



Telecommunication Sector Study



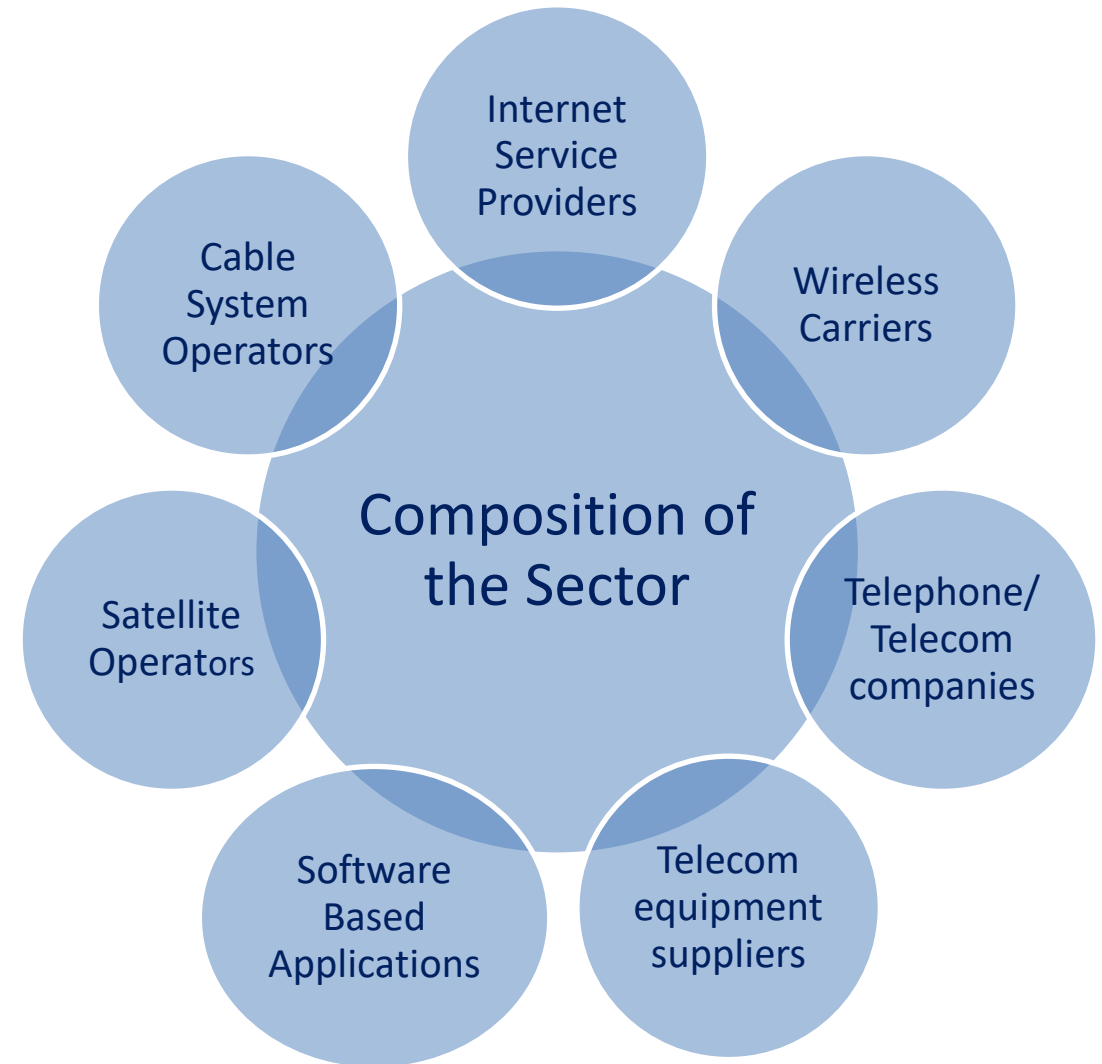
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Overview

- **Definition:** Telecommunication sector comprises companies that make telecommunication possible on a global scale, whether it is through the phone or the Internet, airwaves or cables and wires or wireless. These companies create the infrastructure that allows data in text, voice, audio, or video to be sent anywhere in the world.
- Not long ago, the telecommunication sector consisted of a club of big national and regional operators. Since the early 2000s, the industry has witnessed rapid deregulation and innovation. In many countries around the world, governments are allowing private operators to enter the market creating competition.
- Telecommunication sector plays an important part in day to day affairs now. It is an essential component of every walk of life ranging from personal, business and government environment. The sector has witnessed many innovations and improvements over the period and increased competition has further fueled innovation.

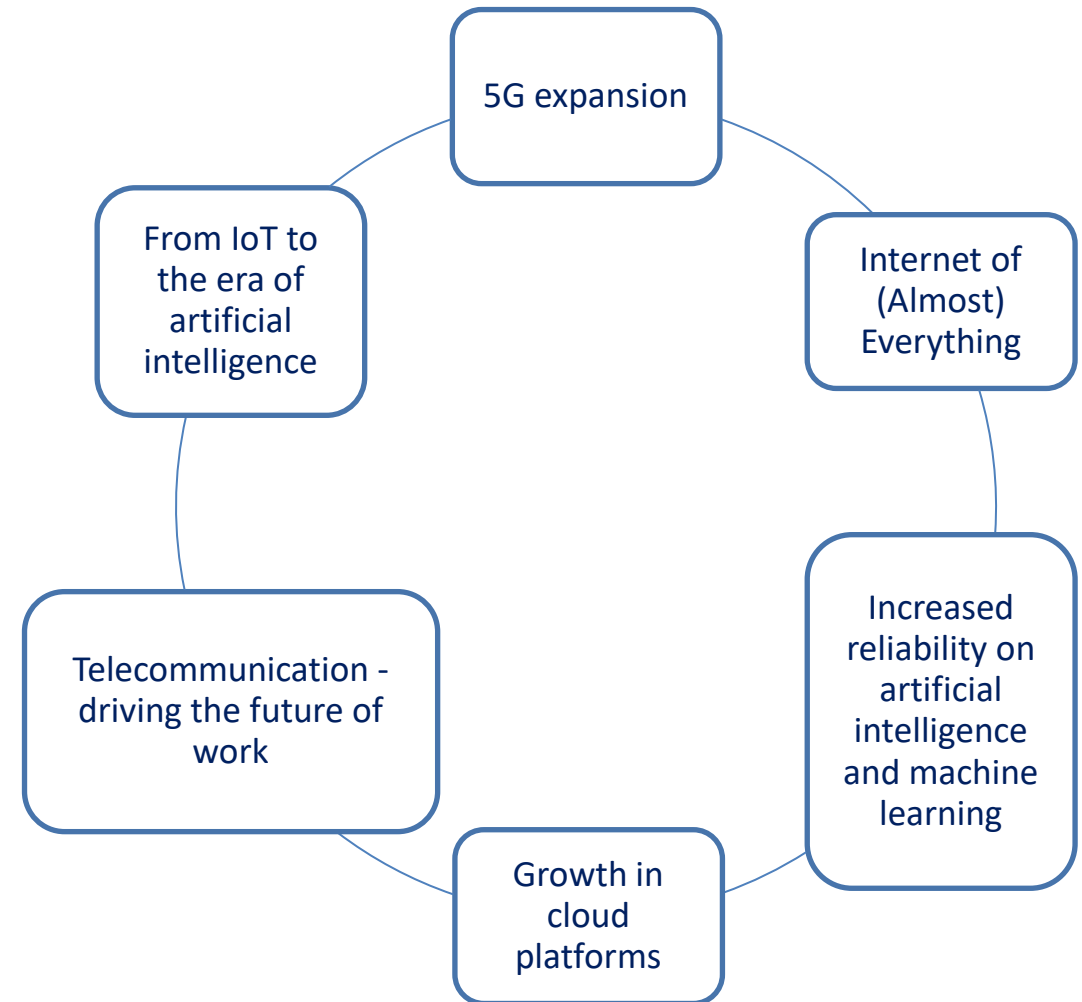


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Global Industry | Market Trends

Following are the trends in the telecommunication sector that will drive innovation in global market.

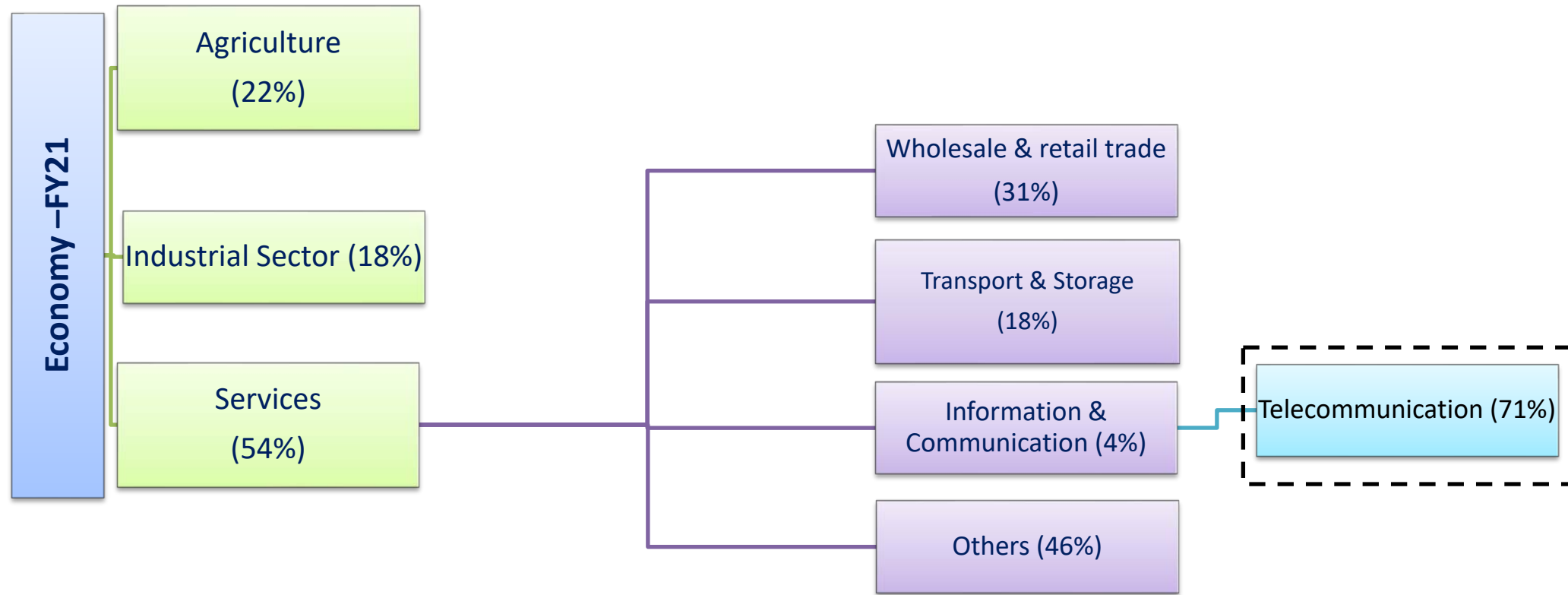
- Demand for high-speed connectivity is greater than ever; 5G is poised to meet these expectations. Lower connectivity cost, ultrafast speed and the much-anticipated lower latency are among its numerous benefits for the network.
- The new era of artificial intelligence will use tons of data to predict peak traffic, provide better end-to-end service and enhance connectivity. Opportunities are there for telecommunication to leverage these technologies for network capabilities improvements, a seamless customer experience and infrastructure automation.
- The telecommunication sector is the largest in absolute size within the IT sector, but has generated only ~14% of the IT growth as a whole. On the contrary, data processing, internet publishing, and other information services are the fastest-growing segments of services-producing industries.
- The demand for home and industrial IoT devices and applications will continue to exponentially increase in the post-pandemic world.
- Telecommunication companies have emerged as one of the most essential industries due to the pandemic and will most likely stay that way for the foreseeable future.



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Services | Overview

- Services sector contributes to 54% to GDP, posting ~6% growth from FY21 to FY20. Telecommunication sector contributes ~71% to the information and technology sector, which is about ~4% part of Services.



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Industry Snapshot | Local

- Market size:** The Telcom sector’s market size is estimated to reach at PKR~695bln in FY22 (FY21: PKR~644bln) with a YoY increase of 8%. The increase in market size can be associated with the expansion of 3G, 4G and 5G services in Pakistan, Moreover in tandem with the impact of COVID-19, broadband data usage increased by 52% during FY21. Increased Internet usage also had a significant impact on the sector’s financial outlook.
- Telecommunication sector:** As per SECP, the principal line of business of the companies in telecommunication sector is to carry on all or any of the businesses of establishing, developing, expanding, enhancing, managing and operating telecommunication systems including systems signals, data or messages of any and all kinds.
- Significance of sector:** In Pakistan, ~98% of the households own a mobile phone whereas penetration of mobile services has reached ~88% at the end of February-2022, with ~192mln mobile subscriptions across the country.
- Measures for the introduction of 5G in Pakistan :** The Government of Pakistan is in the process of refining modalities for launch of 5G in the country. In addition enhanced consumer welfare, innovative entrepreneurship, and startups in ICT sector are also expected as well as economic growth in the ICT sector. Ministry of Information Technology, PTA and FAB are working together for successful launch of 5G in Pakistan in collaboration with relevant stakeholders..

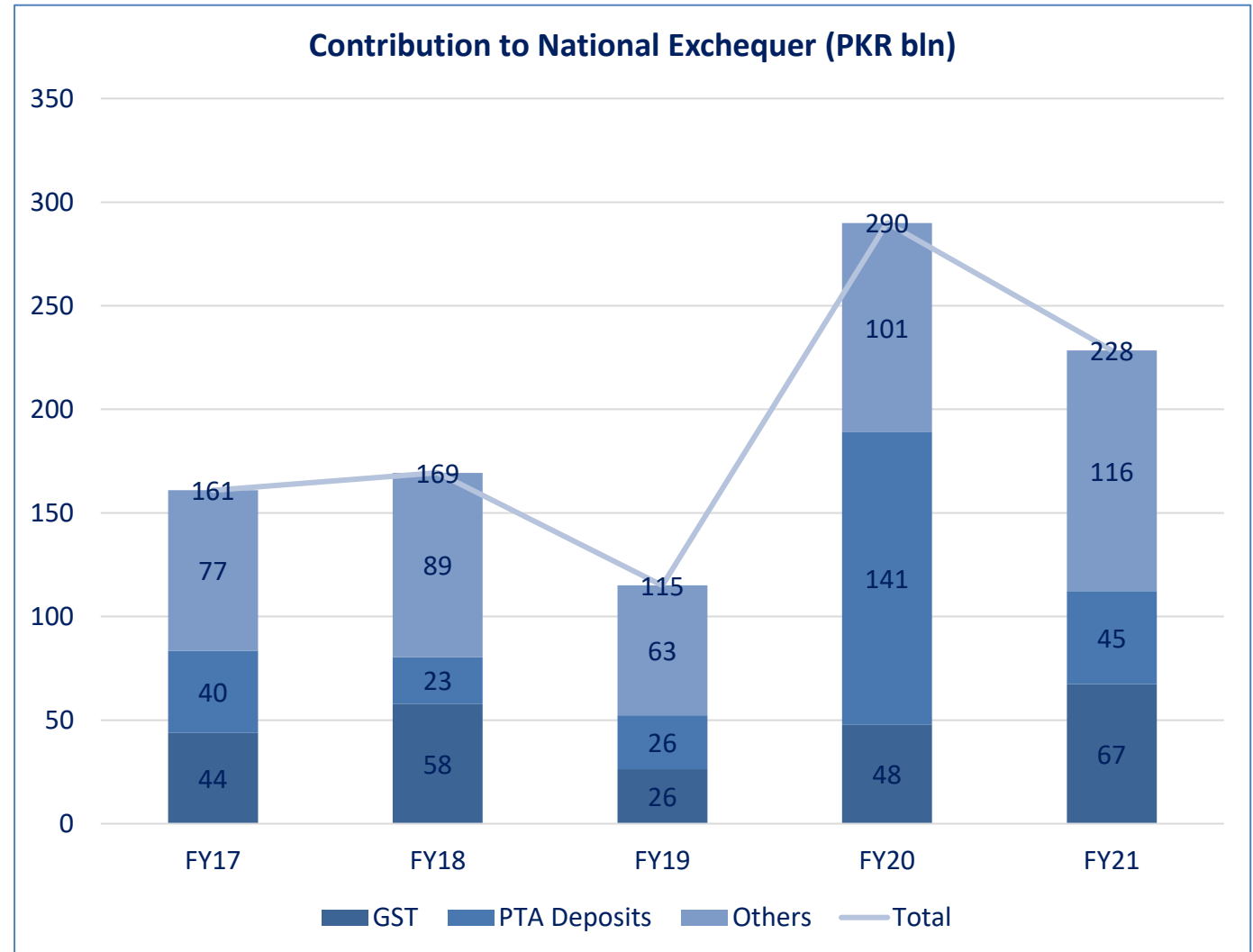
Overview	FY20	FY21	FY22
Gross Revenue (PKR bln)	593	644	695*
Contribution to GDP	1.4%	1.7%	
Key Sector Players	4		
Structure	Organized & Unlisted		
Inflow of Net FDI (PKR bln)	763	202	192
Tele density %	78%	85%	88%
Growth % Subscribers	3%	3%	5%
Total Cellular Subscribers (mln)	174	183	
Regulator	Pakistan Telecommunication Authority (PTA)		

*FY22 market size is estimated using average growth rate

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Contribution to National Exchequer

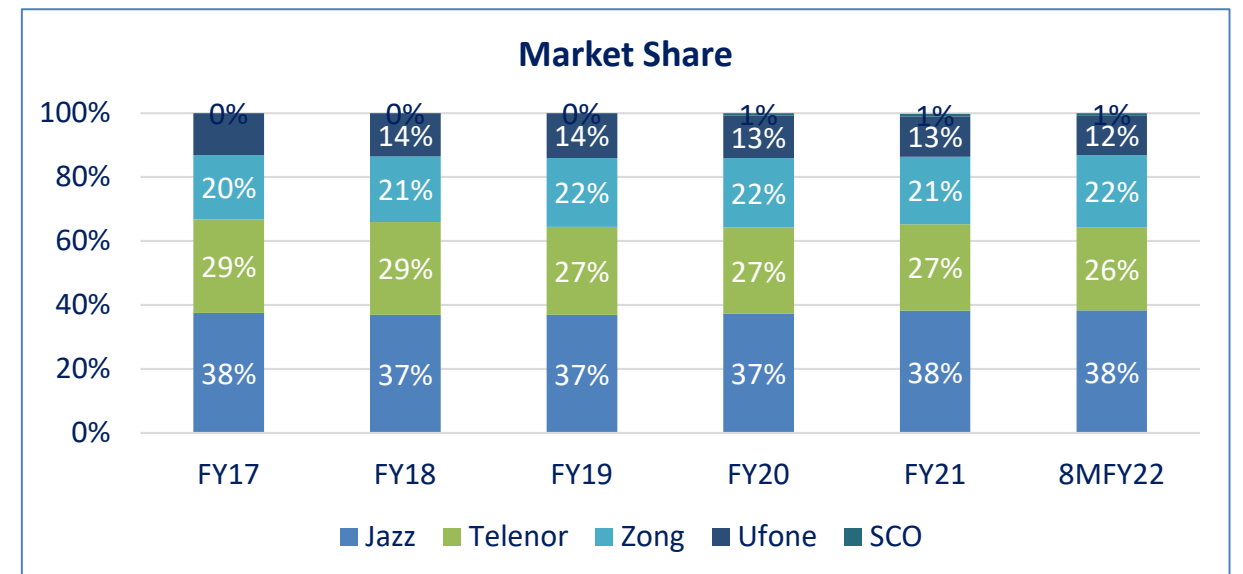
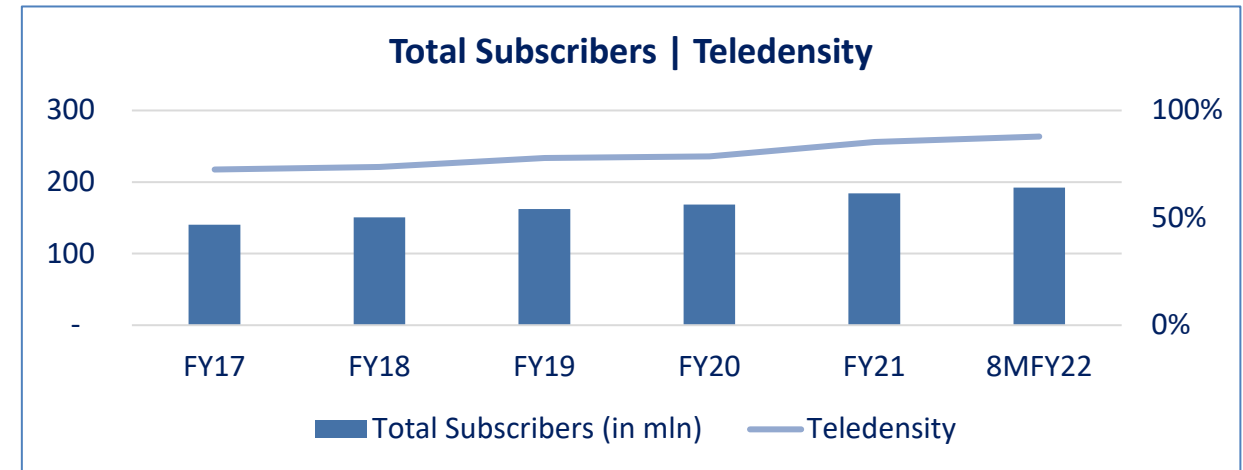
- The sector’s contribution to the national exchequer decreased by ~21% (FY21: PKR~228bln; FY20: PKR~290bln) owing to lesser PTA deposits. PTA deposits include initial license fee, USF, R&D fund and other levies that amounted to PKR~45bln in FY21 (FY20: PKR~141bln).
- The total telecommunication sales taxes grew by ~40% and stood at PKR~67bln in FY21 (PKR~48bln)
- In addition to the aforementioned taxes and contributions made by the telecommunication sector, the FBR also collects a huge amount against import of cellular mobile handsets, which allows only registered and tax-paid handsets to connect to telecom networks in Pakistan.



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Teledensity

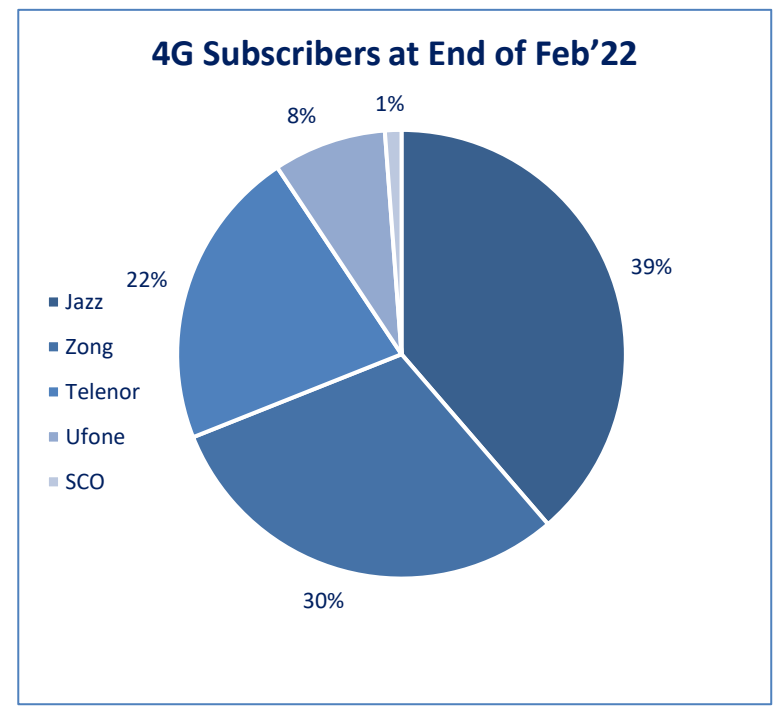
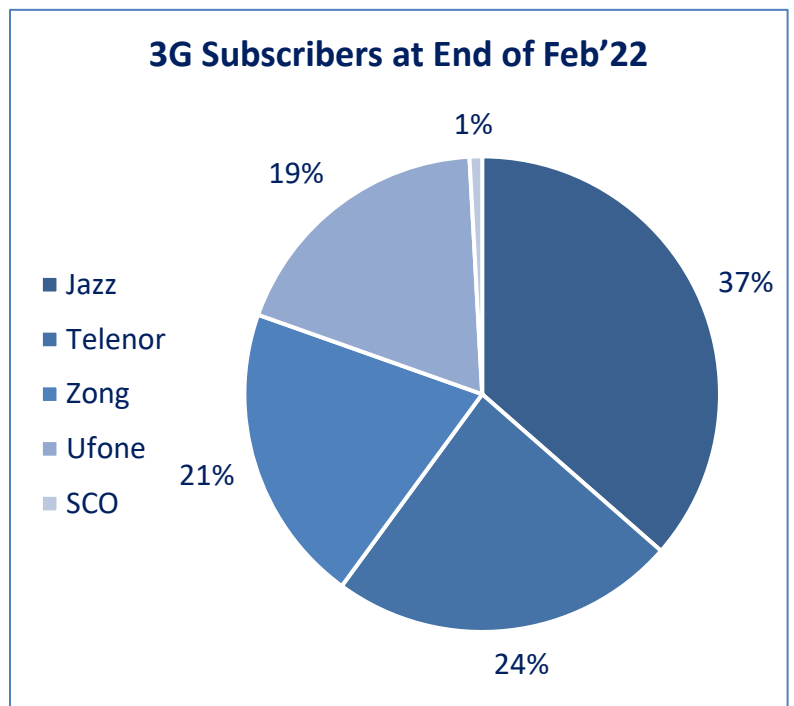
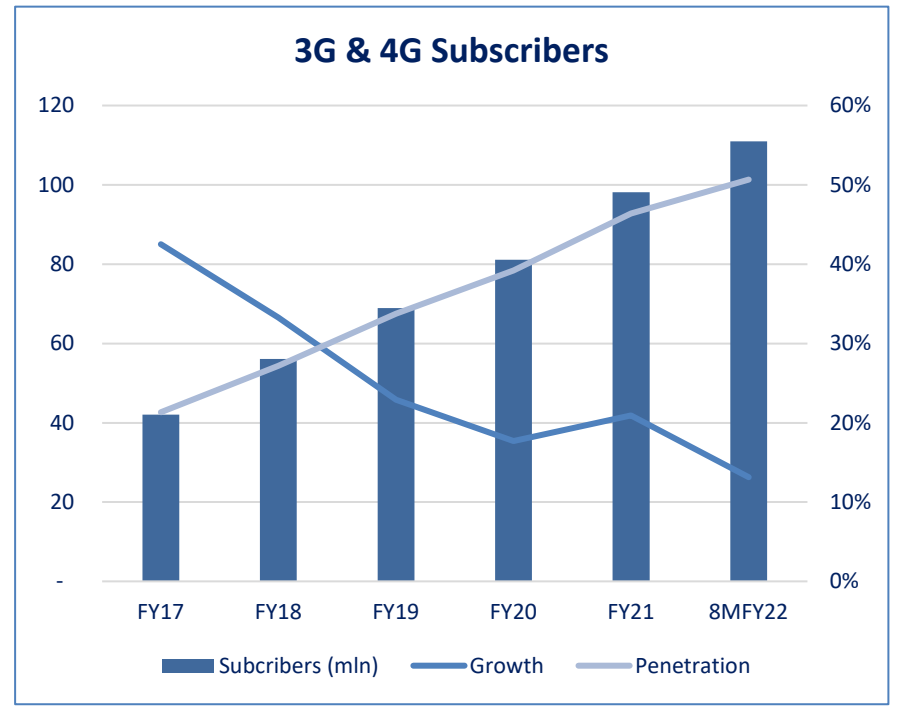
- Cellular Teledensity** represents the percentage of mobile sim subscribers within the population. On an overall basis, the teledensity growth rate outpaces average population growth trend on YoY basis. In Pakistan, approx. ~60% - 65% of the total population constitutes individuals in the age bracket of 15-64 years, perceived to be mobile sim subscribers. Growth trend in this age bracket aligns with the total population growth rate.
- As of February-2022, the teledensity has reached ~88% (FY21: ~85%). Almost ~99% of total teledensity belongs to cellular mobile phones whereas only ~1% is being contributed by Wireless Local Loop (WLL) and Fixed Local Loop (FLL).
- There are four key players in the telecommunication sector: Pakistan Mobile Telecommunication Limited (Jazz), Telenor Pakistan (Telenor), China Mobile Pakistan Limited (Zong) and Pakistan Telecom Communication Limited (Ufone). Jazz has the strongest position with highest number of subscribers. The company enjoys a share of ~38% in cellular subscribers followed by Telenor, which has a ~26% market share. The lowest market share is of SCO, operating in Gilgit Baltistan only. Competition is expected to increase further as local companies pursue aggressive strategies to increase their subscriber base.



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3G & 4G Subscribers

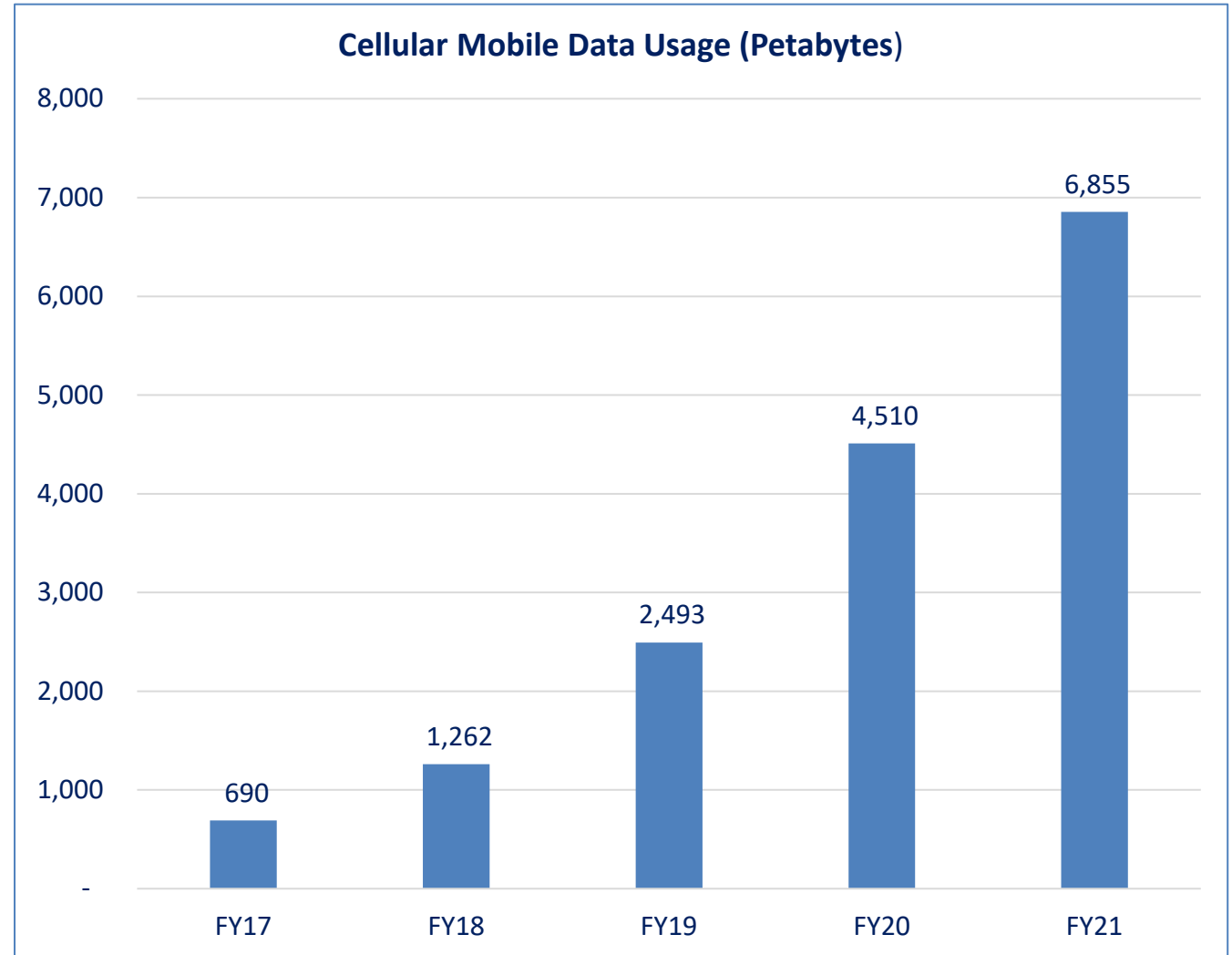
- The combined number of 3G/4G subscribers in Pakistan has reached ~111 mln as at end February -2022 with a CAGR of ~25% since FY17. The growth in total subscribers is led by the growth in 4G subscribers. The share of 4G subscribers is expected to increase further backed by the availability of affordable 4G supported devices.
- Jazz is the market leader in 4G subscribers with a market share of ~39% followed by Zong having ~30% market share as at end Feb-2022. Due to aggressive marketing campaigns and cheap data packages, the 4G subscribers of Zong have showed significant growth. The share of 4G subscribers in total subscribers will increase further.



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Data Usage

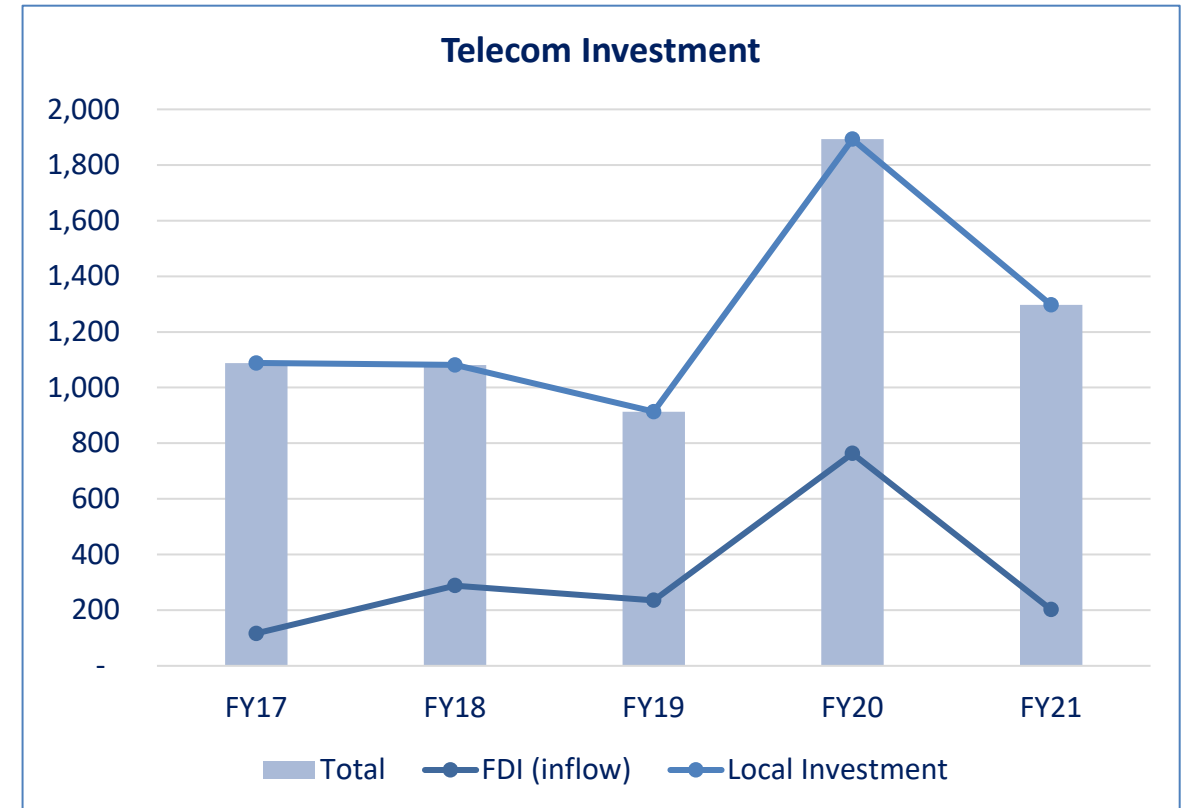
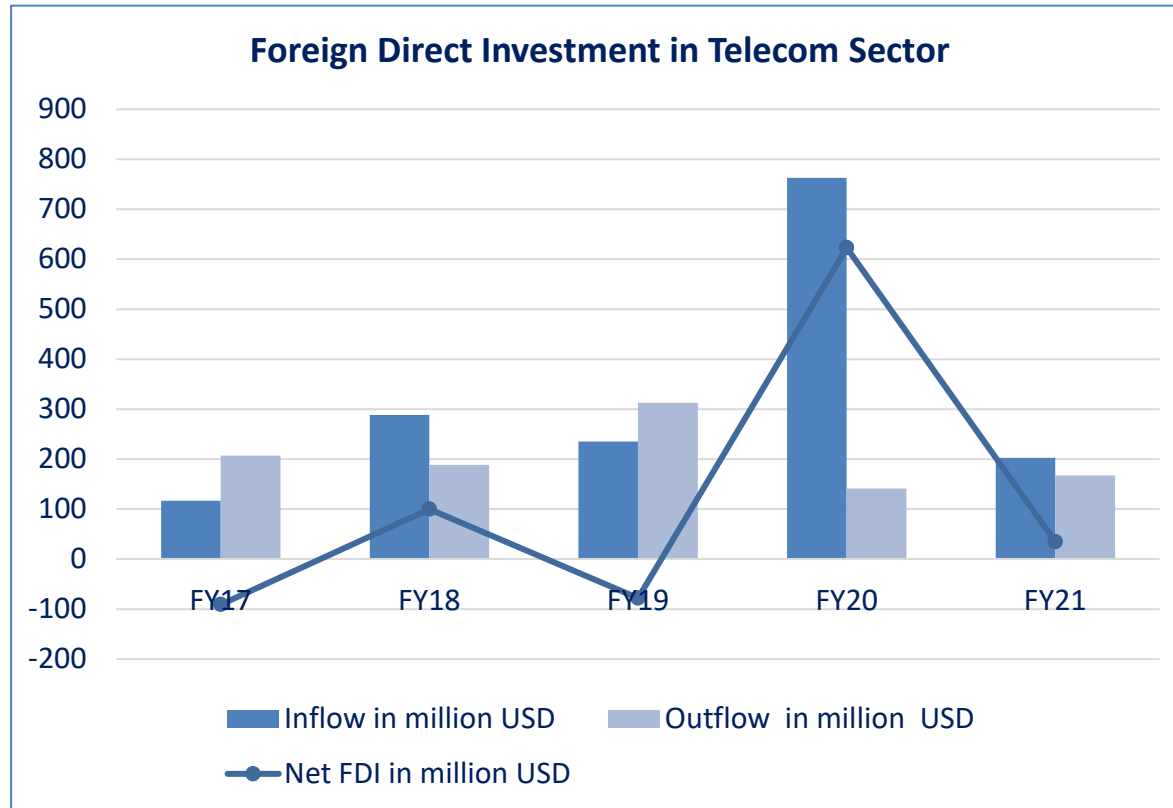
- During FY21, the telecom sector saw a huge demand surge from corporate set-ups and individuals alike to meet the social, educational, business, health-related, and economic requirements across the country.
- Total data usage in the country during FY21 was recorded at 6,855 Petabytes (FY20: 4,498 Petabytes) with YoY growth of ~52%. The usage is expected to show a gradual increase in coming period as well due to change in working patterns and increased dependence on Telecommunication devices in every aspect of life.
- In terms of data usage per subscriber, Zong data usage per subscribers is significantly higher than that of its competitors owing to cheap data packages and extensive market campaign by the company.



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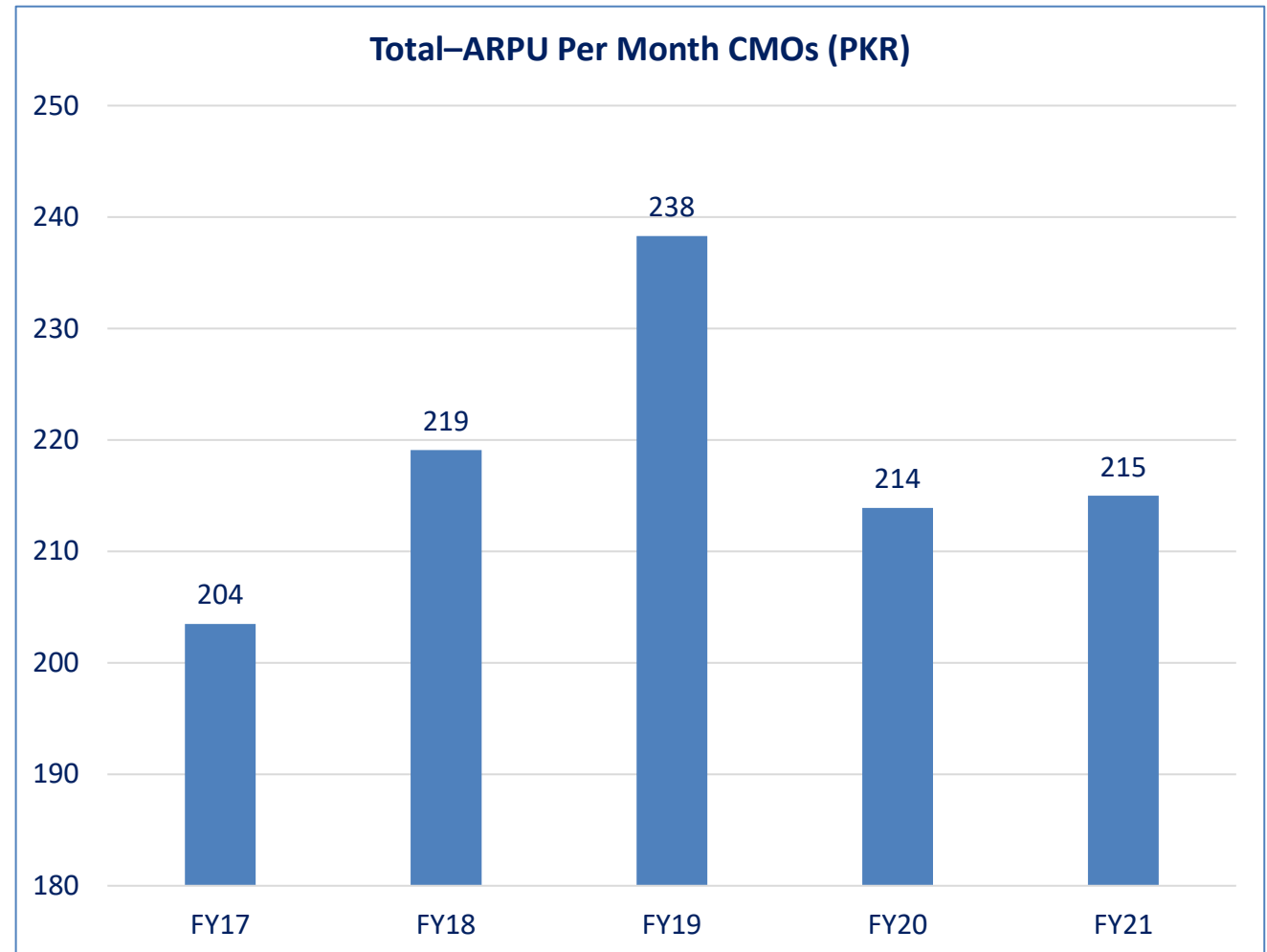
Investments

- The telecom sector has been exhibiting positive and encouraging FDI trends in Pakistan. The sector attracted USD~202mIn in the shape of Foreign Direct Investment (FDI) and contributed PKR ~226bIn to the national exchequer. This huge investment became possible primarily because of the license renewal fees.



Business Risk | Average Revenue per User (ARPU)

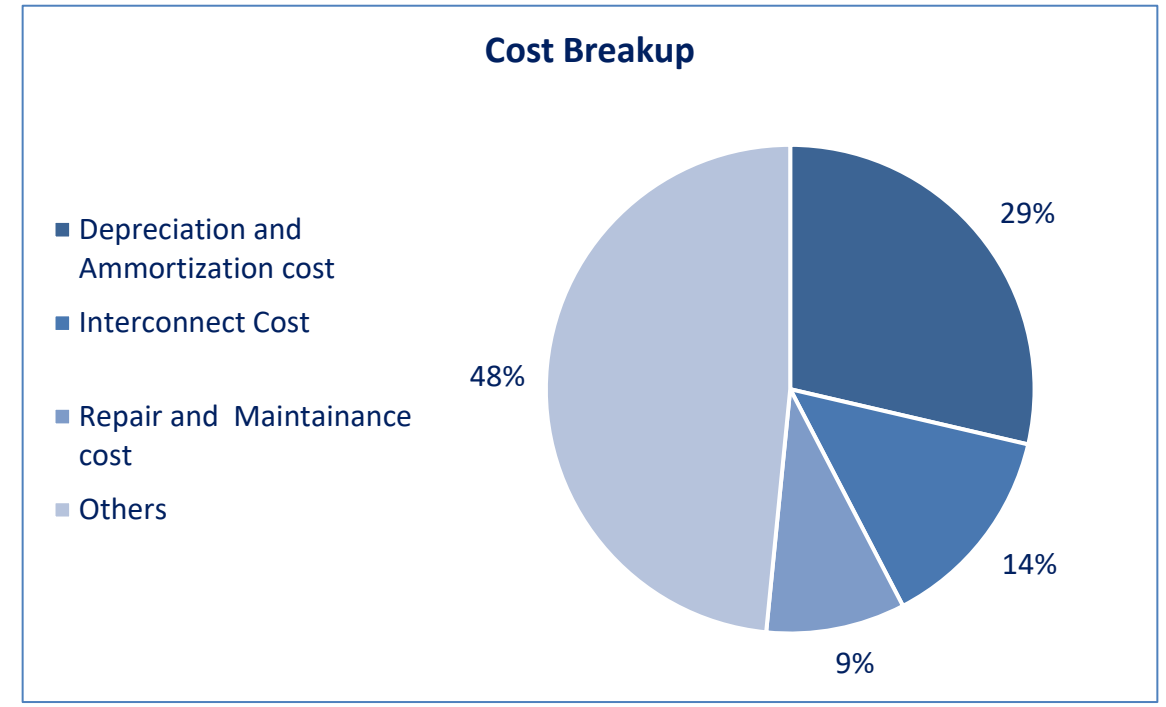
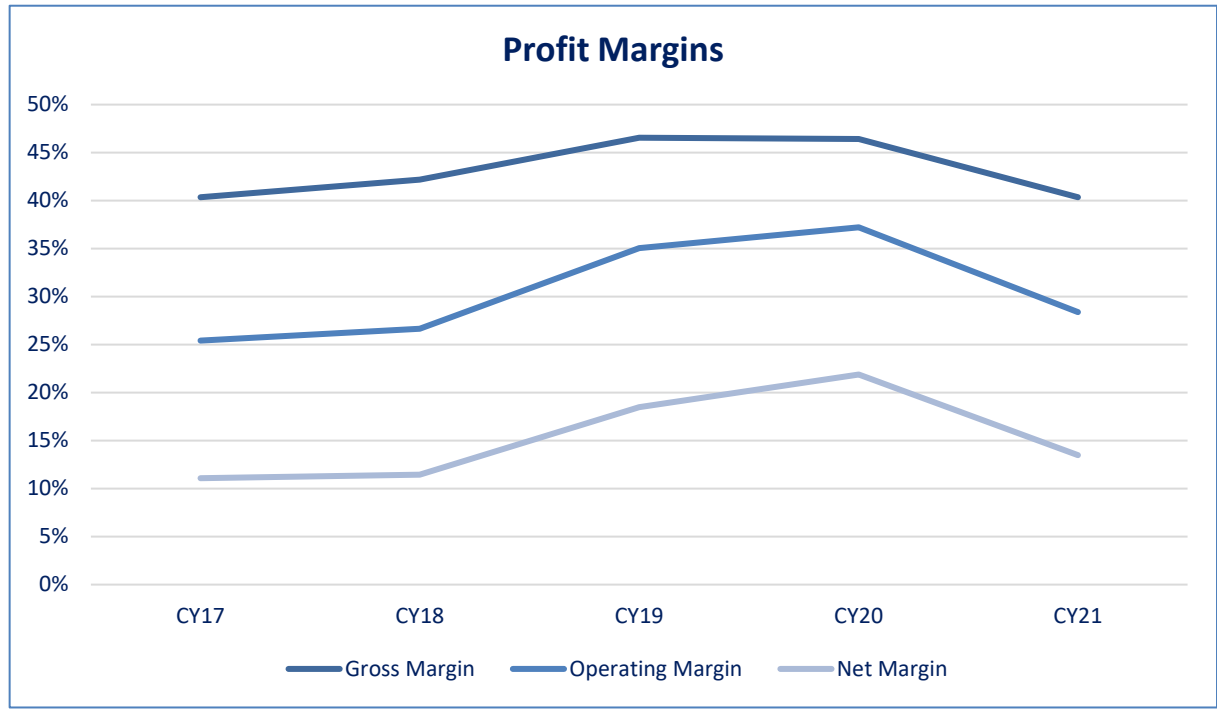
- The industry's data ARPU has slightly increased and stood at PKR~215 in FY21 as against PKR~214 during FY20.
- Pakistan has a relatively low ARPU and predominantly a prepaid subscription market where subscribers enjoy the flexibility of altering their usage patterns in response to any price fluctuations introduced by operators.
- Service providers face challenges in maintaining their ARPUs where voice is still a dominant factor in revenue streams.



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Business Risk

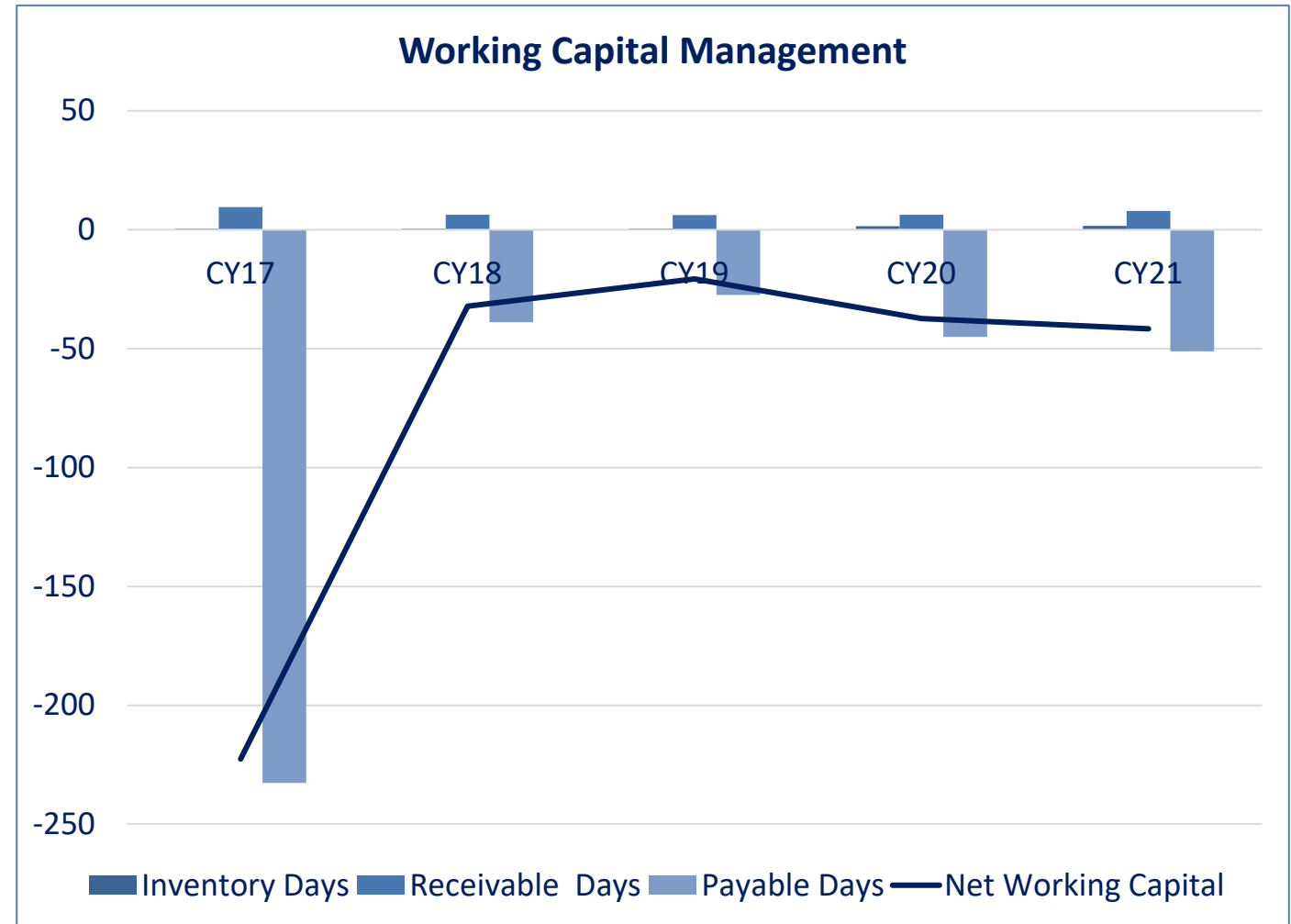
- In CY21, the average gross, operating and net margins of the sector stood at ~41%, 32% and 16% respectively. The margins of the sector have declined owing to increased fixed cost (mainly interconnect cost) and other operating and financial costs.
- Cost structure of the telecommunication sector is predominantly fixed in nature wherein maintenance cost constitutes major portion followed by other fixed expenses. Being fixed in nature, the cost is more predictable and stable in nature and this helps companies in better cost forecasting.
- Predominantly, fixed cost structure also comes with its own set of challenges as its increases the variability in company's profitability. Companies in the sector with low market share and revenue growth in previous years have experienced low profitability in comparison to companies with high market share.



Note: Calculations are based upon PACRA Rated clients that represents ~30% of the sector.

Financial Risk | Working Capital Management

- The sector is characterized by very low working capital requirements. This stems from its nature of business as most subscribers in Pakistan are prepaid customers that translate into cash transactions and low receivable days.

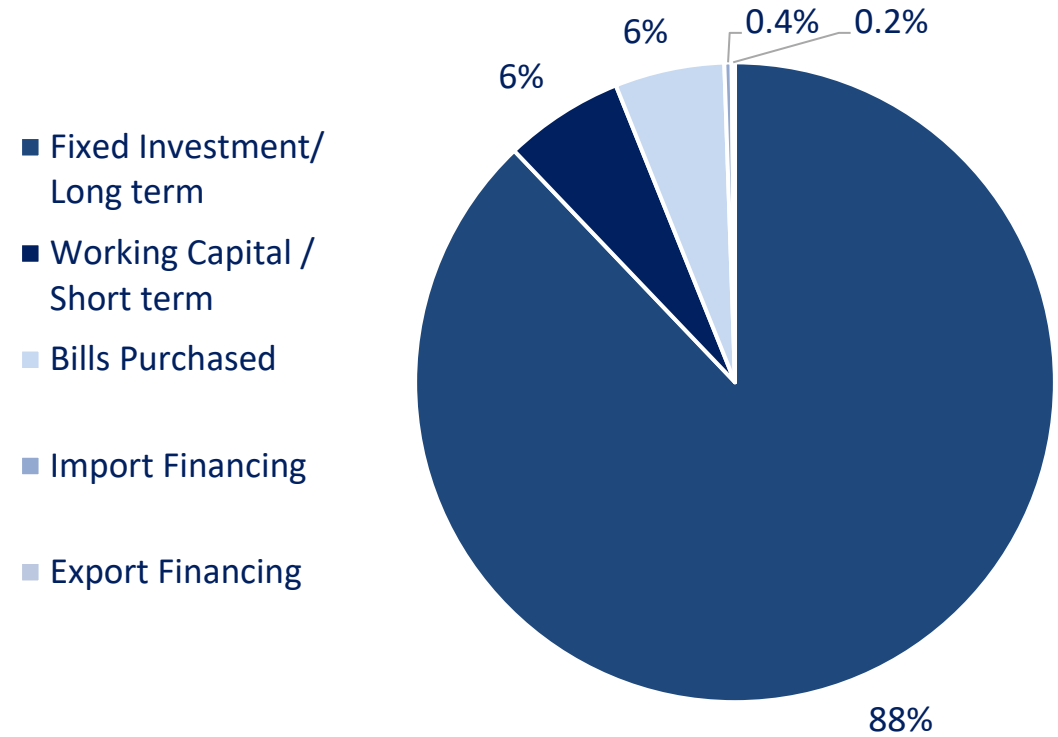


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Financial Risk | Borrowing Mix

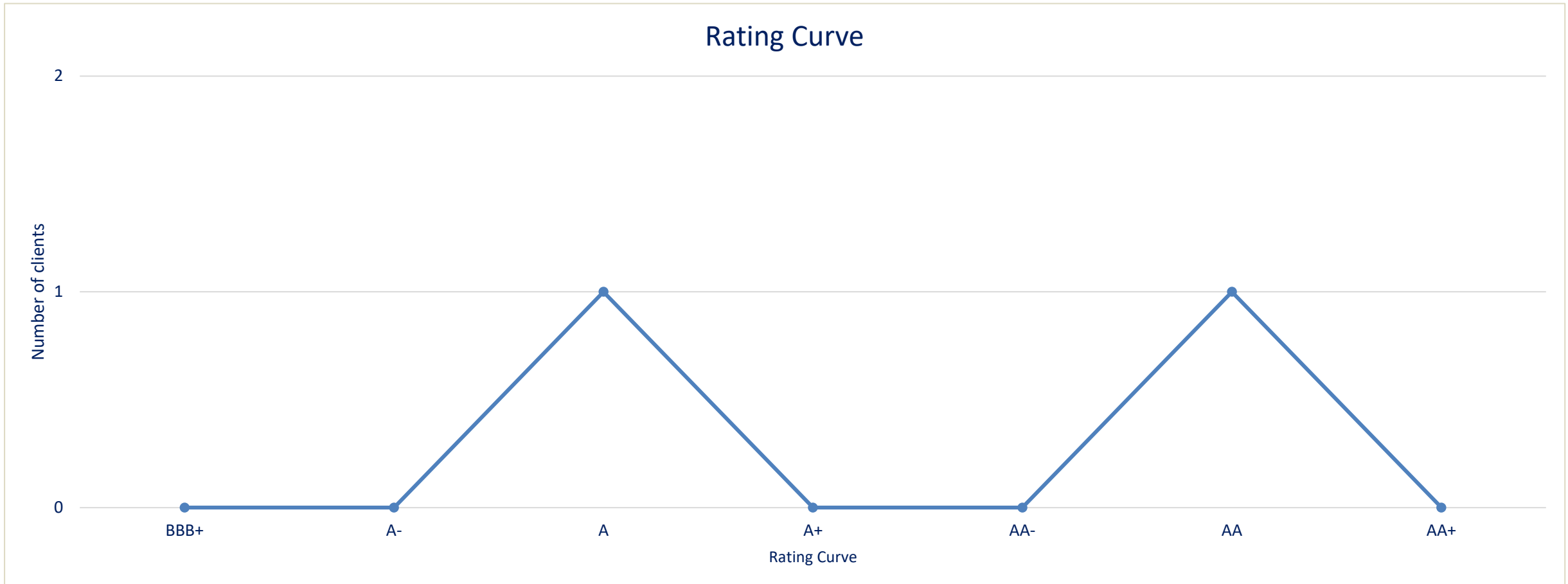
- As at end Feb'22, the total borrowings of the sector reached PKR~180bln (End Feb'21: PKR~140bln) with a YoY increase of ~29%.
- Considering the high capital intensive nature of the sector, a major portion of the sector's borrowing (~88%) is long term in nature used to finance fixed assets. While the portion of short term loans is only ~6%

Borrowing Mix at End of Feb'22



Rating Curve

- PACRA rates 2 clients in the sector. Rating bandwidth of the sector is A to AA.



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SWOT



Outlook: Stable

- Strong telecommunication infrastructure is considered an important component of economic development. In Pakistan, teledensity has shown an exponential growth in the past years and has now reached an all time high of ~87% as of February-2022. The growth in broadband subscription is even more promising as the penetration was recorded at ~51% as of February 2022. The segment is all set to grow at good pace on the back of improving awareness and availability of more affordable devices.
- Data usage in the country has increased to during FY21: 6,855 petabytes (FY19: ~ 4,498 petabytes) with a YoY growth of ~52%. The growth was fueled by increased usage during COVID-19 lock down. With the rising working force and work from anywhere trend, improved economic development and increasing need of telecommunication, the data usage is expected to remain on the higher side. The sector's revenue will be further augmented by the uptick in e-commerce activity.
- The telecom sector has been exhibiting positive and encouraging FDI trends in Pakistan. The sector registered a contribution of USD~623mln to the country's net Foreign Direct Investment (FDI) constituting ~24% of the total FDI in the country. Supported by the government, local companies are investing heavily in innovation and growth. In line with the Policy Directive of the Ministry of Information Technology & Telecom, two Cellular Mobile Operators, i.e., Zong and Jazz, successfully carried out the 5G trials in Pakistan.
- The sector is characterized by low financial risk as the local companies are not highly leveraged. Comfort is further drawn from the backing of international corporate sponsors, robust revenue streams and strong cash flow generation.

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