

**TELECOMMUNICATION  
MARKETS IN THE  
BRITISH VIRGIN ISLANDS  
2009 - 2012**



# TABLE OF CONTENTS

- Introduction
- Key Definitions
- Key Market Trends and Observations
- Benchmarking the Number of Mobile Operators
- Economic Indicators for the BVI
- Main Telecom Indicators
- Revenues in the Telecom Sector
- Employment in the Telecom Sector
- Fixed Line Subscribers and Revenue in the BVI
- Growth Rate of Fixed Line Subscribers across the Caribbean
- Mobile Subscribers, Revenue & Traffic in the BVI
- Benchmarking Postpaid subscribers to Prepaid subscribers
- Benchmarking Mobile Penetration Rates Around the World
- Growth Rate of Mobile Subscribers Across the Caribbean
- Average Revenue per User (ARPU) and Average Usage per User (AUPU)
- Broadband Subscribers and Revenue in the BVI
- Growth Rate of Broadband Subscribers Across the Caribbean
- Benchmarking Broadband Download Speeds
- Growth Rate of Telecommunication Subscriptions by Service
- Conclusion

# INTRODUCTION



***This is the second annual telecommunications market data report which is based on data collected from the licensed public suppliers in the telecommunications market in the British Virgin Islands (BVI): LIME, Digicel and CCT. This report excludes BVI Cable TV.***

***The report is produced by the Economics Department of the Telecommunications Regulatory Commission (TRC) as part of monitoring and assessing the performance and competitiveness of the telecommunications sector in the BVI.***

***This report looks at the state and development of the telecommunication markets (fixed line, mobile and broadband) comparing the BVI to selected island nations and islands in the Caribbean. The report covers data from 2009-2012 and presents data for 2011-2012 for the first time.***

# KEY DEFINITIONS

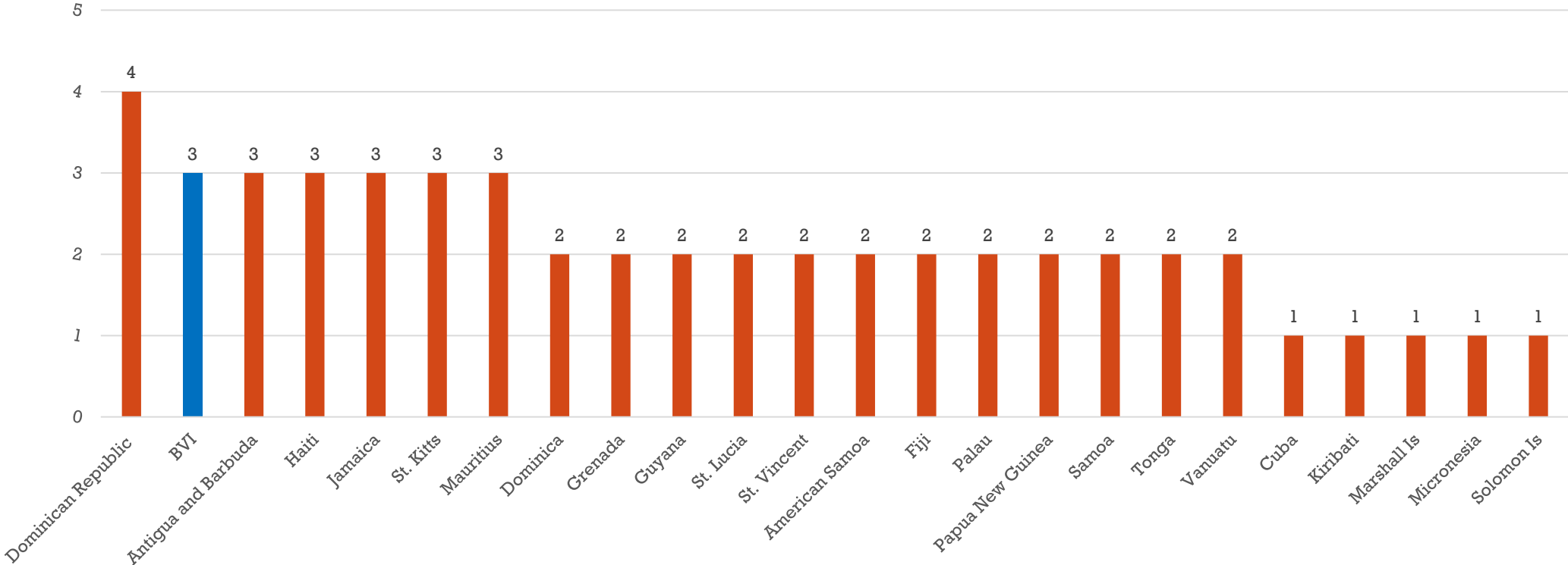
- **Average Revenue per User (ARPU)** – measures the average monthly revenue generated per customer
- **Average Usage per User (AUPU)** – measures the average monthly usage generated per customer
- **Download speed** – the number of bytes per second that data travels from a remote or local server to the user's device
- **Gross Domestic Product (GDP)** – the official measure of a country's economic output
- **Growth rate** – the amount of increase that a specific variable has gained within a specific period and context
- **Penetration rate** – a measure of the level of adoption of a particular product or service by the total population
- **Teledensity (telephone density)** – the number of telephone connections for every hundred individuals living within a country.

# KEY MARKET TRENDS AND OBSERVATIONS

- High mobile teledensity continues to characterize the BVI telecommunications market
- 3 mobile players contribute to a competitive mobile market with high penetration above 100%
- Fixed line penetration is gradually falling in line with the global trend in fixed and mobile substitution
- Broadband penetration has fallen since 2009 to 22% in 2012 and BVI is lagging behind in speed and value

# BENCHMARKING THE NUMBER OF MOBILE OPERATORS

Number of Mobile Operators in 2009



Source: CARICOM

In the BVI, 3 players make it a relatively competitive market place despite the small size of the territory.

# ECONOMIC INDICATORS FOR THE BVI

<b>Economic Indicators</b>	<b>2009</b>	<b>2010</b>	<b>Growth (%)</b>	<b>2011</b>	<b>Growth (%)</b>	<b>2012</b>	<b>Growth (%)</b>
GDP (US \$)	876,811,000	894,437,000	2%	915,592,000	2%	909,355,000	-1%
Number of households	11,303	11,677	3%	11,224	-4%	11,311	1%
Total population	28,882	29,537	2%	28,103	-5%	28,028	0%

Source: Development Planning Unit (DPU)

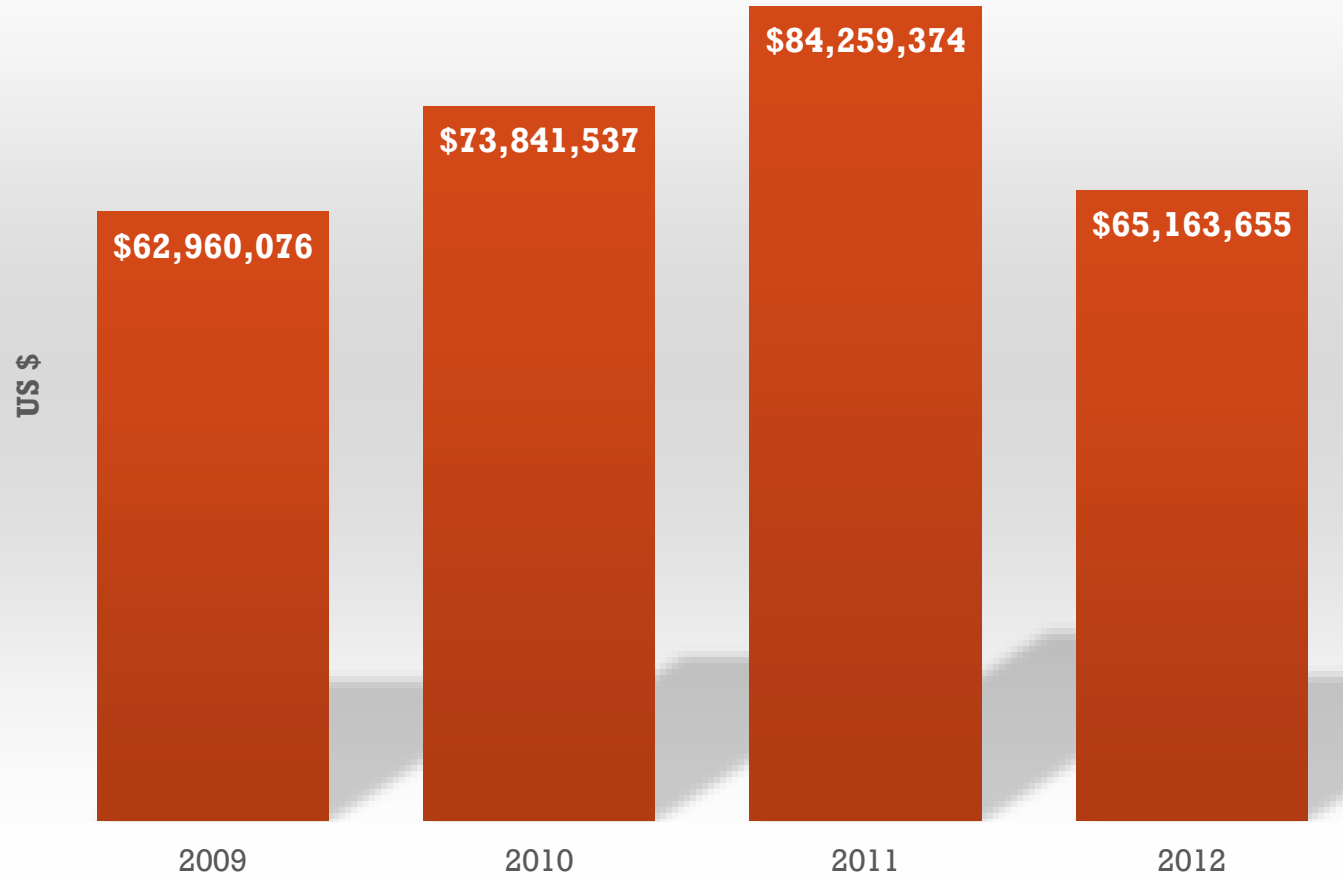
Indicators	2009	2010	2011	2012
<b>Fixed line services</b>				
# of fixed line subscribers	14,132	12,886	12,773	12,496
Fixed line penetration	49%	44%	45%	45%
<b>Mobile service</b>				
# of mobile subscribers	47,031	47,524	46,493	49,224
Mobile penetration	163%	160%	165%	176%
<b>Internet services</b>				
# of broadband subscribers	7,736	6,969	5,916	6,213
Broadband penetration	27%	23%	21%	22%
Telecommunication revenues (in millions)	\$62	\$73	\$84	\$65
CAPEX (in millions)	\$7	\$3	\$8	\$15
OPEX (in millions)	\$33	\$33	\$32	\$35
Number of Employees in the Telecoms sector	309	293	148	140

## MAIN TELECOM INDICATORS

- Between 2009-2012, there has been limited progress in growth of the number of broadband connections.
- Fixed line penetration is gradually falling in line with the global trend in fixed mobile substitution
- 3 mobile players contribute to a competitive mobile market with high penetration over 100%
- Broadband penetration has fallen to 22% in 2012 and the BVI is lagging behind in speed and value.
- Network developments particularly in 4G mobile services, buildings and equipment contributed to the 88% increase in CAPEX in 2012.



## Telecommunications Revenue in the BVI

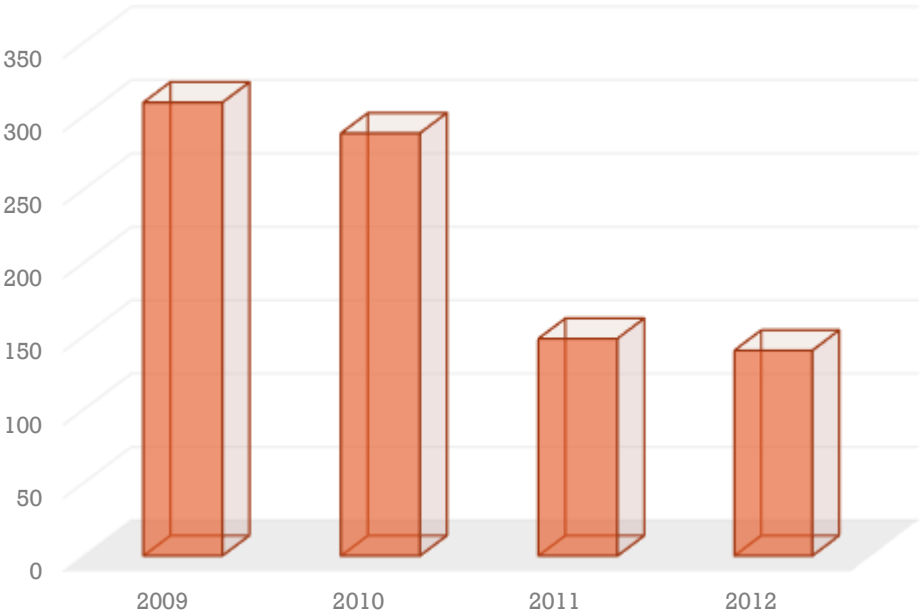


## REVENUES IN THE TELECOMS SECTOR

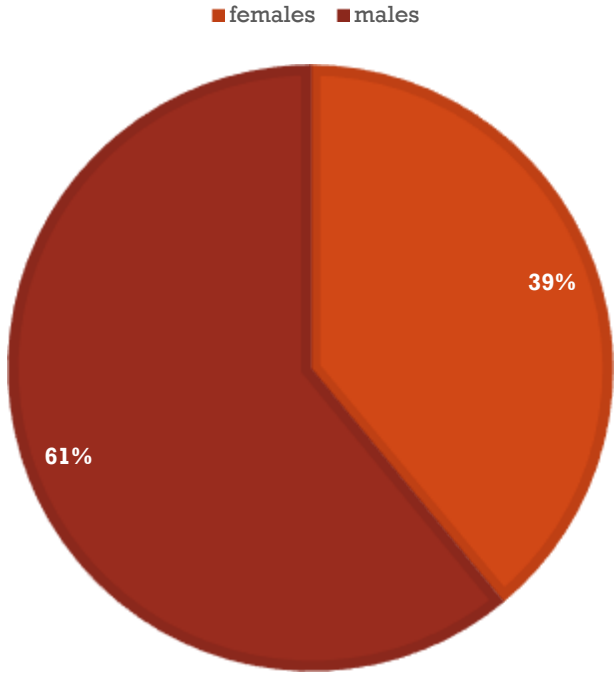
- Revenues have grown by 3% from 2009 to 2012.
- In 2011, revenue for the entire telecommunications sector increased for that year:
  - Mobile revenue increased by 13%.
  - Other services revenue increased by 61%. Factors contributing to this are international capacity sales and tower rentals.

# EMPLOYMENT IN THE TELECOMS SECTOR

Number of Employees working in the Telecommunications Industry



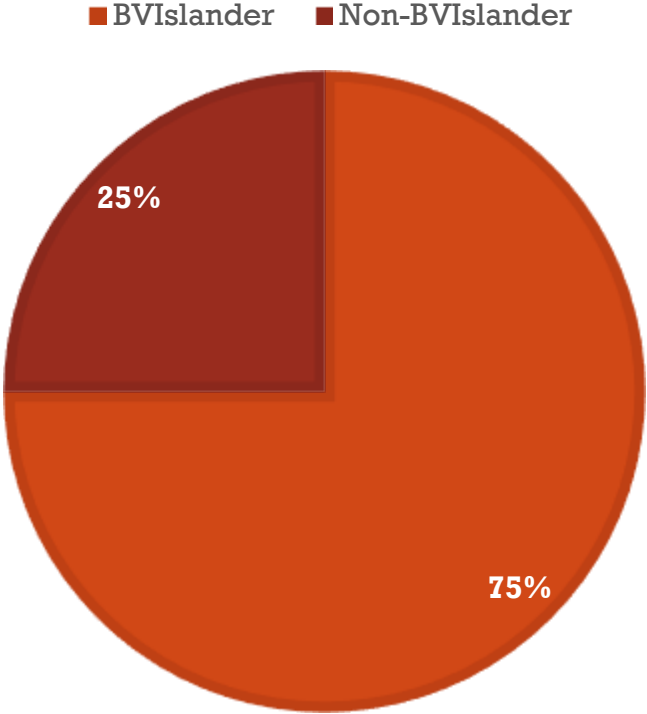
TOTAL EMPLOYEES BY GENDER (%) IN 2012



In 2009: 64% males & 36% females – proportions remain roughly the same.

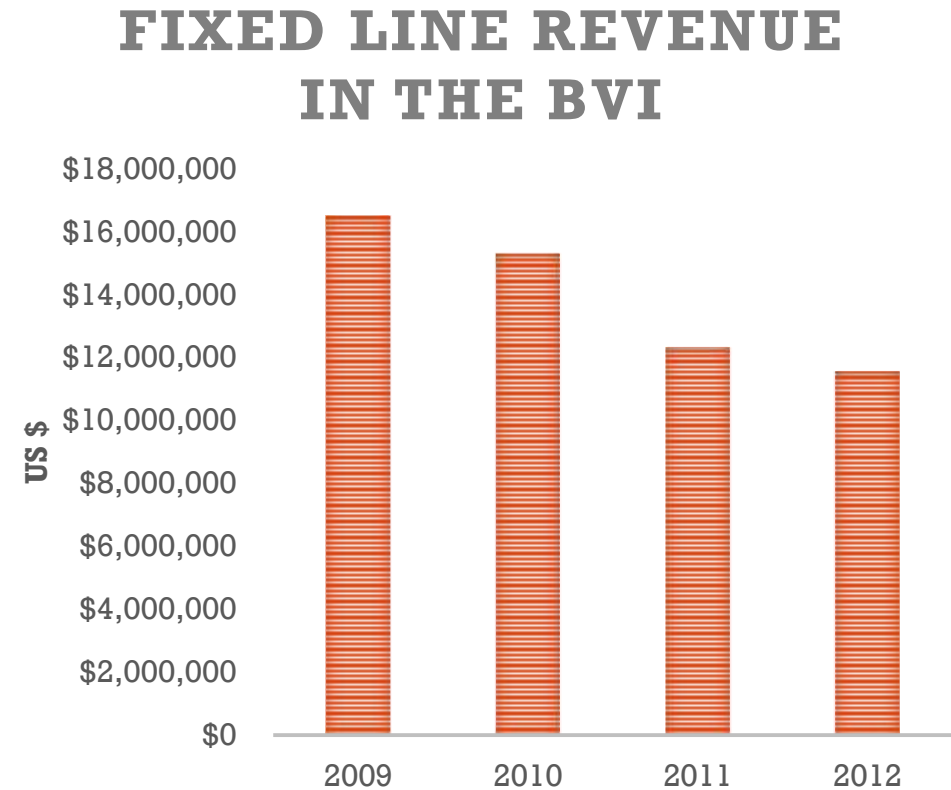
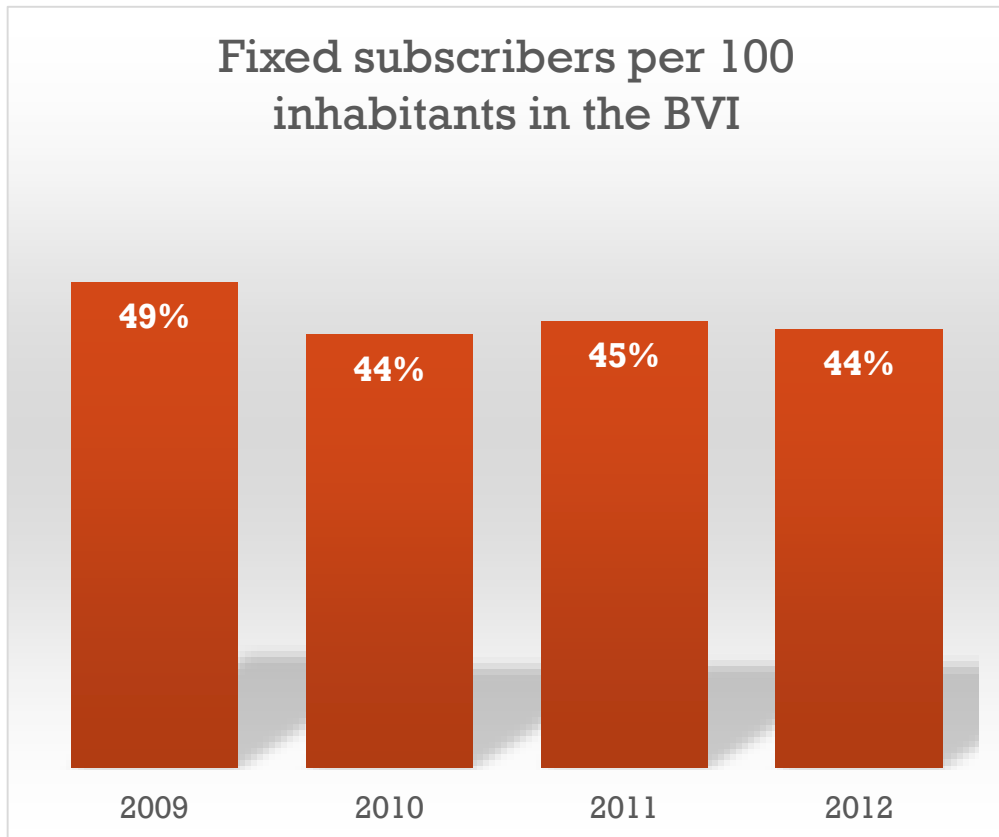
# EMPLOYMENT IN THE TELECOMS SECTOR CONT.

DISTRIBUTION OF EMPLOYEES BY RESIDENT STATUS IN 2012



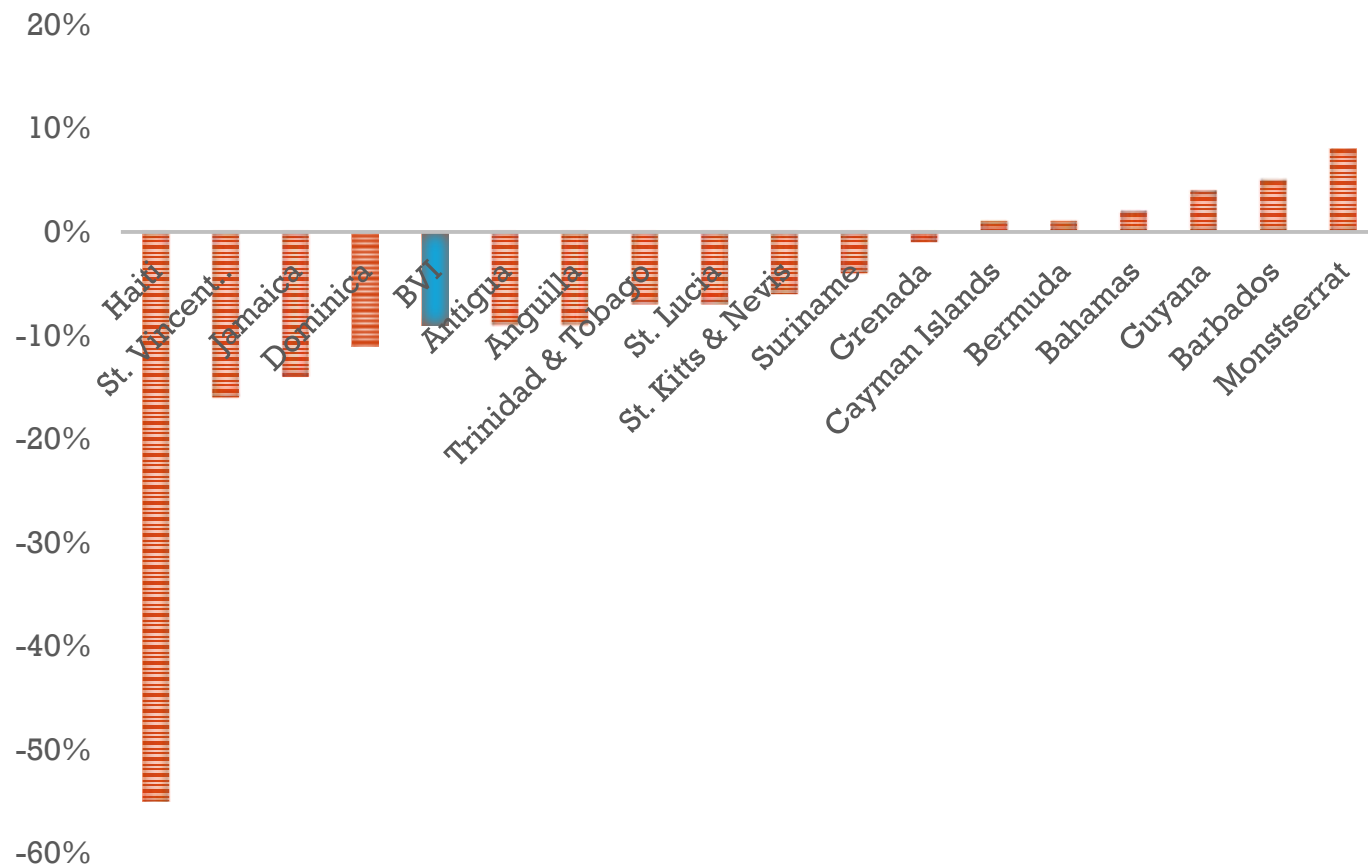
BV Islander – a native born island resident or a person who has been granted the status of a native-born resident *\*Please see full definition in the Virgin Islands Constitution Order 2007*

# FIXED LINE SUBSCRIBERS & REVENUE IN THE BVI



The number of subscribers who use and access fixed lines declined by 12% as more subscribers use mobile phones. Revenue and demand are falling. On average, fixed line revenues are declining by 11% every year.

## GROWTH RATE OF FIXED LINE SUBSCRIPTIONS: 2009-2012

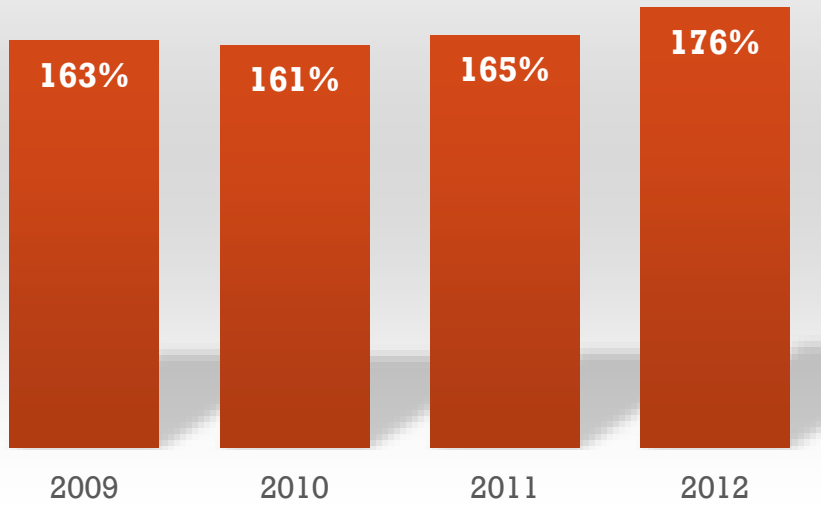


Source: CARICOM

## GROWTH RATE OF FIXED LINE SUBSCRIBERS ACROSS THE CARIBBEAN

- Majority of the Caribbean islands including the BVI are in line with the global trend of the decline in demand for fixed line services.

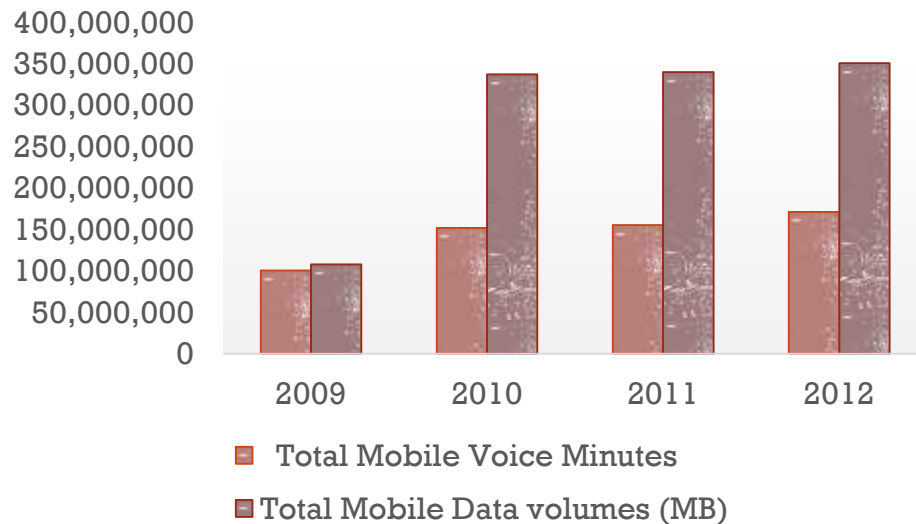
Mobile subscribers per 100 inhabitants in the BVI



MOBILE REVENUE IN THE BVI



Proportion of Mobile Voice traffic to Mobile Data Traffic

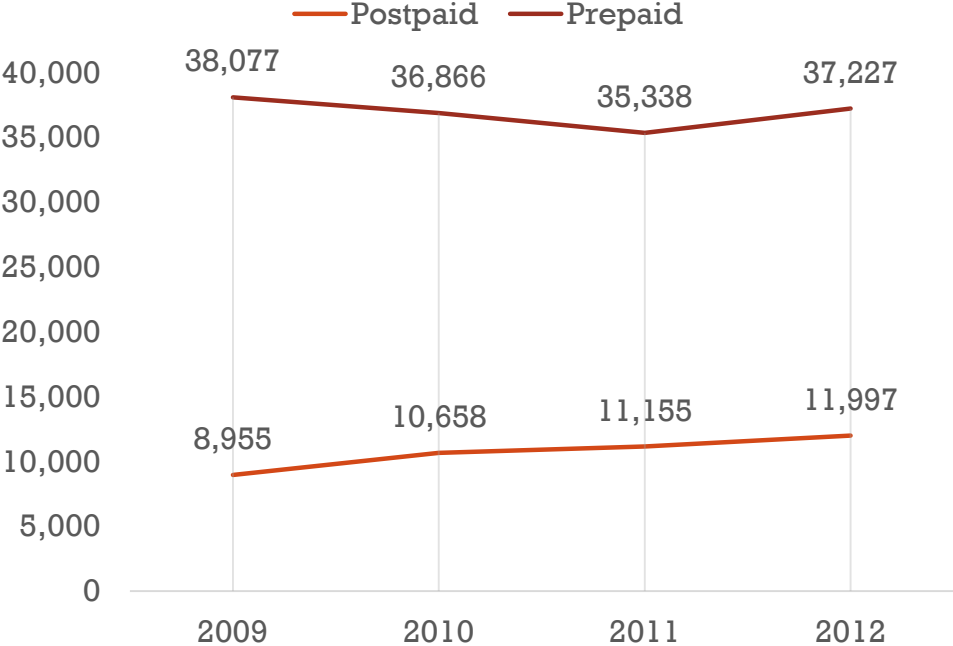


# MOBILE SUBSCRIBERS, REVENUE & TRAFFIC IN THE BVI

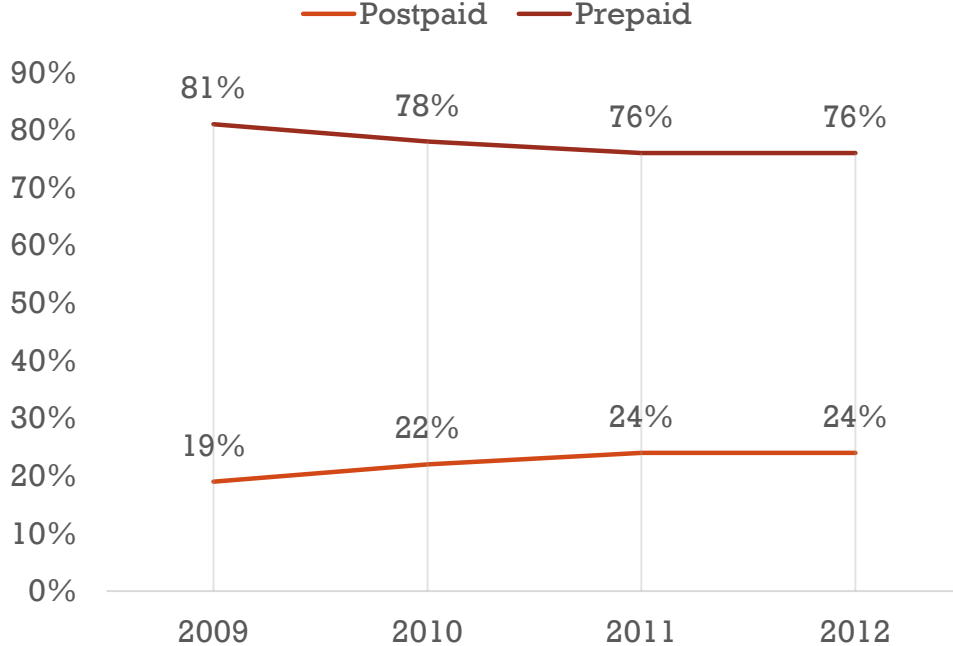
- Like the rest of the world, the BVI is turning increasingly towards mobile solutions and away from the traditional fixed telephone.
- Mobile voice traffic continues to grow at a steady rate, mainly driven by international calls from 2010 onwards.
- On average, mobile revenues are increasing by 6% every year.
- Growing mobile revenues shows a strong mobile industry and growing demand for voice and data.
- Data traffic doubled in 2010 after which a stable trend in mobile data growth has continued.

# COMPARING POSTPAID SUBSCRIBERS TO PREPAID SUBSCRIBERS

Breakdown of Mobile Subscribers by Type



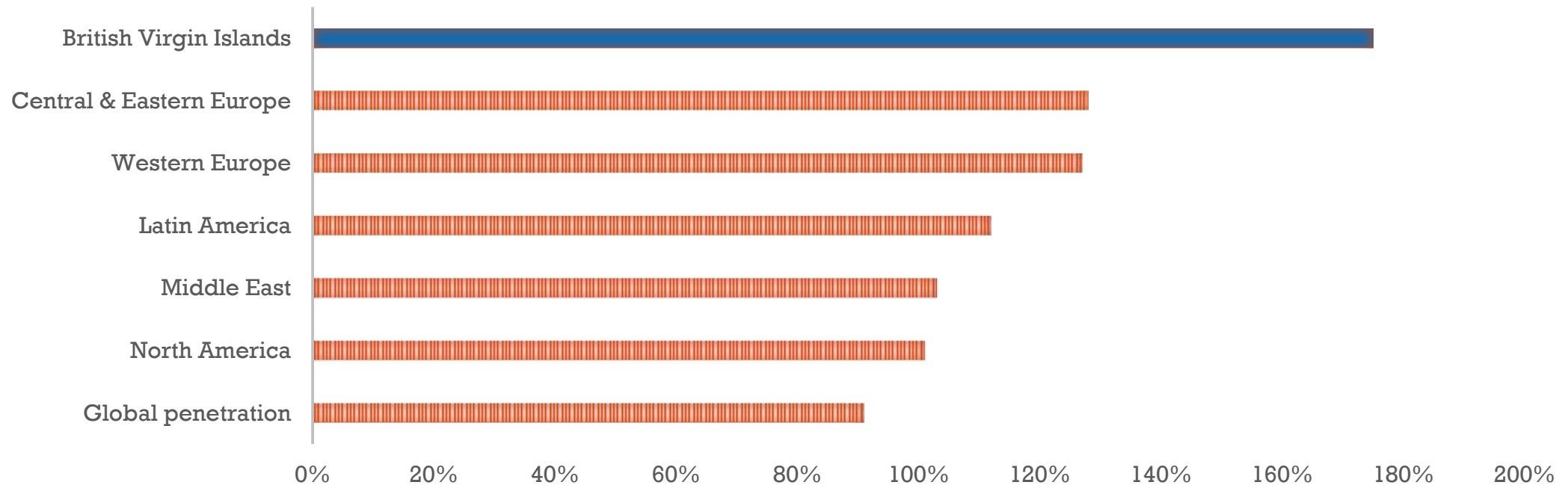
Breakdown of Mobile Subscribers by Type



Approximately 76% of BVI’s mobile subscribers are on prepaid plans.

# BENCHMARKING OF MOBILE PENETRATION RATES AROUND THE WORLD

## MOBILE PENETRATION IN 2012 AROUND THE WORLD

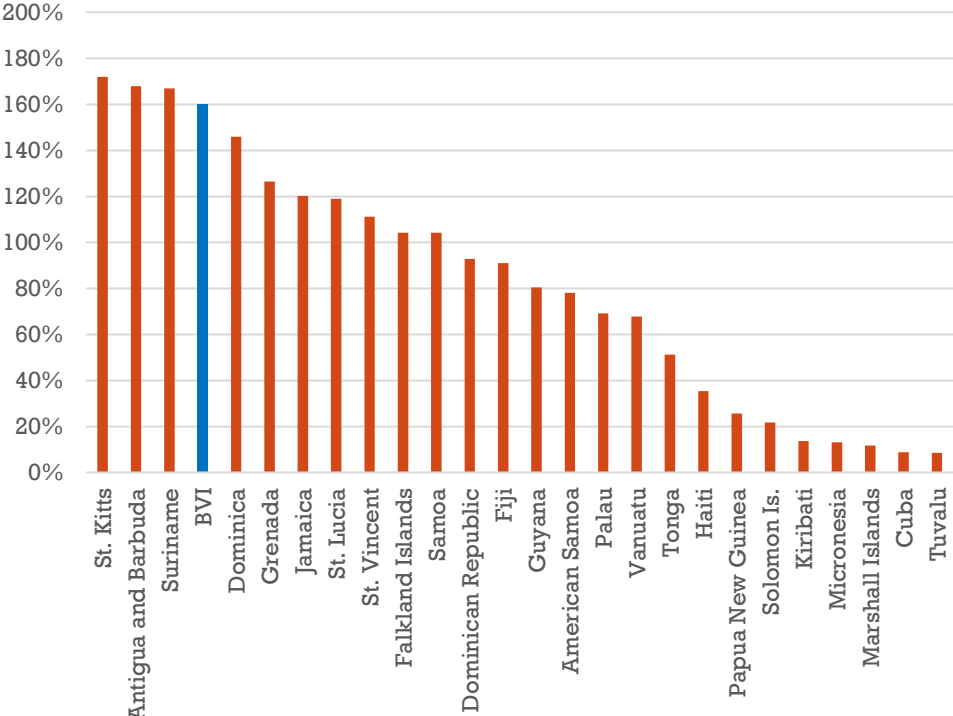


The BVI's mobile penetration of 176% compares to a global average of 91%.



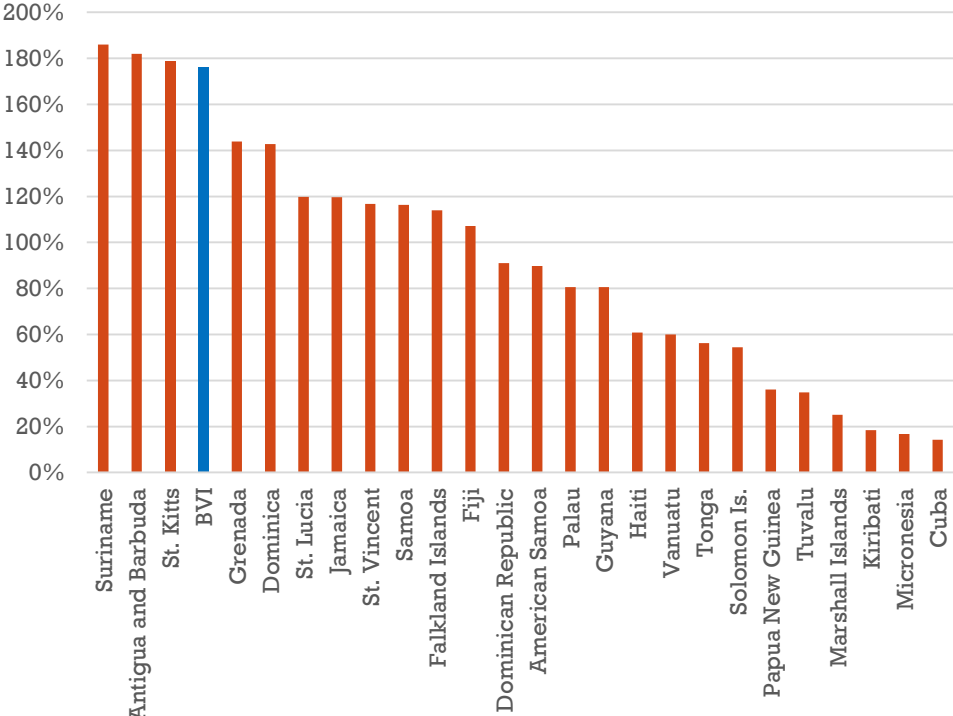
# BENCHMARKING MOBILE PENETRATION RATES AROUND THE WORLD

Mobile Penetration Rate in 2010



Source: ITU

Mobile Penetration Rate in 2012

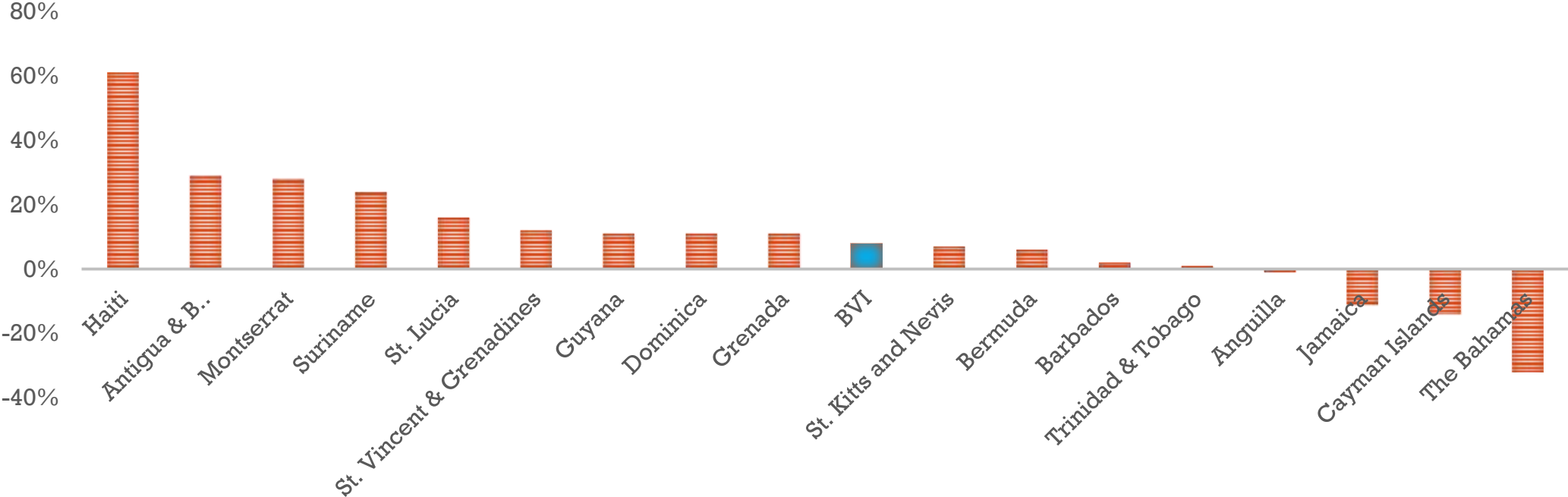


Source: ITU

The BVI has a high mobile penetration compared to similar island nations and other Caribbean islands.

# GROWTH RATE OF MOBILE SUBSCRIBERS ACROSS THE CARIBBEAN

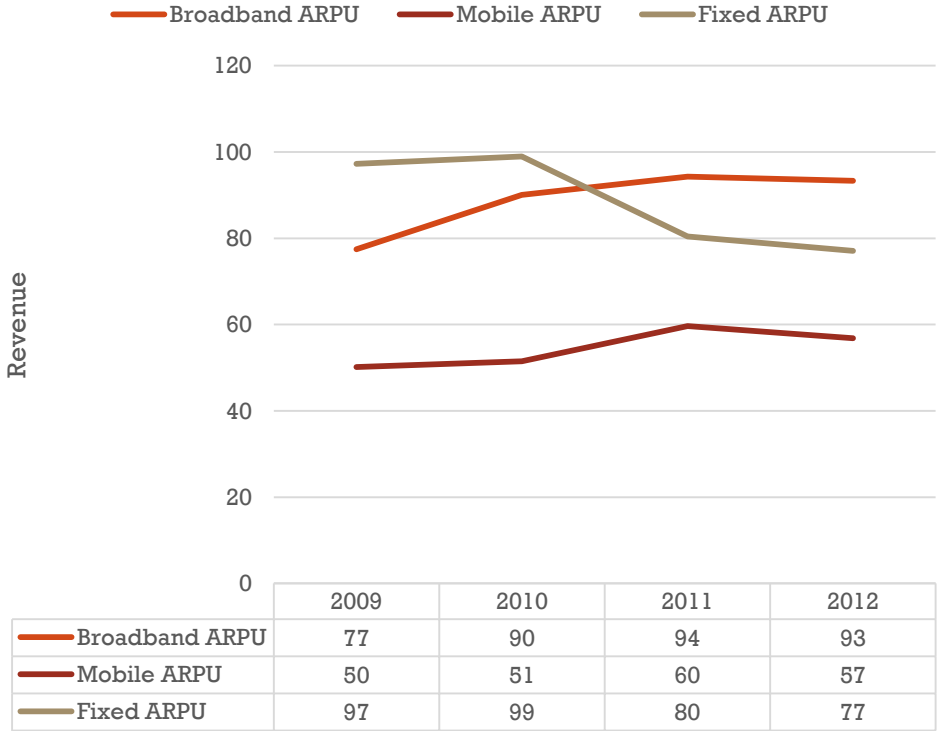
GROWTH RATE OF MOBILE SUBSCRIPTIONS:  
2009-2012



The BVI's growth rate in mobile subscribers is similar to other countries in the Caribbean.

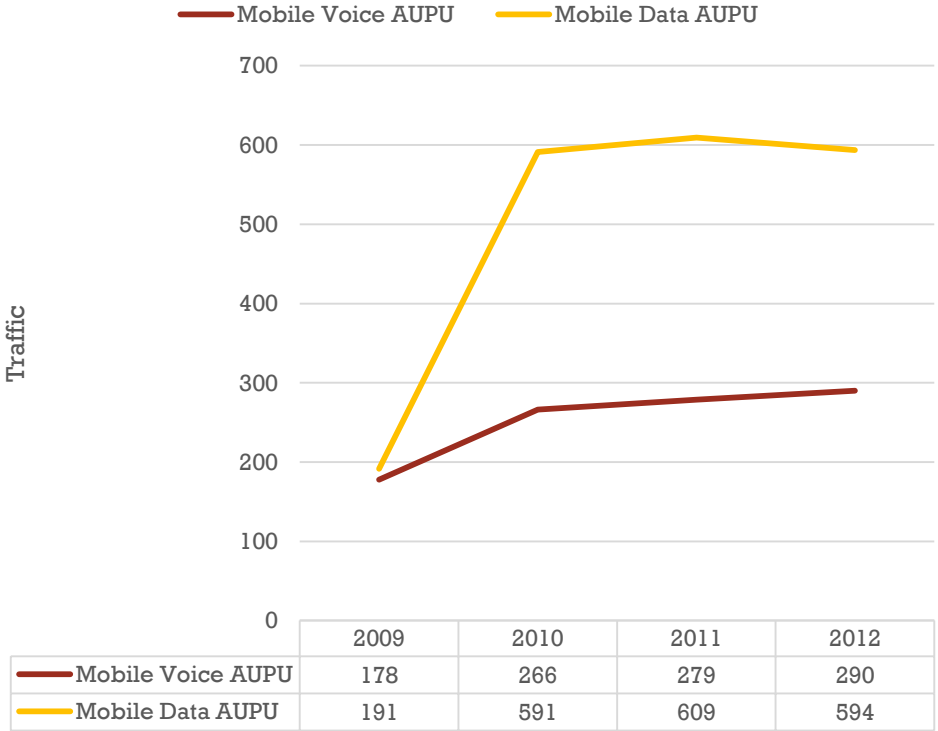
# AVERAGE REVENUE PER USER (ARPU) & AVERAGE USAGE PER USER (AUPU)

Fixed, Mobile and Broadband ARPU



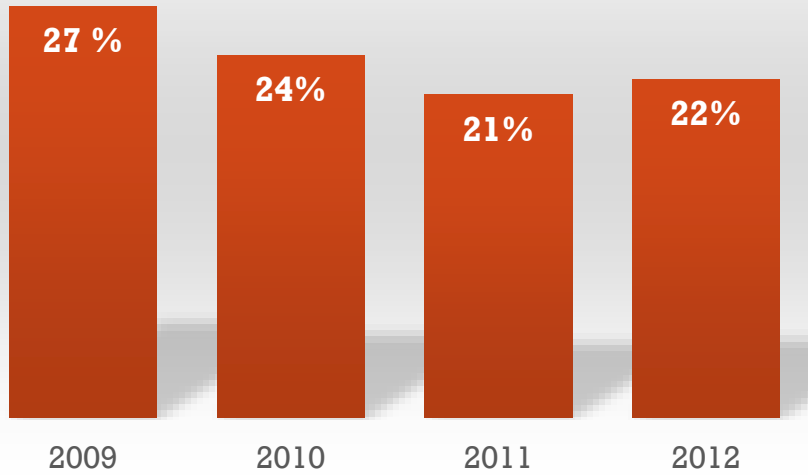
\*ARPU per month in US\$

Mobile Voice and Data AUPU

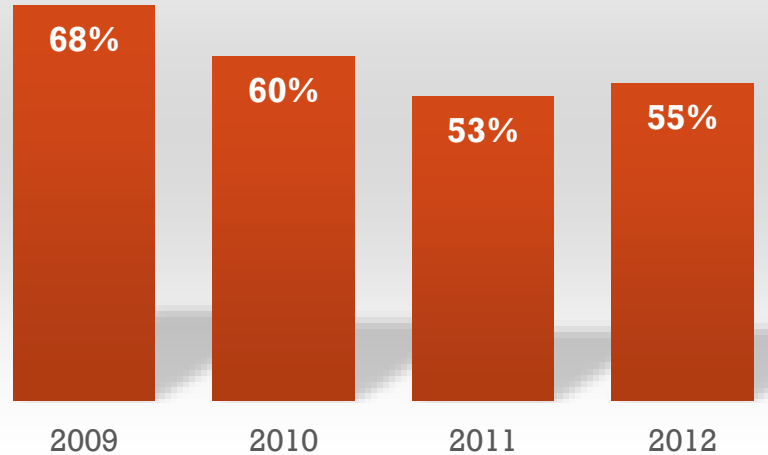


\*AUPU per month in US\$

Broadband subscribers per 100 inhabitants in the BVI



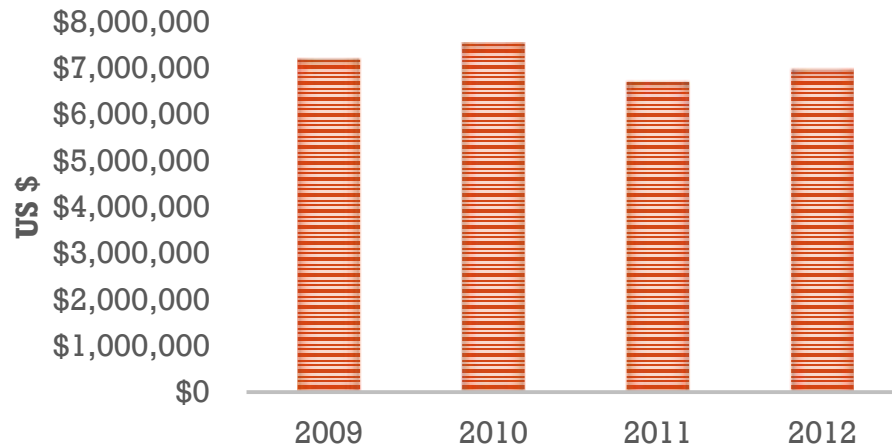
Proportion of households with a Broadband subscription



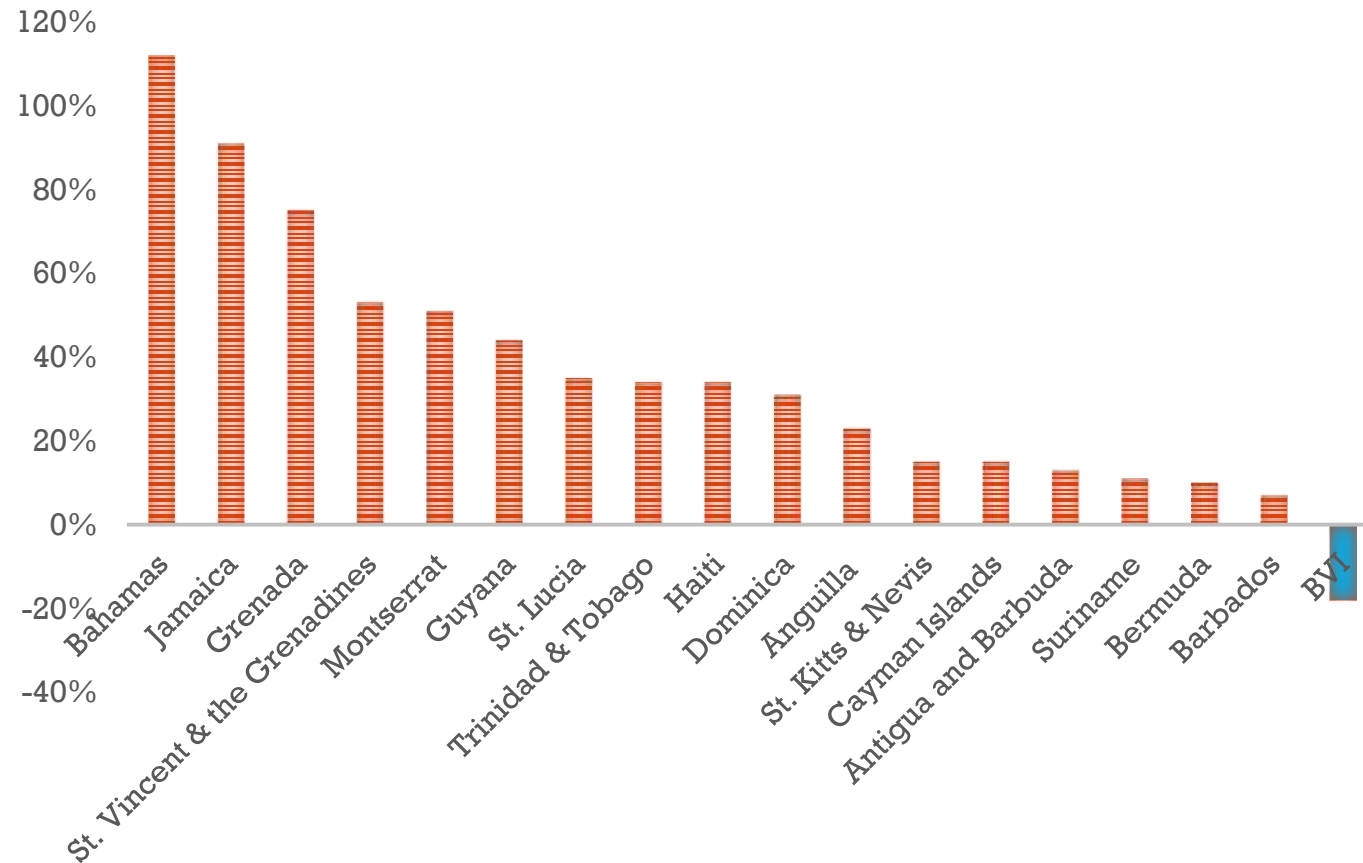
## BROADBAND SUBSCRIBERS AND REVENUE IN THE BVI

- The number of broadband subscribers has decreased by 20% since 2009. Revenues have remained fairly stable.
- Number of broadband subscribers are decreasing by 7% per year meanwhile revenues remain fairly stable. This implies that broadband services are more expensive despite high demand.

## BROADBAND REVENUE IN THE BVI



## GROWTH RATE OF BROADBAND SUBSCRIPTIONS: 2009-2012

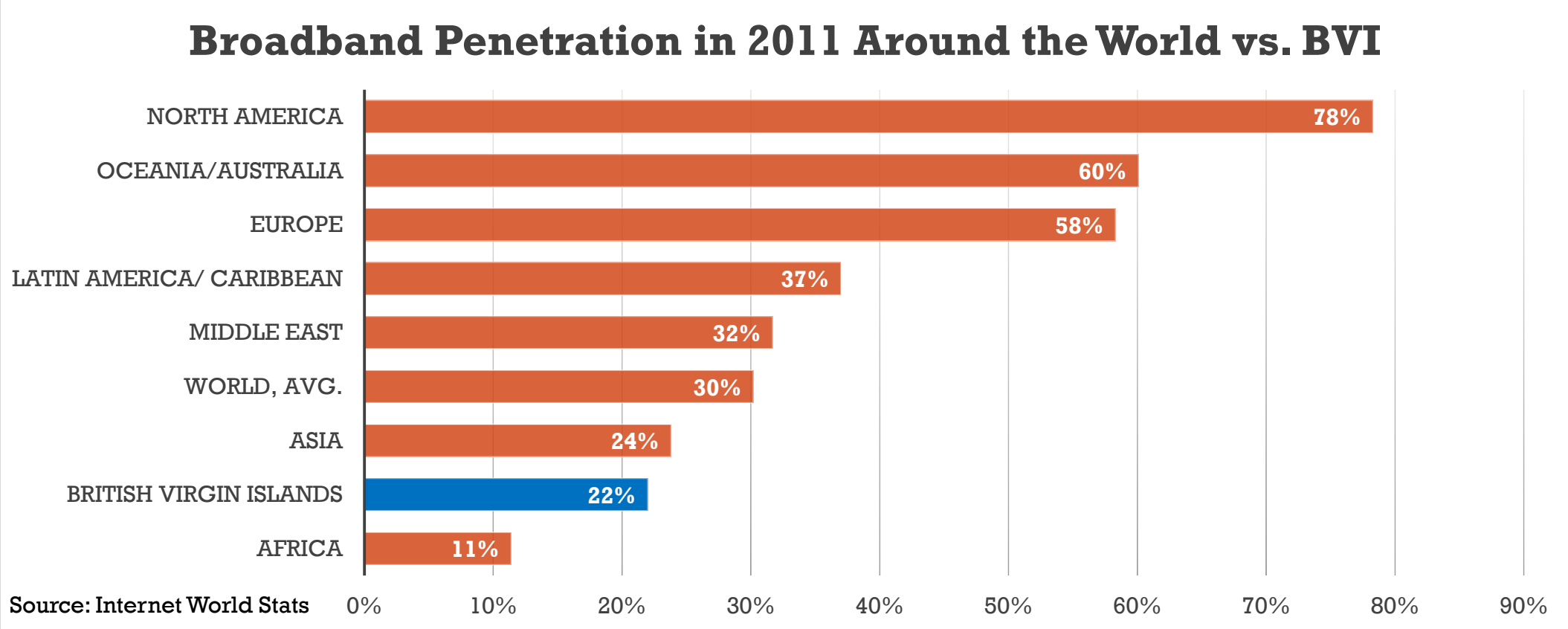


Source: CARICOM

## GROWTH RATE OF BROADBAND SUBSCRIBERS ACROSS THE CARIBBEAN

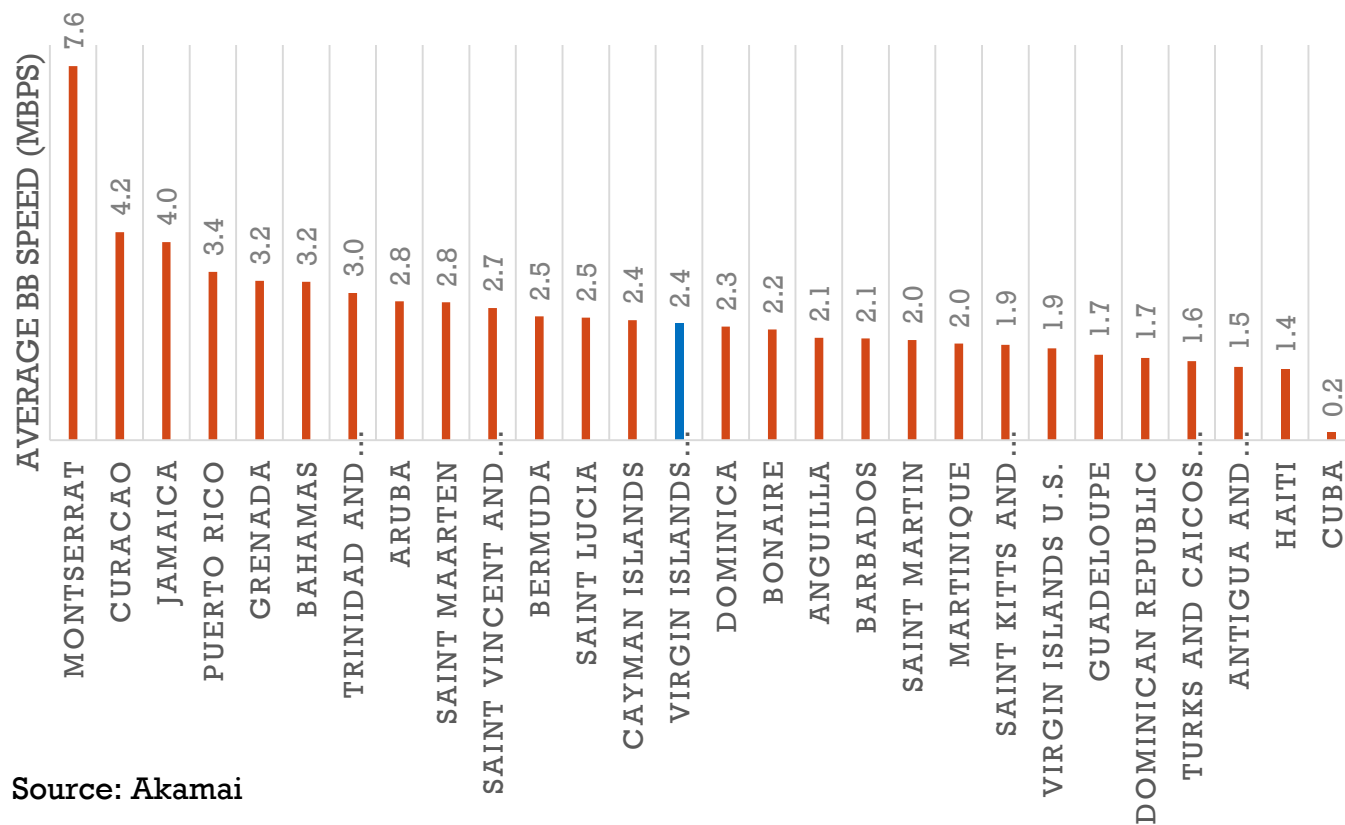
- Over the past four years, the number of subscriptions has decreased by 20% which is out of line with other countries in the Caribbean.
- The BVI is lagging behind in the provision of broadband services.

# BENCHMARKING BROADBAND PENETRATION RATES AROUND THE WORLD



The BVI lags behind the rest of the world with low penetration levels despite being a high income territory with high demand.

## AVERAGE DOWNLOAD BROADBAND SPEEDS BY CARIBBEAN COUNTRY FOR Q4 IN 2012

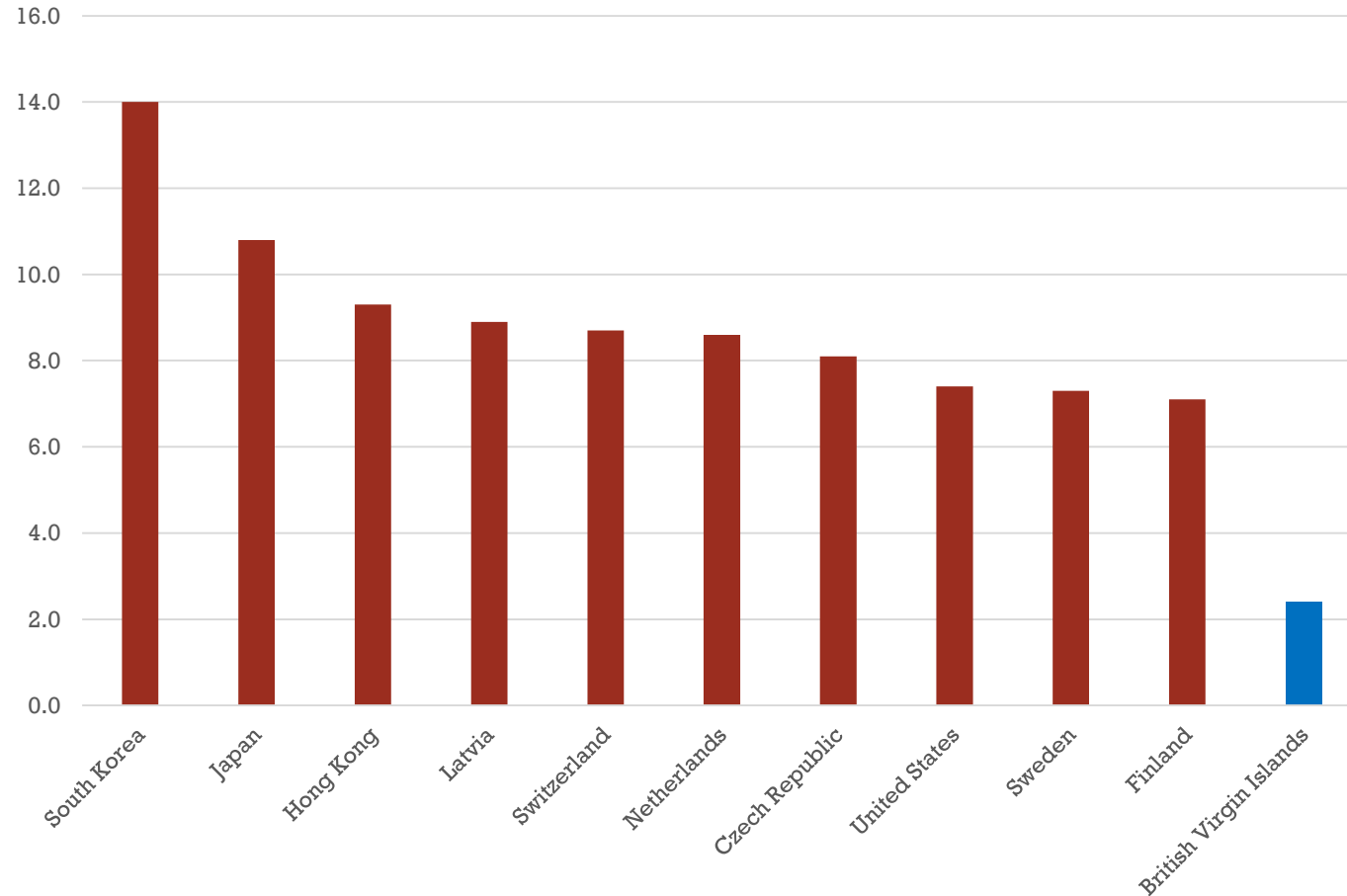


Source: Akamai

## BENCHMARKING BROADBAND DOWNLOAD SPEEDS

- Consumers experience network quality through its coverage and speed.
- Weak competition and insufficient bandwidth characterizes broadband services in the BVI compared to other Caribbean islands.
- Speed isn't solely determined by the network, it is also affected by device capabilities and user behavior.

Top 10 Countries: Average Download Speed (Mbps) vs. BVI in Q4 2012



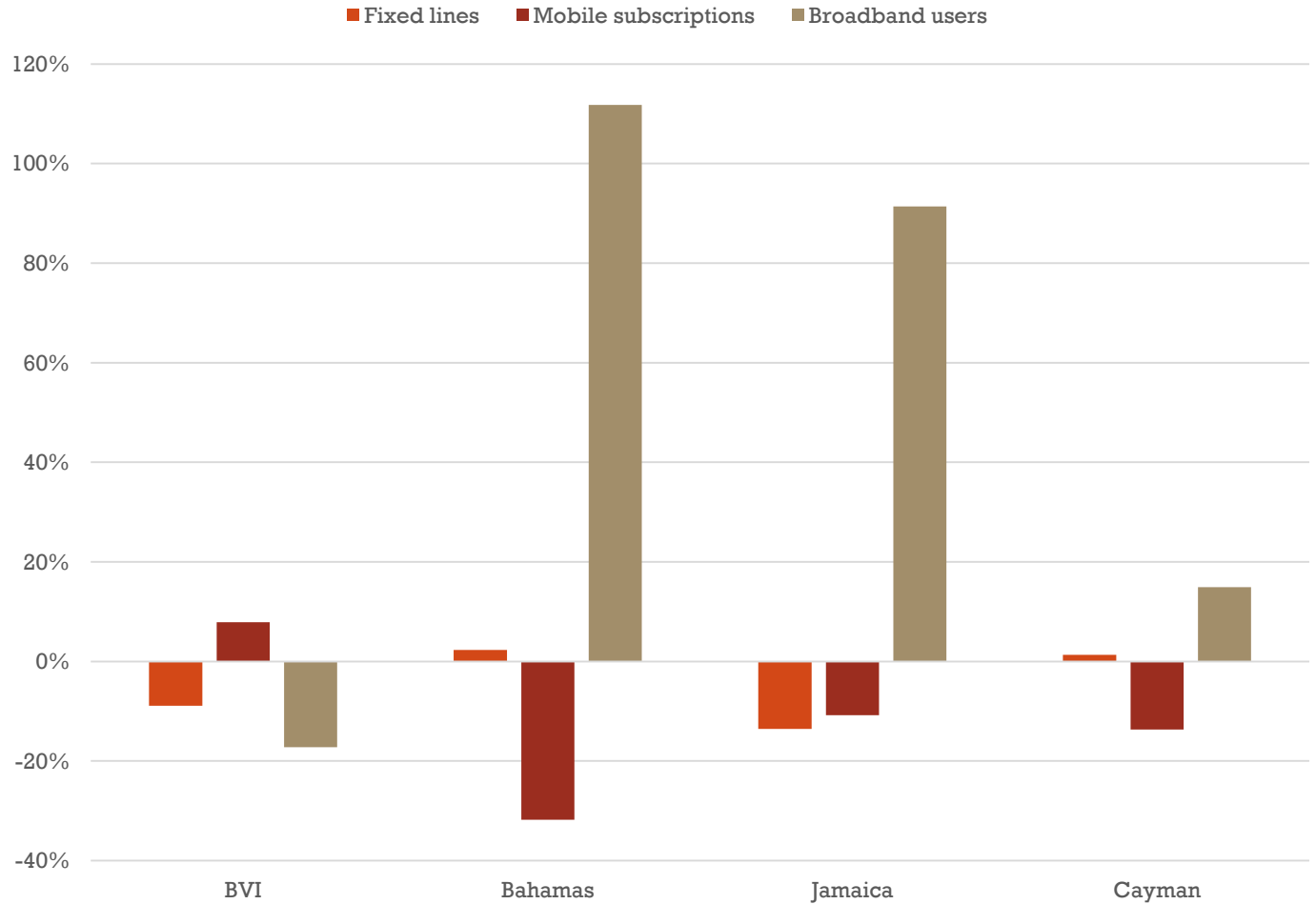
Source: Akamai

## BENCHMARKING OF BROADBAND DOWNLOAD SPEEDS

- There is a wide gap in the average download speed in the BVI in comparison to the most connected countries in the world



Growth Rate of Telecommunication Subscriptions by service



Source: CARICOM

## GROWTH RATE OF TELECOMMUNICATION SUBSCRIPTIONS BY SERVICE

- Lack of growth in broadband for the BVI is a concern compared to Bahamas, Jamaica and the Cayman Islands.
- It is of high interest to promote the uptake of broadband to comparable levels as in Bahamas, Cayman Islands and Jamaica where parts of the island have fiber to the home.

# CONCLUSION

- An increasing reliance on mobile telephony has become a normal part of the landscape in the BVI
- The demand for mobile data services is increasing in line with the global trend with the rest of the world
- A key concern for the BVI is the stagnation in fixed line broadband services from 2009-2012 and the low bandwidth speed available
- Regulatory intervention may be required to address this problem