSME) in the sectors covered in this study. As per the MSME Development Act, a micro enterprise is one where investment in plant and machinery does not exceed ₹ 25 lakhs, while in a small enterprise the limit is between ₹ 25 lakhs to ₹ 5 crores and medium enterprises are those which have investment values between ₹ 5 crores to ₹ 10 crores.

Comparing these definitions it can be assumed that small and medium enterprises would have been covered by ASI. Accordingly annual production of micro enterprises that are engaged in manufacturing activities has been extracted from the MSME annual production.

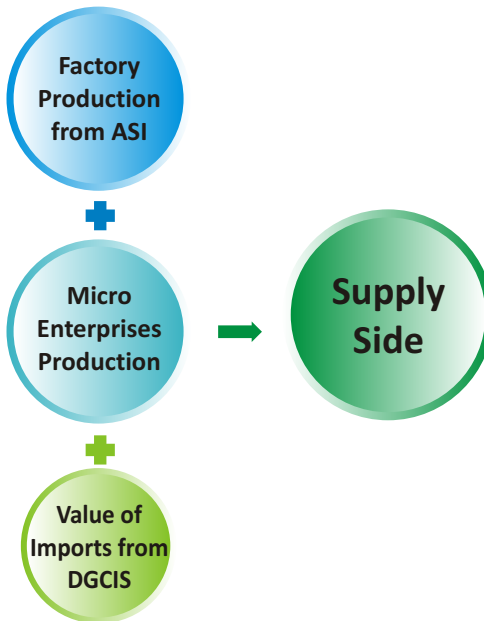
Out of the total 24.01 lakh units surveyed in 2006-2007 as a part of the MSME Census, only 22.48 lakhs were found relevant to MSME of which 15.64 lakh units were found working, 4.96 lakh units were closed and 1.88 lakh units were not traceable. The survey results give details of the registered units, segregate such units into micro, small and medium enterprises and map their products into National Industry Code (NIC) classification.



In this study, the value of the goods manufactured from registered micro enterprises and supplied to the selected industry sectors has been estimated by taking inputs from MSME Census of 2006-2007 and the Annual Report of the Ministry of MSME for the year 2011-2012. These estimates supplemented the GSV obtained from ASI data.

**Value of Goods Imported:** The value of goods imported into the country has been taken from the data published by the Directorate General of Commercial Intelligence and Statistics (DGCI) under Ministry of Commerce and Industry. For this study, we have used the eight digit code classification import data for the year 2011-2012. Import value data was extracted to supplement the production figures obtained from factories and micro-enterprises to arrive at the total of the supply side for domestic consumption.

ASI 2012 uses NPCMS code classification whereas import data uses ITC HS codes. Import data follows the harmonic system code for classification and for 2010-2011 a total of 10,032 codes were scrutinised up to an 8 digit level. MSME data is based on the 2 digit classification of NIC 2004.



## Consumption/Demand Estimation

The National Sample Survey Organisation (NSSO) of MoSPI conducts a survey on household consumer expenditure and employment and unemployment covering the entire country. This National Sample Survey (NSS) is one of the largest sample surveys of its kind and collects data on household characteristics such as household size, principal and secondary occupation, household type, land ownership/ possessed/ leased, land cultivated, land irrigated, primary source of energy, household ownership, etc.



For this study, data was analysed from NSS's 68th round survey, covering the period July 2011 to June 2012. Consumption expenditure data for the last 30 days/365 days (as the case may be) for the country, was arrived at after giving effect to the multiplier suggested by NSSO. Approximately 123.35 lakh data points were analysed for NSS 68th round where the codes were assigned to the respective industry sectors and then mapped to find the related consumption values. The blocks and codes of NSS 68 from which data was extracted for this study are given in the table below.

**Table: NSS Data Points Analysed**

Particulars	Description of data series	Data Points evaluated
National Sample Survey (Round 68)	Household consumer expenditure for the period July 2011 to June 2012.	Block 5, 9, 10, 11 and 12; Item code, subsample code, consumption value, multiplier, weight to be applied, NSS/NSC code.

## Estimating the Illicit Markets-Methodology

Using the data obtained from the sources listed in the previous section, we have ascertained the grey market percentage for 2012 with the following formula:

$$\text{Grey Market \%age} = \frac{\text{Total Consumption} - \text{Total Supply} \times 100}{\text{Total Consumption}}$$

## Mobile Phones - Data Analytics

The counterfeit mobile phone market is a \$ 6 billion a year drain on the global economy. Counterfeit phones are known to be made with cheap sub-standard materials and have been shown to contain dangerous levels of metals and chemicals like lead up to 40 times higher than industry standards. These substandard devices run on inferior operating systems and there have been reports of fraudulent applications which, when downloaded, collect and illegally circulate sensitive and personal data. Since black market phones are made from sub-standard materials and are not tested for compliance with industry and national standards, they suffer frequent call dropouts and put a strain on the mobile network by degrading coverage, call quality and mobile internet speeds for all users.<sup>8</sup>

For ascertaining the grey market percentage of the mobile phones market in India, we have compared the supply side with total consumption.

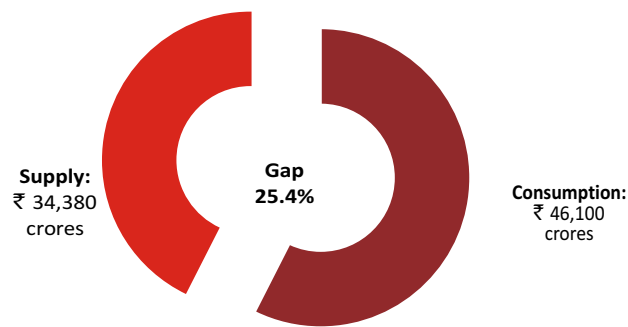
ASI 2012 provides data domestic production of mobile phones under two NPCMS code (4722200 and 4722199) which cover telephones for cellular networks or for other wireless networks.

**Total domestic production in factories amounts to ₹ 2,150 crores.**

Since a large portion of the mobile phones market is sourced from imports (94% approximately), DGCIS data was extracted for imports of push button phones, video phones and other items falling under the mobile phones category. Since MSME data does not have a specific product code for mobile phones producers, no part of the supplies in this market have been attributed to registered micro enterprises.

**The sum of the two sources of supply, i.e. domestic production and imports puts the total supply of mobile phones in India during 2011-12 at ₹ 34,380 crores.**

### Mobile Phones Supply vs Consumption Gap 2012



On the consumption side, as set out in the earlier FICCI-CASCADE study, there is a significant gap between consumption data available from NSS and that provided by the Indian Cellular Association (ICA). For 2011-12, while consumption as per NSS is estimated at ₹ 22,000 crores approximately, the ICA estimate is ₹ 46,100 crores. This is possibly on account of the high penetration of mobile phones across socio-economic strata in urban and rural India that has not been captured by the NSS survey. This may continue to be a likely limitation of NSS survey findings and hence, as an exception, NSS consumption data is not being used for the analysis of grey market percentages in the mobile phones industry.

**The total consumption expenditure in the mobile phones market therefore for the year 2011-12 is taken at ₹ 46,100 crores.**

The resultant grey market percentage in the industry for 2011-12 is 25.4% due to a gap of ₹ 11,720 crores between total consumption and total supply of mobile phones in the country.

#### Summary

To conclude, based on an analysis of reliable data published by government sources for the year 2011-12, it has been established that size of illicit markets in the mobile phones sector has increased from 20.8% in 2010 to 25.4% in 2012.

Industry	2012		Grey Market		
	Total	Total	2012		2010
	Supply*	Consumption*	Total Loss	%age	%age
Mobile Phones	34,380	46,100	11,720	25.4%	20.8%

₹ crores

(\*Based on NSSO/ASI/DGCIS data for 2012)



# Impact of Illicit Market-Estimating Loss to the Mobile Phones Industry



**G**rey market percentages have been established in the preceding page, for the year 2011-12. For the purpose of arriving at the loss to the industry in 2013-14, we have assumed that the grey market percentage will remain constant over 2012-13 and 2013-14. Industry size for 2013-14 has been arrived at with reference to expected and actual growth rates for the past two years provided by industry reports or analysts. These growth rates have been used to extrapolate the industry size established for 2011-12 to 2013-14. Industry size for 2011-12 is taken as the domestic factory production of the industry, ascertained from ASI 2012 data.

Thus loss to the industry (purely in terms of sales) has been established as follows:

$$\text{Estimated Loss of Sales to Industry} = \text{Size of Industry in 2013-14} \times \text{Grey Market Percentage (2011-12)}$$

## Estimating the Loss for 2013-14

The market size of the mobile phones industry has been estimated at ₹ 46,100 crores for 2011-12. As we have taken details provided by Indian Cellular Association for estimating the grey markets in 2011-12, estimates provided by the association have been considered for arriving at the market size for the year 2013-14.

### Fig: Estimated Loss to Mobile Phones Industry in 2013-14

$$\text{Estimated Size of Industry in 2013-14} \times \text{Grey Market Percentage (2011-12)} = \text{Estimated Loss of Sales to Industry} \\ ₹ 75,000 \text{ crores} \times 25.4\% = ₹ 19,066 \text{ crores}$$

According to ICA the mobile phones market is expected to grow ₹ 75,000 crores in 2013-14. Applying the grey market percentage calculated for the industry (i.e. 25.4 %) to this market size, **the grey market for 2013-14 is estimated to be approximately ₹ 19,066 crores.**

The estimated loss to the sector is tabulated below:

**Fig: Loss of Sales to Industry 2013-14(in ₹crores)**

Industry Sector	2014	2012
Mobile Phones	19,066	9,042

The loss to the industry due to the operation of illicit markets has increased by approximately 111%.

It is quite clear from this that despite best efforts undertaken to curb smuggling and counterfeiting, the illicit markets continue to thrive in the industry. It poses serious challenges to various stakeholders, viz in terms of loss of taxes to the government, loss of sales revenue to the industry and loss of quality products to customers who knowingly or unknowingly purchase such products which could often also lead to hazardous health and safety consequences.

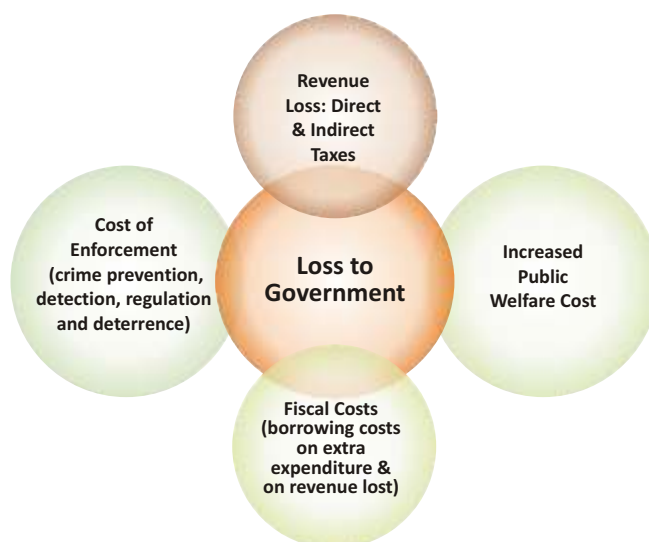
# Estimating Illicit Markets - Loss to Government



**A** part for resulting in loss to the industry concerned, the operation of the illicit markets results in losses to the government in the form indirect taxes and direct taxes. Illicit markets cause losses to the original right holders in the form of reduced sales, lower profits, brand value, reputation, consumer distrust, etc. Governments lose tax, incur higher expenditure on public welfare, insurance and health services. Ultimately corporates shy away from making investments (as established in an earlier section) due to limited/no protection of rights, resulting in loss of employment opportunities.

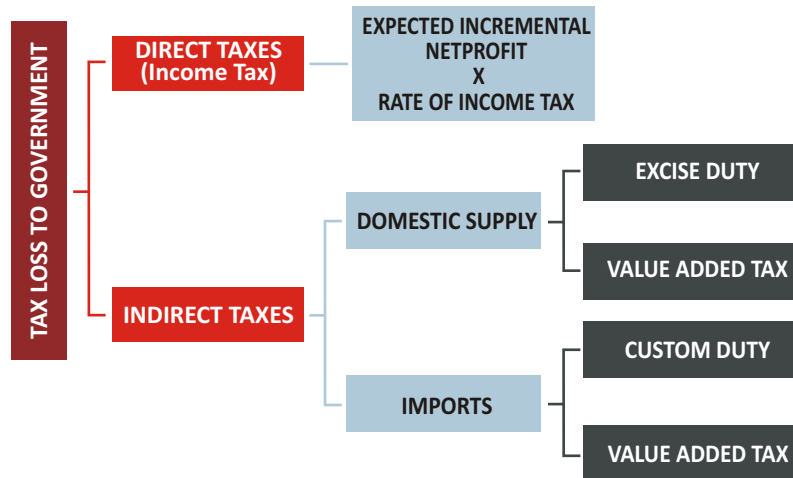
Governments that lose taxes will find it difficult to function and will be unable to provide quality and timely public services. They will be unable to deliver their legislative programmes, provide public goods or redistribute wealth.

This section aims to estimate the loss to the government of India on account of the illicit markets in the mobile phones industry. It is imperative to develop an estimate of the challenge to the National and State exchequers with the objective of introducing strong regulatory measures.



## Methodology

There is very little data on the global economic impact of counterfeiting and the losses to public revenues, employment, investment and innovation.<sup>9</sup> This study aims to project only the consequential tax loss to government on account of counterfeiting and the presence of grey markets in India. As in the 2012 FICCI-CASCADE study, the methodology used in this report is derived from the economic model used in the BASCAP report that analyses the negative impact of counterfeiting and piracy on government receipts and expenditures.



The Tax loss to government has been estimated as loss of direct taxes (income tax) and indirect taxes (value added tax, import duty and excise duty).

**Revenue Loss to Government = Loss on account of Direct and Indirect taxes in case entire gap is met by the legitimate manufacturers or importers**

For calculating the loss in income tax and indirect taxes (excise/customs/VAT), the following approach was followed:

### Direct Taxes (Income Tax):

To determine the loss attributable to income taxes, this study analysed annual reports of a sample/representative companies in the industry concerned to determine the weighted average net profit before taxes over sales. This percentage was applied to the sales loss to the industry determined in the previous section (“Size of the Illicit Market in the Mobile Phones Industry”). The resultant figure is the incremental net profit that would have accrued to the industry had legitimate industry been able to fulfil sales lost to the grey market. The number so determined is multiplied by the income tax rate to arrive at the income tax forgone by the government. Additional profit will be taxed at the highest income tax slab rate, hence the tax rate considered is 33%.

Income tax lost by the government due to the operation of the illicit markets in the mobile phones industry is tabulated below:

### Indirect Taxes (On Domestic Manufacture and Imports):

Industry Sector	Net Profitability	Direct Taxes Loss		Change	
	Percentage	2014	2012	₹ crores	%age
Mobile Phones	16.6	1,044	496	548	111%

### Indirect Taxes (On Domestic Manufacture and Imports):

Loss of indirect taxes to the government on account of illicit markets has already been ascertained. This loss comprises loss on domestic production and loss on imports. The gap in consumption and supply is assumed to be met through legitimate domestic factory and registered MSME production, as well as imports, in the same ratio using 2012 ASI, MSME and DGCIS data.

Indirect tax loss in case of domestic production (ASI & MSME) arises on account of loss of excise duty and VAT. In case of imports the loss arises on import duty (basic and countervailing duty) and VAT.

Based on the principle of conservatism we have considered the following rates of indirect taxes for the mobile phones industry. The table also shows the proportion of sales loss met by domestic production and imports:

Industry Sector	Loss to Industry met by .. (₹ crores)			Duty Rates (percentage)	
	Total	Domestic Production (ASI + MSME)	Imports	Excise Duty + VAT	Import Duty + VAT
Mobile Phones	19,066	1,192	17,874	25	30

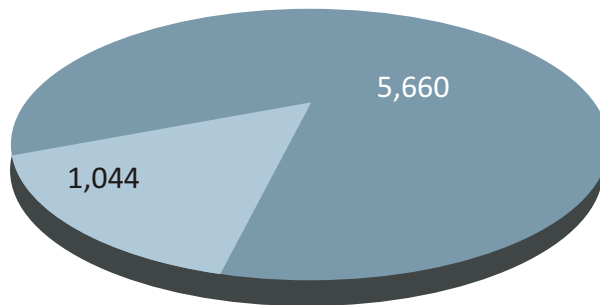
*These rates of tax were applied to the sales loss to the industry ascertained earlier, to arrive at the loss to the government on account of indirect taxes.*

Industry Sector	Excise Duty + VAT	Import Duty + VAT	Total Indirect Taxes Loss - 2014	Total Indirect Taxes Loss - 2012	Change	
					₹ crores	%age
Mobile Phones	298	5,362	5,660	2,678	2,982	111%

**Conclusion:**

Thus, the total loss to the government estimated for 2014, on account of the illicit markets in the mobile phones industry is ₹ 6,705 crores, up from ₹ 3,174 crores in 2012. As stated earlier, it needs to be highlighted, that this loss is only on account of tax revenues. We have not estimated the incremental costs incurred by government on account of welfare measures, enforcement and legislation and interest costs.

**Loss of Revenue to Government  
Mobile Phones**  
(in ₹ crores)



# Anti-counterfeiting Measures



## Government Actions:

Many existing rules and regulations are in-force to combat counterfeiting and illicit markets. These are:

- Indian Penal Code 1860 provides for penalty of imprisonment up to seven years for counterfeiting of device or mark. (Sec. 476)
- The Trademarks Act, 1999 provides for the registration of trademarks and the statutory protection of registered trademarks. Section 29 of the Trademarks Act provides for protection in cases of infringement of Registered Trademarks. In addition, Section 27 (2) clarifies that suits for passing off in respect of both Registered and Unregistered Trademarks can be maintained irrespective of infringement action.
- The Trademarks Act, 1999 provides for a penalty of imprisonment ranging from 6 months to 3 years in addition to a minimum fine ₹ 50,000/- for selling or applying false trademarks, trade descriptions, etc. (Sec. 103)
- Intellectual Property Right (Imported Goods) Enforcement Rules, 2007 [Custom notification no. 47/2007 Customs (N.T.) dated 08.05.2007] read with Instructions for implementation of Intellectual Property Rights (Imported Goods) Enforcement Rules, 2007 [Circular No. 41/2007 Custom Circular dated 29.10.2007] issued by Central Board of Excise and Customs empower the Customs authorities to seize counterfeit goods.

The Ministry of Consumer Affairs, Government of India, conducts awareness campaigns through a programme called “Jaago Grahak Jago” about counterfeiting in its attempt to educate people on how to identify fake products.

## Society and Industry Initiatives

Apart from legislations various organisations in collaboration with government and industries are also working to combat counterfeiting, smuggling and piracy. One of such organization is Federation of Indian Chambers of Commerce and Industry (FICCI).

There are various applications available for smart phones for online verification of IMEI and serial number. Many mobile phone companies provide specific dial-codes that work only in original phones and help to identify fakes. Some manufacturers provide a separate portal for complaints about counterfeit products.



# Impact of Illicit Markets on Innovation & Investment



In order to assess the impact of illicit markets on innovation and investment the following proxies were identified:

Impact on innovation:

- Intellectual property rights created.
- Research and development expenditure as a percentage of operating expenses

Impact on investment:

- Gross value added as a percentage of total output
- Percentage of imported and indigenous inputs and imports of goods over total production.
- Sales over capital employed.

However, unlike all other industries covered under FICCI CASCADE review there was limited data available in the public domain related to the mobile phones industry due to the specific nature of the industry which is dominated by foreign entities or unlisted private domestic entities. As a result, the following proxies could not be analysed:

Impact on innovation:

- Intellectual property rights created.
- Research and development expenditure as a percentage of operating expenses

Impact on investment:

- Gross value added as a percentage of total output.
- Sales over capital employed.

Our analysis for this industry is therefore limited to a review of the impact on investment vis-a-vis percentage of imports of finished goods over total production.

## Impact of Illicit Markets on Investments: Imports of Finished Goods over Total Production

Here we examine the extent of imports of finished goods over total production to estimate the level of production capacity within the country. An increasing trend would show that value (and jobs) is being created outside the country while a lower trend would show greater value being retained/generated within the country.

The following table shows the trend in the percentage of imports of finished goods over the total production in the mobile phones sector.

Industry Sector	2008	2010	2012	Trend
Mobile Phones	92.3	92.39	93.75	Increasing

The mobile phones sector displays an astonishingly high level of imports as a percentage of total production, which has consistently been over 90% over the past few years and is increasing marginally every year. Any figure over 90% for the percentage of imports over total production is clearly not heartening. It implies that most of the goods required in the manufacturing process are sourced through imports. This could either be because the indigenous technology for developing these goods is completely absent or that imports are cheaper and/or of better quality than domestic goods.

Higher imports is clearly not encouraging for the Indian economy. It increases foreign exchange outflow putting unwarranted stress on foreign currency reserves and the exchange rate. Additionally, there could be an element of threat to national security as indicated in recent media reports whereby mobile phones manufactured overseas could be technologically programmed to send coded or encrypted information or messages outside India even without the knowledge of the user.

Higher imports not only discourage the growth of intermediate manufacturers in the economy but has also proven to be a disincentive towards undertaking quality innovation initiatives. Import sector liberalisation may not lead to high input quality and high product quality. In a developing country like India, it is essential to stress on research and development initiatives to develop technologies or capability to substitute imported intermediate goods used in the process of manufacturing with indigenously produced ones. This requires rational and scientific examination and will encourage development of local raw materials, indigenous technology capacity and capability. It will also enable conservation of foreign exchange spend on the imported raw materials and finished products and help create jobs and wealth.

## Impact of Inter-state Tax Arbitrage within India



Illicit markets are all pervasive, impacting all countries, industries and products. Most recognisable brands be it of mobile phones, computers, fashion accessories, pharmaceuticals, auto components, etc. can be counterfeited, or are easily available in the grey markets in the form of smuggled or tax evaded goods. In respect of certain products, consumers are also often aware that their purchases are imitations as such acquisitions are driven primarily by a necessity to display a certain social background and to feel admired, recognised and accepted by other people. Whether the seller or the buyer is complicit, the illicit markets clearly have an impact on all stakeholders, be it the manufacturer, consumer, or government in the form of loss of revenue and profits, brand dilution, health and safety concerns. It also has a bearing on the level of investments, and innovation in a country, as well as on tax revenues.

It is often claimed, that higher tax rates tend to exacerbate the illicit markets of a country. A significant reason being, that high tariffs and taxes create opportunities for those involved in illicit markets to step in and supply 'reduced' versions of the original product at lower prices.

The purpose of this section of the report is to attempt to establish a relationship between high taxes and availability of illicit products. It had been concluded with FICCI-CASCADE that this part of the study will cover sectors with higher incidence of tax, set at 20%-25%.

In the case of mobile phones we observed, that rates of excise and customs were lower than 20-25%. State VAT rates in a majority of the states is 5%, with a few charging VAT at 14.5% or 8%. Since this industry did not fit the criteria, analysis of tax arbitrage did not form a part of this sector report.

## Impact on Consumers



### Health and Safety:

Fake phones are often purchased by consumers who are unaware of the substandard components used to make them, the impact they have on the industry and governments and the potential risk to health. A study was conducted in India by the Centre of Material for Electronics Technology (C-MET), Hyderabad, to test RoHS compliance of mobile handsets being put in Indian market. All unbranded mobile phones were found to contain alarmingly high proportion of hazardous substances, especially lead (Pb). In some cases the values were 35-40 times higher than the globally acceptable limits.<sup>10</sup> Counterfeit mobile phones may cause cancer because the materials that they are made from are usually sub-standard and may be harmful to humans. The proper safety checks are not usually carried out during the manufacture of counterfeit phones as the manufacturers try to cut production costs.<sup>11</sup>

Substandard accessories do not meet the national and international safety standards. There have been many media reports in India, and around the world, of mobile phone batteries exploding and causing injuries.

### Other Impacts

- Counterfeit phones reduce network speed or drop calls in network area
- These mobiles do not provide any after sales guarantee and warranty which leads to excessive costs of repairing
- Limited services due to pirated software
- Short life span of the gadget and hence loss of money

# Illicit Markets, Terror Organisations and Criminal Networks



## Terrorism in India

Terrorism, in all its forms, constitutes a grave threat to peace and security of a nation. Those indulging in it use disruption and violence as the weapons of intimidation against the civilian population, the government to influence public policies or even effect a regime change. By its very nature, terrorism is against the established order of the day. There is, however, no universally accepted definition of the word. Different countries fighting the menace define it differently. In India, the Unlawful Activities (Prevention) Act of 1967, amended in 2004 to fight terrorism, uses the word “unlawful activity” instead of terrorism and defines it as “any action...intended, or supports any claim, to bring about, on any ground whatsoever, the cession of a part of the territory of India or the secession of a part of the territory of India from the Union, or which incites any individual or group of individuals to bring about such cession or secession; and which disclaims, questions, disrupts or is intended to disrupt the sovereignty and territorial integrity of India.”<sup>12</sup>

## Terrorist Attacks and its Financing: Need for Funding & Costs Incurred

Running a terrorist organisation requires substantial financial resources which are transferred to the groups through clandestine and often illegal channels. Terror expert Jean-Charles Brisard argues that 90 per cent of terror financing goes toward general maintenance of cells and equipment. Less than 10 per cent actually finances the execution of operations.<sup>13</sup> Costs incurred by terrorist organisations include materials such as bombs, vehicles, weapons and communication equipment and those related to planning and execution of attacks and expenses for running terrorist outfits.

While it is relatively easy to provide historical data citing an observational link between counterfeiting and terrorism, it is much less so to analyse the aggregate effects of the illicit



markets industry on terror crimes in general. **Moreover, lack of reliable data on terrorist financing leads to an enormous mismatch between the costs of a single attack and the supposed costs of running and maintaining a terror organisation.** At the same time, estimates of actual financial flows among the parties involved in terrorist activities appear rather preliminary. However this information is essential in order to develop a sound cost-benefit analysis of anti-terrorist measures associated with terror funding.

**It is important to note that while statistical data is available for the number of attacks that have taken place in India, it is difficult to directly correlate it to the grey market data in absence of sufficient information and research, which are lacking at present, especially in the Indian context.**

Furthermore, despite the existence of requisite laws in India and arrests of suspected criminals by the police, the scale of illicit markets is huge and the criminal networks and illicit markets organisations continue to thrive. Clearly, this means that the existing laws and police operations are not resulting in the desired outcome and are unable to act as a deterrent. This could be due to the low conviction rates in India.

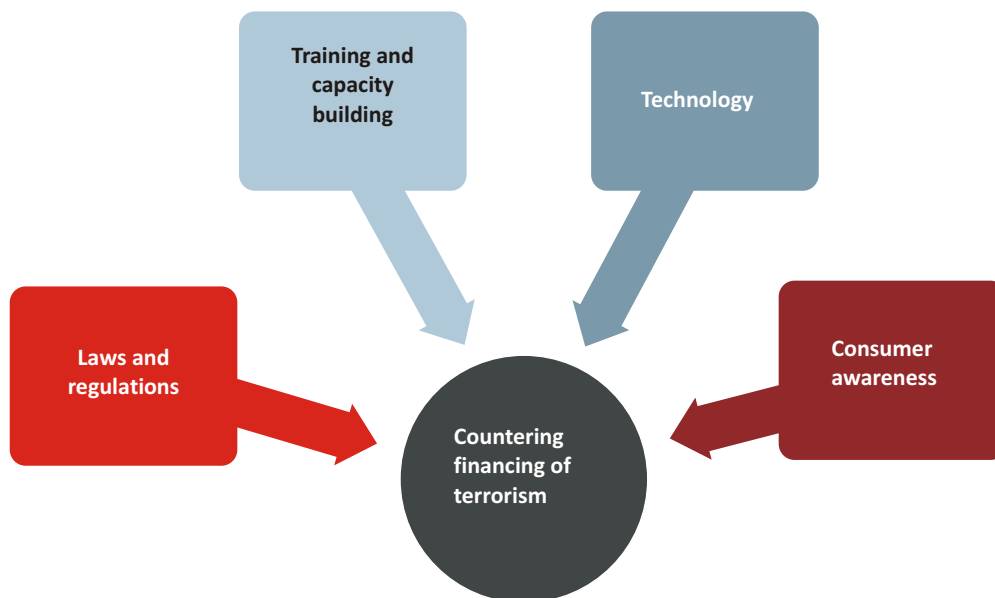
The scenario in other jurisdictions is not very different, although, credible data on seizures may be more easily available. The UK government in their Report of October 2014, has estimated that they lose about 1.3 % of their total tax collection due to criminal networks, mainly from smuggling.

A number of international studies have been conducted in the past which highlight the involvement of counterfeiting and piracy in financing of terrorist activities, for example, Al Qaeda<sup>14</sup> has been linked to the counterfeit industry through the sales of fake perfumes and shampoos. Also, Al Qaeda training modules recovered in 2002 reveal recommendation of sale of fake goods as a means to raise funds for cells.

The illicit markets have grown exponentially across the world, not only costing the industry and governments dear but also promoting criminal enterprises and generating funds for terror activities. Inadequate laws, poor governance and information gaps have aggravated the problem. It is, therefore, crucial to tackle the menace on a global footing in which all countries share information and join forces in creating a legal and regulatory framework, backed by effective enforcement.

**So far as India is concerned, lack of adequate data based on search and seizure makes it difficult to link or correlate the increase in illicit markets to terror funding. Establishment and determination of the extent of such a link calls for strategic intelligence gathering and preparation of robust databases, which are clearly missing at present. Given the security implications, if not outright financial considerations, there is little to argue against carrying**

out such exercises. This would be the first step to contain counterfeiting and its corollary, terror and ensure that genuine business interests do not suffer. It is therefore imperative to build a framework for prevention of terrorist financing which not only tracks down their financing hubs but also acts as a deterrent for them to ultimately bring down the threat of terrorism. The framework must deal with financing of terrorism from the following perspectives:





## Conclusion

**G**rey markets in India's mobile phones industry have increased to 25.4% in 2012 from 20.8% in 2010. The resultant loss to the industry in 2014 has been estimated at ₹19,066 crores in 2013-14 from ₹ 9,042 crores (2011-12). Loss to the government has also increased significantly from ₹ 3,174 crores in 2012 to ₹ 6,705 crores in 2014.

Our study has attempted to establish a relationship between the existence and growth of illicit markets and its impact on innovation, investment and tax arbitrage. However, not much data is available in the public domain to enable us to measure the proxies used to assess impact on innovation and investment – limited data is available on patents, research and development expenditure, gross value added, sales, capital employed and the extent of indigenous and imported inputs used in production.

Significantly though, we have seen that the industry is highly dependent on imports for finished products, implying that value (and jobs) are being added overseas and not domestically. There could be multiple reasons for this - either indigenous technology for developing these goods is completely absent or imports are cheaper and/or of better quality than domestic goods. The operation of the illicit markets plays a significant role, in that increasing illicit markets kill the incentive to innovate. Since research is a risky activity, returns on successful R&D must be large enough to compensate for the high proportion of R&D that is unsuccessful, generating in this way a normal return on R&D as a whole. However, **for an industry sector faced by the challenges of a significant and increasing grey market, the returns would be much lower on account of the greater risk of operation of illicit markets.**

As far as prevention of terrorist financing goes it is imperative to build a framework which not only tracks down financing hubs but also acts as a deterrent to ultimately bring down the threat of terrorism. Such a framework will include training and capacity building among enforcement agencies, use of technology to detect and track sources of finance and increasing consumer awareness to empower consumers to take more informed decisions.

The reasons for the growth of grey market in Indian mobile phones industries are varied. Some buy fake products because the customers are unsuspecting and unaware. But some also buy look-alike products because of the high brand value of the original products.

Illicit markets are a big enemy of economic growth, particularly in a developing country. It discourages innovation and investment, curbs employment opportunities, reduces revenues of legitimate manufactures and results in tax losses to governments. The Government of India, in collaboration with various domestic and international organisations and law enforcement agencies, is working towards curbing this menace, however the fact that the illicit markets have grown, across sectors, shows that the regulatory and enforcement mechanisms need to be strengthened in order to boost sustainable economic development and growth.



# Annexures

## Annexure I: Academic Literature Review

- ❖ **OECD** estimates international trade in counterfeit and pirated products could have been up to USD 200 billion in 2005 excluding domestically produced and consumed counterfeit and pirated products and the pirated digital products being distributed via the internet. The magnitude and effect of counterfeiting are of extreme significance and warrants strong, sustained and coordinated action from government, industry and consumers. Counterfeit and pirated products are infiltrating legitimate supply chains other than informal markets. The Internet has provided counterfeiters/pirates with a new and powerful means to sell their products via auction sites, stand-alone e-commerce sites and email solicitations.<sup>15</sup>
- ❖ **OECD** further states that the effects of counterfeiting and piracy on government come in the form of (i) lower tax revenues, (ii) the cost of anti-counterfeiting activities, including responding to public health and safety consequences and (iii) corruption. ...Tax revenues. Tax collection is presumed to be far more effective from rights holders and their licensees than from counterfeiters and pirates. Potential losses include corporate income taxes, sales or value added taxes, excise taxes, import tariffs and social insurance charges. The revenue losses are particularly high in sectors such as tobacco and alcohol, where excise taxes are high and smuggling of counterfeit products to avoid those taxes is widespread.<sup>16</sup>
- ❖ **BASCAP** estimates that the total value of pirated and counterfeited products impacting G20 economies for 2008 is \$455 to \$650 billion and has been projected between \$1,220 to \$1,770 billion for 2015 including international trade, domestically produced goods and pirated digital products distributed via internet. The impact of counterfeiting and piracy on government tax revenues, legitimate employment, increased costs of crime, economic costs on consumer health and safety and downward pressures on FDI flows has been estimated at \$125 billion per annum for G20 countries. Employment loss has been estimated at 2.5 million jobs for G20 countries excluding secondary impact on employment in the supply chain.<sup>17</sup>
- ❖ **International Anti-Counterfeiting Coalition, Inc. (IACC)** professes that low risk of prosecution and enormous profit potential has made criminal counterfeiting an attractive enterprise for organized crime groups. There are connections between intellectual property theft and terrorist groups and terrorists can use intellectual property crimes not only as a source of funding but also as a means of attack.<sup>18</sup>
- ❖ **GAO** states that it is difficult to quantify the economy wide impacts of counterfeiting because of varying assumptions on substitution of legitimate products with the pirated goods across industries. Hence each method of costs estimation has limitations on account



of data availability and underlying assumptions and no single method can be used across industry sectors.<sup>19</sup>

- ❖ **UNODC** says, "The ramifications of counterfeiting affect everyone, with Governments, businesses and society being robbed of tax revenue, business income and jobs. The flood of counterfeit and pirated products creates an enormous drain on the global economy by creating an underground trade that deprives Governments of revenue for vital public services and imposes greater burdens on taxpayers. It also leads to more public resources being spent on fraud-detection methods by public sector authorities and larger intelligence and policing budgets being needed to counter sophisticated schemes and networks. Counterfeit goods also undermine employment, as products are copied and produced illegally, thereby displacing sales of original merchandise and reducing the turnover of legitimate companies. Fraudulent medicines also have a direct impact on increased medical costs due to prolonged treatment periods and medical complications in the spread of treatment-intensive diseases. The prices of products also go up because companies increase security systems to counter organised criminal activities and have to invest more in research and development."<sup>20</sup>
- ❖ **A WIPO** study talks about the how intellectual property rights or their protection plays a role in the innovation process, emphasising that technological innovation is a principal determinant of successful firm performance. The study also indicates that small and medium sized enterprises (SMEs) prefer to use trade secrets rather than patents as a form of protecting their inventions to stay competitive. The main reasons given by SMEs for shying away from patenting their inventions include high costs and complexity of the patent system.<sup>21</sup>
- ❖ **Nam D. Pham** lays emphasis on the impact of innovation and the role of IP rights in his study. The study brings to the fore, the critical importance of allocating resources to innovation in sustaining long-run economic growth in both developed and developing countries. The author argues that countries with the highest technological capacity are better able to enhance the efficiency of their production methods and exploit new market opportunities. The study states that the protection and enforcement of IP rights are imperative for creating strong incentives for innovation and safeguarding it from counterfeiting, piracy, and other forms of IP theft. It concludes that with the growing importance of knowledge as a driving force for innovation and economic expansion worldwide, the protection of property rights has attracted greater attention and concern. The counterfeiting and piracy of products are rising exponentially and are costing the global economy hundreds of billions of dollars a year in lost revenues and thousands of jobs. The challenge for policymakers is therefore to continue encouraging investment in R&D and human capital in order to promote innovation while at the same time developing the policy instruments and frameworks to better protect intellectual property rights.<sup>22</sup>

- ❖ **A Harvard University** study delves into the relationship between counterfeit sales and financing of activities of terrorist organisations using a number of economic controls to analyse the effect of two proxies of annual counterfeit sales on two measures of international terrorism namely RAND database and DOS database. It states that while the societal and economic costs of counterfeit products are largely incontrovertible, one final effect of this crime industry is less definite: its support of international terrorism. Anti-counterfeiting organizations and luxury goods manufacturers are quick to suggest that counterfeit product revenues are directly funding terrorism. There is, however, only a small amount of hard data in support of this claim. The study conducts an inquiry into the purported causal link between measure of counterfeiting and terrorist incidents in a given year through a regression model but suggests that the empirical analysis fails to provide a conclusive relationship between the two.
- ❖ **A University of Wellington study** on cross border tax arbitrage states that in most cases, cross-border tax arbitrage increases the tax payable in one jurisdiction and decreases the tax payable in the other jurisdiction. The decrease must be larger than the increase for the arbitrage to be worthwhile for the taxpayer. Tax arbitrage, therefore, redistributes resources not only from government treasuries to taxpayers, but often from one government treasury to another. The study says the direct consequence of cross-border tax arbitrage is to distort individuals' and corporations' investment decisions, and to reduce the revenue raised by governments. Although cross-border tax arbitrage may augment the coffers of one government's treasury, this augmentation is likely to be more than offset by a reduction in the revenue raised by the other government's treasury (otherwise the arbitrage is unlikely to be advantageous from a tax perspective).<sup>23</sup>

A significant anti-counterfeiting measure undertaken in recent times is the Anti-Counterfeiting Trade Agreement (ACTA). It builds on the Trade-Related Aspects of Intellectual Property Rights (TRIPS), but has been negotiated outside WTO (World Trade Organization) framework. The draft ACTA calls for increased use of criminal and civil penalties against people using copyright circumvention technologies and those accused of copyright infringements, and also for ISPs to have more responsibilities with regards to removing infringing material. **ACTA has been rejected by the European Union in July 2012.**

ACTA binds negotiating states and creates a new international standard which is likely to be imposed on third countries in future trade agreements. The current draft threatens fundamental rights in countries such as the right to freedom of expression and information, right to protection of personal data and fair trial/due process issues related to other fundamental rights. It was negotiated in unwarranted secrecy, without adequate input from civil society or parliamentarians, but in close cooperation with major IP right holders. It has resulted in disproportionate protection to big business.<sup>24</sup>



## Annexure II: Items considered as part of operating expenditure

S. No.	Components of Operating Expenditure
1	Raw material expenses
2	Power & fuel
3	Water charges
4	Salaries & wages
5	Repairs & maintenance of buildings
6	Repairs & maintenance of plant & machinery
7	Repairs & maintenance of vehicles & others
8	Communications expenses
9	Travel expenses
10	Selling & distribution expenses
11	Printing & stationery expenses
12	Donations
13	Social and community expenses
14	Environment and pollution control related expenses
15	Subscriptions and membership fees
16	Research & development expenses
17	Other miscellaneous expenses
18	Miscellaneous expenditure

# Abbreviations

ASI	Annual Survey of Industries
CASCADE	FICCI's Committee Against Smuggling and Counterfeiting Activities Destroying the Economy
CAGR	Compounded Annual Growth Rate
COAI	Cellular Operators Association of India
CII	Confederation of India Industry
CSIR	Council of Scientific & Industrial Research
CSO	Central Statistical Organisation
DGCIS	Directorate General of Commercial Intelligence and Statistics
FDI	Foreign Direct Investement
FICCI	Federation of Indian Chambers of Commerce & Industry
GDP	Gross Domestic Product
GSMA	Groupe Speciale Mobile Association
GSV	Gross Sales Value
GST	Goods & Services Tax
GVA	Gross Value Added
IBEF	India Brand Equity Foundation
ICA	Indian Cellular Association
IPR	Intellectual Property Rights
ITTC	Independent Telecom Tower Companies
MoSPI	Ministry of Statistics and Planning Implementation
MSME	Micro Small and Medium Industries
NIC	National Industry Code
NSS	National Sample Survey
NSSO	National Sample Survey Organisation
R&D Expenditure	Research and Development Expenditure
TARI	Thought Arbitrage Research Institute
TRAI	Telecom Regulatory Authority of India
UNODC	United Nations Office on Drugs and Crime
VAT	Value Added Tax
WIPO	World Intellectual Property Organisation

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- <sup>11</sup> <http://ucc.co.ug/data/dnews/8/Counterfeit-Mobile-Phones-FAQs.html>
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### **About FICCI**

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies. FICCI has contributed to this historical process by encouraging debate, articulating the private sector's views and influencing policy.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry.

Federation of Indian Chambers of Commerce and Industry

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### **About FICCI CASCADE**

In the recent past India's economic growth story has attracted world's attention bringing new challenges for the domestic economy. One of the challenges currently faced is the growing illicit trade in counterfeits, pass offs and smuggled goods. These activities are also threatening brands not only in every region of the country but across the globe.

Contraband and counterfeit products hurt the integrity of the brand, further diluting the brand owner's reputation. This not only results in erosion of sales of the legitimate product but further [CASACADE]s onto affect the consumers in the form of health and safety hazards.

With the above insight the Federation of Indian Chambers of Commerce and Industry(FICCI) took the initiative to dedicate a forum by establishing the Committee Against Smuggling and Counterfeiting Activities Destroying the Economy - CASCADE on 18thJanuary, 2011 at FICCI Federation House, New Delhi.

FICCI Committee Against Smuggling and Counterfeiting Activities Destroying Economy (CASCADE)

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