



Mobile Phone and Allied Products

Sector Study



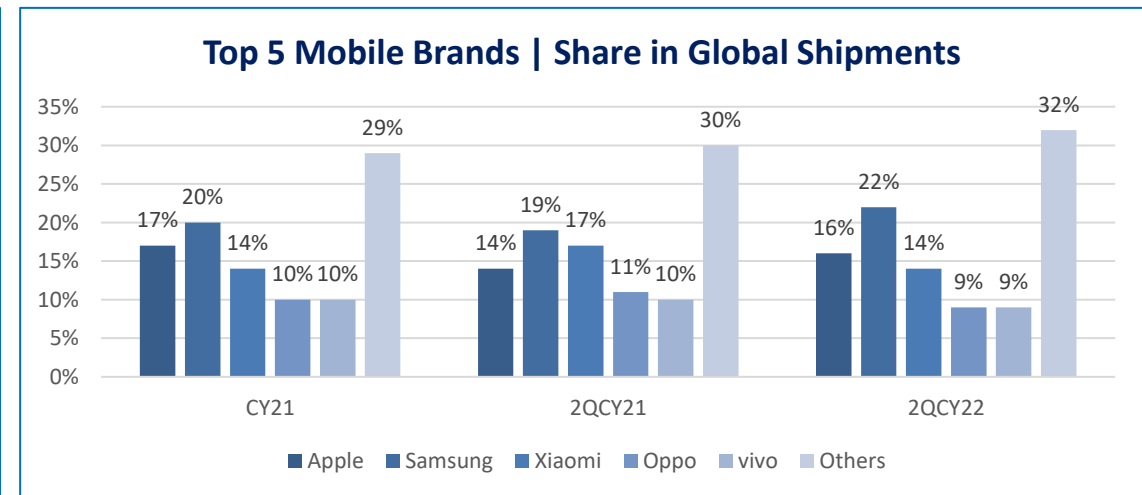
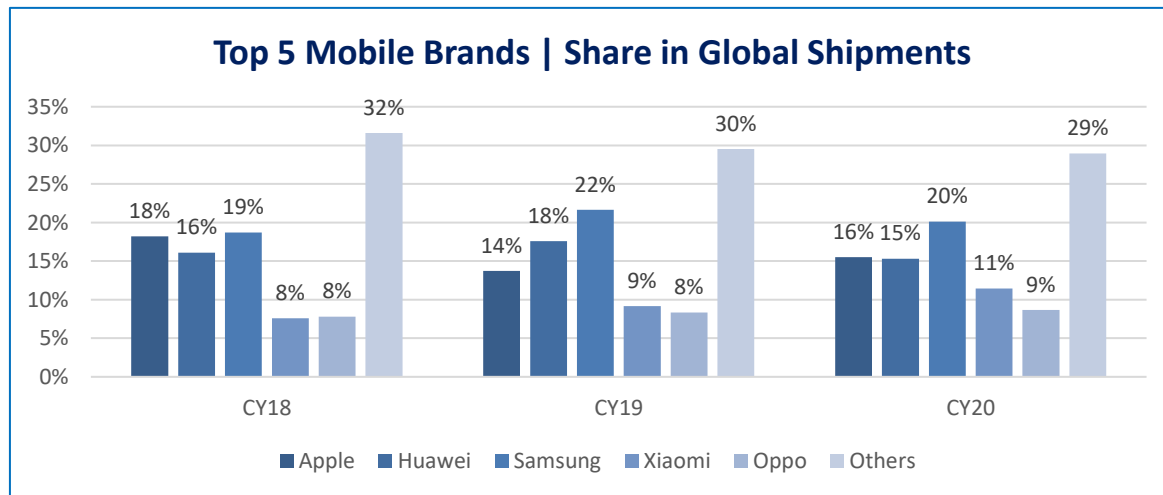
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Global Industry | Overview

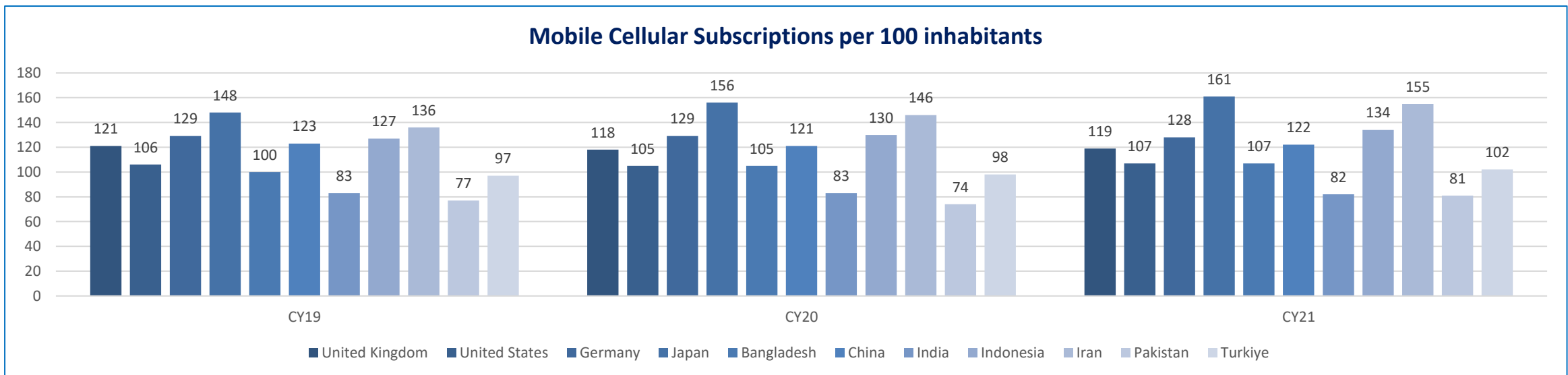
- Market structure:** Although, the mobile phone manufacturing industry is fragmented with a large number of global players, it can still be termed as an oligopoly, since the top 5-6 brands make up ~70% of the overall market share.
- Top Players:** Up until CY20, leading brands in the market in terms of shipments included Apple, Huawei, Samsung, Xiaomi, and Oppo. In CY20, shipments decreased YoY across the board, with the exception of Xiaomi (increased from ~9% to ~11%) and Oppo (increased from ~8% to ~9%). However, a rebound was observed in CY21 whereas the market was dominated by Samsung, Apple, Xiaomi, Oppo, and vivo, in this exact order. On a quarterly basis, while market shares of Samsung and Apple increased (~19% in 2QCY21 to ~22% in 2QCY22 and ~14% to ~16% in the same period, respectively), those for Xiaomi, Oppo and vivo declined in 2QCY22, compared to same period previous year.
- Market size:** Global mobile phone shipments for CY21 clocked in at ~1,355mln units, a YoY increase of ~6%. However, numbers for 2QCY22 were recorded at ~286mln units, compared to ~313mln units, same period last year (a decrease of ~9% QoQ). The industry has turned from supply-constrained to a demand-stricken one, as roaring inflation and economic uncertainty has dampened consumer spending.



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Global Industry | Cellphone Penetration

- Due to growing connectivity around the globe, the world has witnessed tremendous growth in the use of the mobile phone. In 1994, there were 56mIn mobile cellular subscriptions worldwide, less than one for every 100 inhabitants.
- In CY21, there were more mobile-cellular subscriptions than the total population. Countries that exhibit high mobile cellular subscriptions per 100 inhabitants include Japan and Iran, followed by the United States, Indonesia, and China.
- Smartphones have transformed use of the Internet. As of CY22, there are ~6.7bIn smartphone users across the world (~86% of the world population).
- However, affordability of smartphones varies across regions and goes beyond income levels. High prices are a function of factors such as tax policies, development, production and market competition. For CY22, it has been estimated that smartphone cost as percentage of average monthly incomes is ~2% in North America, ~11% in Europe & Central Asia, ~39% in Sub-Saharan Africa and ~53% across South Asia.



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Supply Chain

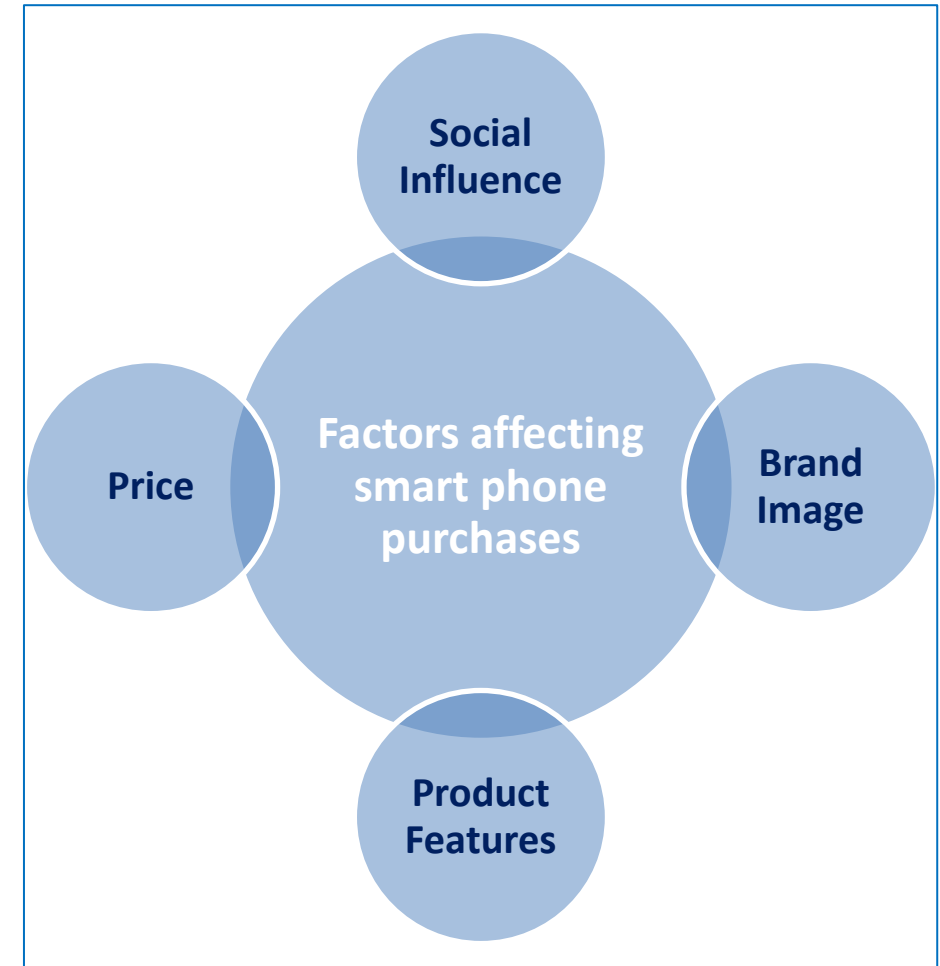
- The focus of this study shall pertain to the assembler and distributor segment of the mobile phone supply chain.
- A mobile phone assembler is involved in manufacturing and/ or assembling of mobile phones whereas a mobile phone distributor (or “distributor”) is an entity that buys mobile phones and allied products from the assemblers and sells them to customers either through dealers and retailers or directly.
- Most distributors also provide a range of allied services such as technical support, warranty and after sales services. In the mobile phone supply chain, distributors play an essential role in helping assemblers/principles reach out to markets which they could otherwise not target.
- Distributors are, therefore, responsible to sell the products and provide after-sales services to clients.
- Assemblers set the prices of their products and all distributors and dealers are obliged to sell the phones at the predetermined prices, therefore competition in terms of price-setting amongst distributors and dealers is quite low.



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Local Industry | Market Dynamics

- With expanding net coverage, myriad options of mobile devices available in the market, ever-increasing, sustainable demand for technology and ubiquity of mobile phones and their uses among a wide cross-section of ~220mln people, Pakistan’s local market has a great potential for mobile phones.
- This potential is evidenced by 194mln cellular subscribers, with a tele-density of ~88%, and 124mln broadband subscribers, as per Oct’22 figures released by PTA.
- Moreover, initiation of DIRBS (Device Identification, Registration and Blocking System) in CY19 by PTA proved vastly useful in curbing illegal import channels for mobile phone devices in the country. As per PTA Annual Report 2021, legal commercial imports of mobile phones increased by around ~125% in three years (2018-20), while the revenue collected on these imports crossed the PKR~122bln mark.
- This paved the way for Mobile Device Manufacturing Policy (2020) which set in place three key targets: Import Substitution, Production and then Exports. It set a ~49% localization target by June 2023, including 10% localization of parts of the motherboard and 10% localization of batteries. In light of the policy, PTA issued MDM (Mobile Device Manufacturing) Regulations in 2021, authorizing 30 companies enabling them to manufacture mobile devices in Pakistan.



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Local Industry | Overview

- Market Structure:** During FY17-21, the market was largely import-driven, which grew at an average CAGR of ~3%. However, a sudden shift was observed in FY22, when commercial imports of mobile devices declined by a whopping ~58%, from ~25mln units to ~10mln units. Simultaneously, local manufacturing during the same period increased from ~13mln units to ~25mln units. This mainly resulted from supporting government policies, as aforementioned.
- Market Size :** Total mobile phone imports during FY22 were recorded at USD~1,979mln (FY21: USD~2,065mln) registering a decline of ~4.2% YoY. Total mobile phone imports during 4MFY23 have been recorded at USD~226mln (4MFY22: USD~645mln), a massive decline of ~65% over the same period last year.
- Key Suppliers:** These include Apple, Samsung, Oppo, Huawei, Xioami and other Chinese brands that have lately tapped the domestic landscape. The global assemblers/ principles sell their mobile phones in local market through networks of their authorized distributors on contractual basis.
- Distributors:** Major mobile phone distributors in the country include Airlink Communication, M&P, Burque Corporations and Advance Telecom. Other distributors are involved in distribution of some local and Chinese mobile phones. Distribution Models for Oppo, Vivo and Q Mobile differs from the rest of the market as they have established their own distribution networks.

Industry Snapshot				
	FY21	FY22	4MFY22	4MFY23
Mobile Imports (USD mln)	2,065	1,979	645	226
Mobile Imports (% change)*	51	-4.2	15.5	-64.9
Mobile Imports (mln units)	25	10	9**	1**
Mobile Devices Locally Manufactured (mln units)	13	25	16**	18**
Industry Structure	Oligopoly			
Top Manufacturing Brands	6			
Top Mobile Phones Distributors	4			
Regulator	Pakistan Telecommunication Authority			

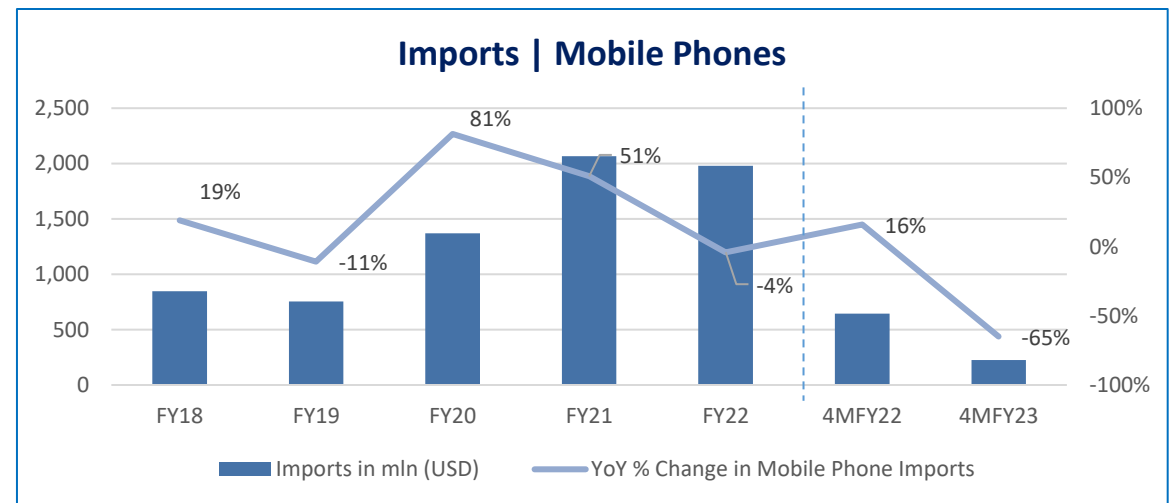
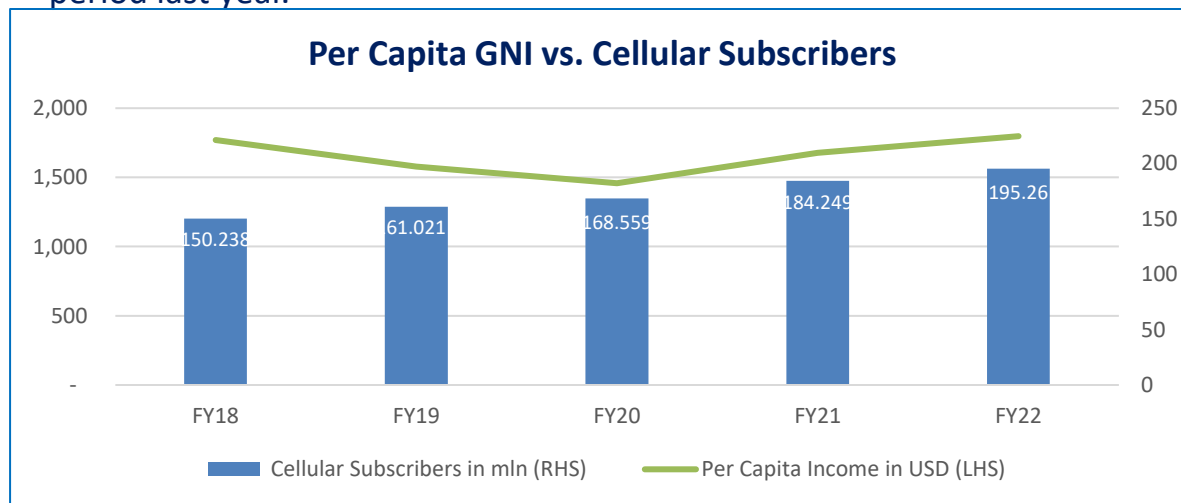
*All figures depict changes over same period previous year.

**Latest available figures for 9MAY21 AND 9MAY22., respectively.

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Local Industry | Demand

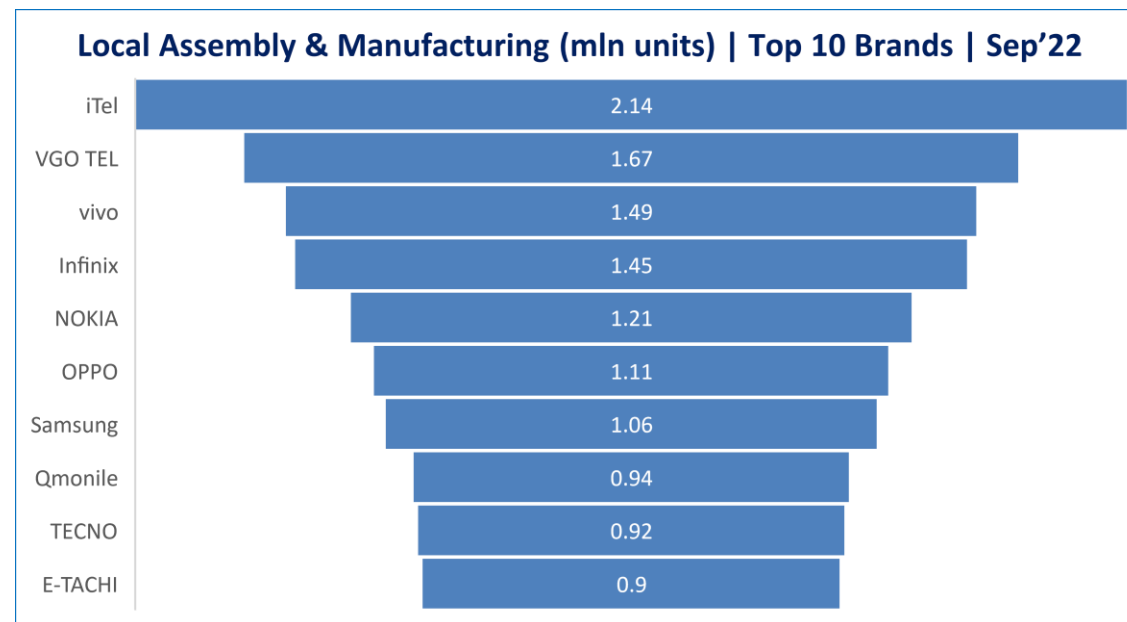
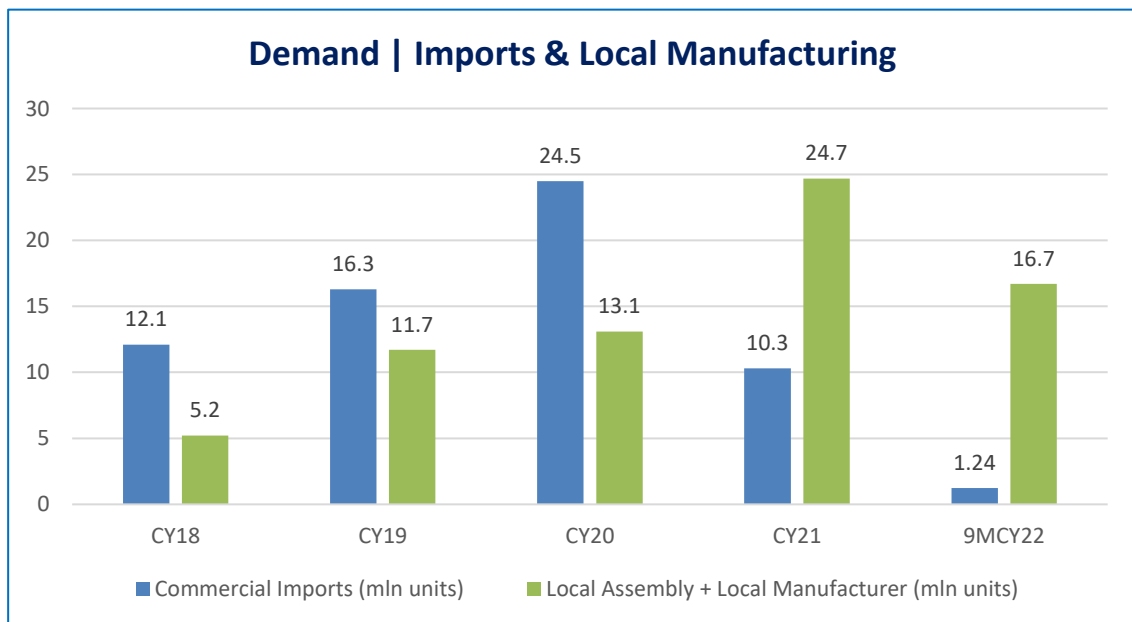
- Estimated demand for smartphones is largely a function of cellular subscribers (based on sims) in the country. This estimate has been compared with the per capita GNI, in order to observe if the two trends move in tandem.
- According to Pakistan Economic Survey, ~77% of households across all rural districts of Pakistan have mobile phones and ~62% own a smartphone. Amongst the mobile phoner users, ~89% use WhatsApp services, while ~64% use SMS facility. Based on numbers made official by PTA, there is an upward trend in the number of cellular subscribers in the country. In FY22, the number increased by ~6%, from ~184mln to ~195mln subscribers. This is corroborated by the increasing per capita GNI, which grew by ~7% to USD~1,798 (FY21: USD~1,676).
- Pakistan has historically (FY18-20) relied on imports to cater local demand of mobile phones, with the exception of FY19 (primarily due to slowdown in economic activity due to outburst of COVID-19). However, post-FY20, there has been a steady decline in mobile phone imports, largely due to government's efforts and PTA's initiatives to pursue import substitution. Imports declined by ~4.2% in FY22, down from USD~2.1bln to USD~1.9bln, as against a growth of ~50% in FY21. For 4MFY23, mobile imports have declined by ~64% QoQ. This figure had exhibited an increase of ~66% in the same period last year.



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Local Industry | Supply

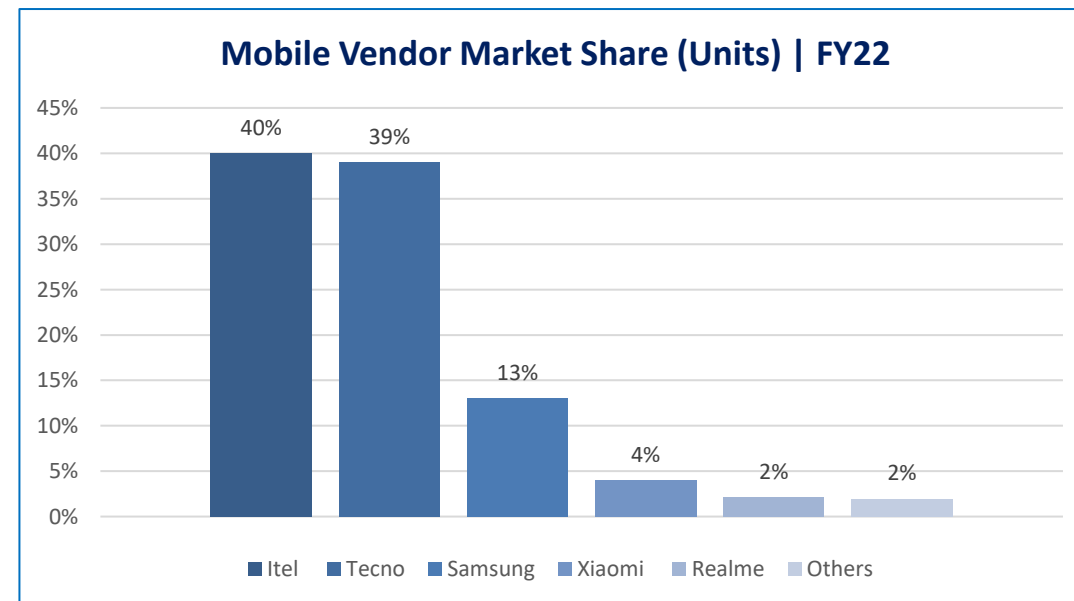
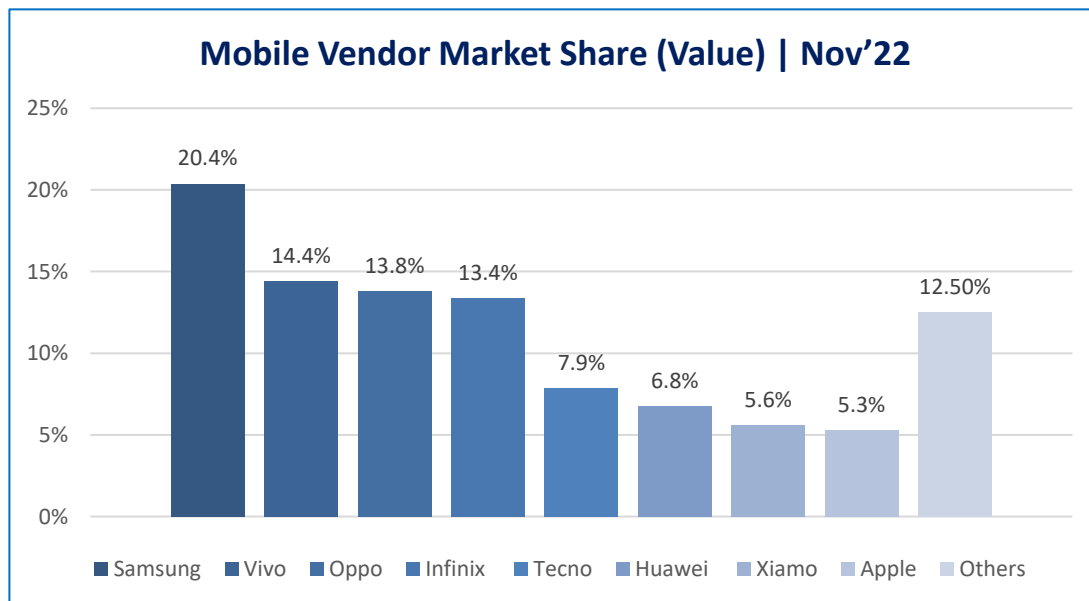
- In order to cater to ever-growing demand, the industry was historically (for the purpose of this analysis, time period is defined as CY18-CY20) reliant on imports. According to PTA, commercial imports grew at an average CAGR of ~26%. While local production did register an increase of ~11.2% (YoY) in CY20, it was not enough to outpace growth of ~50% in imports (CY20).
- However, post-CY20, the trend has reversed in favor of local manufacturing, which grew at a colossal rate of ~89%, compared to a decline in commercial imports of ~58% during the same period. This trend reflects positive materialization of PTA's Mobile Device Manufacturing (MDM) Authorization regulatory regime, as aforementioned.



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Local Industry | Mobile Vendors

- In terms of value, Samsung is leading the market with the market share of ~20%. Following it are the brands Vivo, Opp, Infinix, Tecno, Huawei, Xiaomi and Apple in that order, with respective market shares of ~14%, ~13%, ~13%, ~8%, ~7%, ~6% and ~5%.
- Of these, Infinix, Vivo, Itel, Oppo and Tecno have initiated their mobile assembling units in Pakistan. Samsung has also invested in local mobile assembling plants, hence fostering the local mobile phone industry.
- In terms of units sold, Itel dominated the market in FY22, with ~40% market share, while Tecno was a close second with ~39% share. Samsung held a share of ~13%, while Xiaomi and Realme registered shares of ~4% and ~2%, respectively.



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Local Industry | Distributors

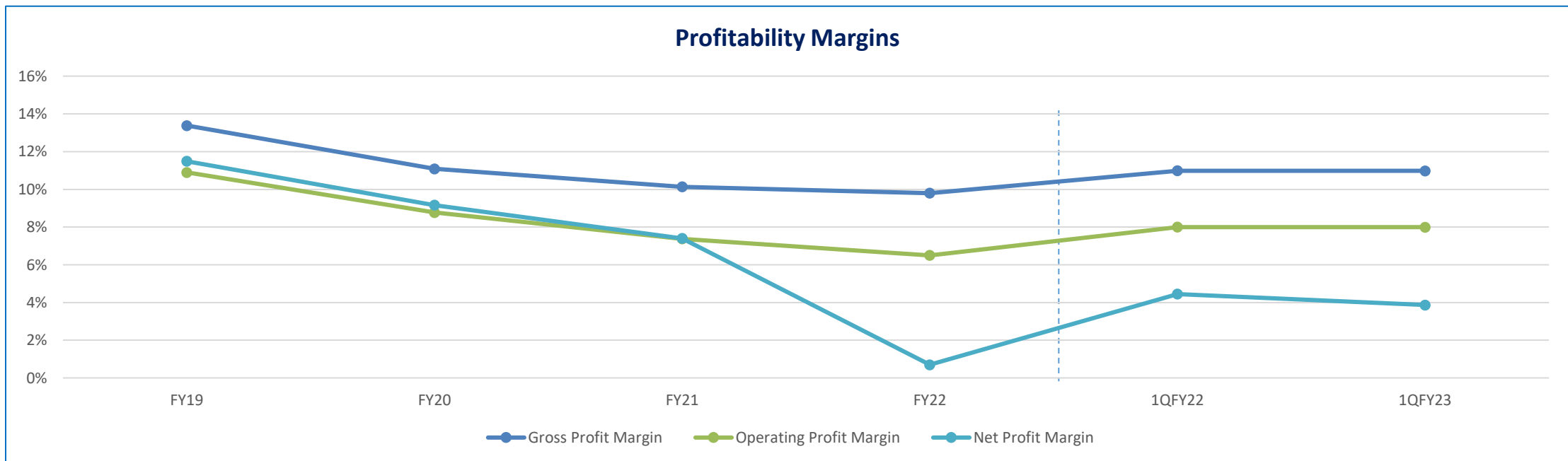
- At present, there are 4 major mobile distributors that are involved not only in distributing international brands but assembling and distributing local phones as well. There are 7 other small distributing partners that distribute some local and Chinese mobile phones.
- The local market carries a potential of 40 million handsets. The distributors generally have contractual relationships with international brands/ principles, which pre-set the terms and conditions, such as prices, margins, returns and discounts. The market is, therefore, free of price competition and largely dependent on long-standing relationship of international brands and dealers.
- Among the top 4 distributing partners, Airlink has the highest overall market share of around ~21% (in terms of units). The company is authorized distributor of Samsung, Huawei, TCL, Tecno, Itel, Xiaomi and has also entered into an agreement with the Apple Authorized Distributor for Pakistan (i.e. Mecantile Pacific Asia Pte. Ltd.) for distribution of products procured from MP in Pakistan. It has been associated with Huawei and Samsung, since 2012 and 2016, respectively. Realme is world’s no. 1 fastest growing smartphone brand for 5 consecutive orders.
- Some mobile manufacturing brands have their own distributing channels including Oppo, Vivo and QMobile.

Mobile Phone Distributors	
Distributors	Associated International Brands
Airlink Communications	Tecno (38.5%) Samsung (34.7%) Itel (11.3%) Xiami (9.3%) Apple (2.53%) TCL (0.14%) Huawei (0.04%)
Muller and Phipps M&P	PTCL EVO Samsung Huawei HTC & Microsoft
Burque Corporation	Samsung Tecno
Advance Telecom	Microsoft Mobile, Infinix

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Business Risk | Margins

- The distribution segment runs on consistent margins, owing to adjustment to pricing of products provided by various vendors. They are set by Principal/ Manufacturer/Regional Distributor.
- The sector’s margins have traced a continuous trajectory from FY19 to FY22 (with the exception of Net Profit Margin in FY22). Keeping in line with past trends, both gross profit and operating profit margins have declined slightly to ~9.8% and ~6.5% from ~10.1% and 7.4%, respectively. Gross Profit declined by ~70% YoY in FY22, mainly due to increased raw material costs of ~18.5% YoY. However, net profit margins declined to ~0.7% in FY22, compared with ~7.4% in FY21, owing to high finance costs.

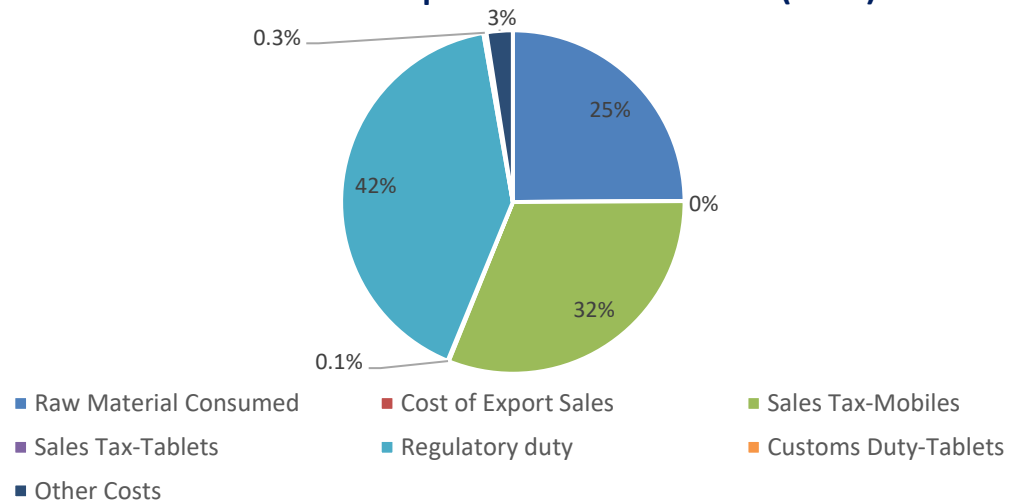


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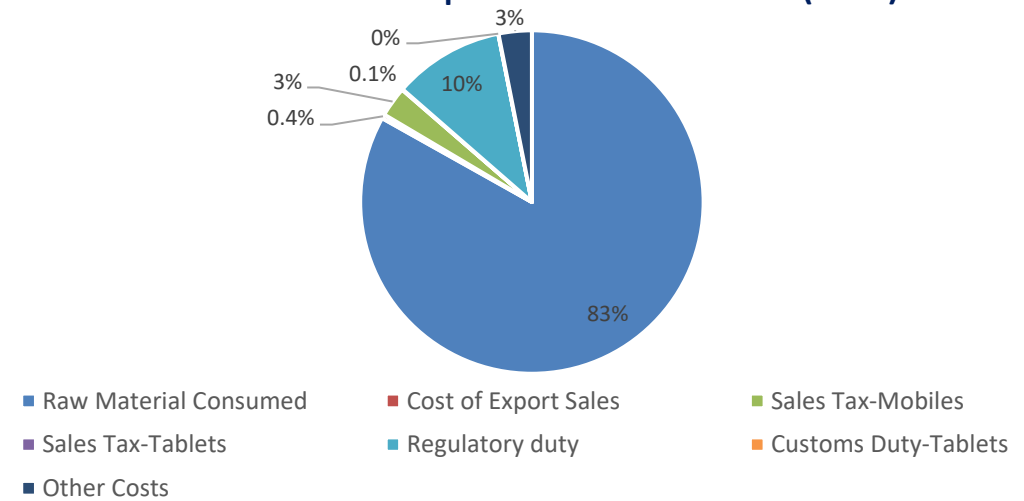
Business Risk | Cost Structure

- For the sector, there has been a significant shift in the cost structure in FY22. As per latest available financials, Sales Tax on Mobiles constituted a major chunk of total cost of manufactured goods in FY21 (~32%). However, in FY22, this share decreased to only 0.4%.
- Similarly, another difference of significance has been observed in the Regulatory Duty component, which formed only ~10% of the total cost of manufactured goods in FY22, compared to ~42% previously in FY21. Both these changes indicate government's tax policies introduced in order to encourage local manufacturing of mobile phones.
- Moreover, raw material consumed initially comprised ~25% of the total cost mix. However, in FY22, it made up for the largest chunk of ~83%, again signaling import substitution. Another interesting dynamic was observed in the case of export sales costs, which increased to 0.4% in FY22, reflecting the sector's export potential (cumulative revenue from exports sales in FY22 amounted to PKR~62mln).

Cost Breakdown | Manufactured Goods (FY21)



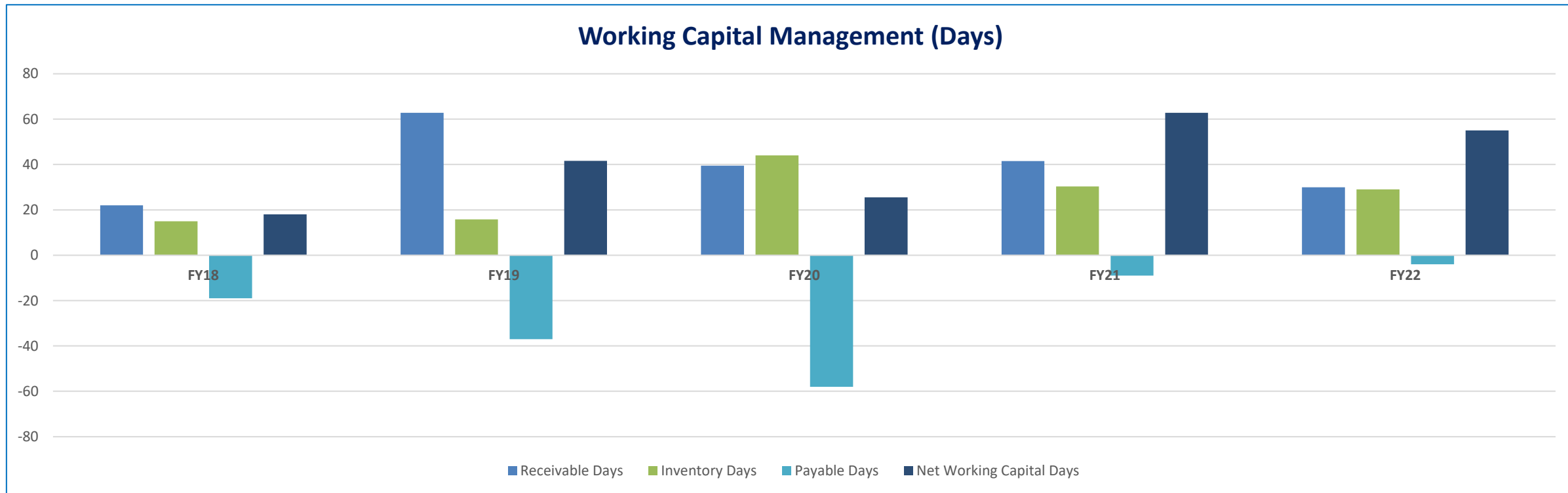
Cost Breakdown | Manufactured Goods (FY22)



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Financial Risk | Working Capital Management

- The industry’s working capital requirement is a function of financing its trade receivables and inventory.
- Average net working capital days of the company have decreased by ~8 days, from ~63 days to ~55 days when compared with last year. This was due to decline in average days of trade payables from ~9 days to ~8 days. Moreover, average receivable days have also improved, from ~40 days to ~30 days.



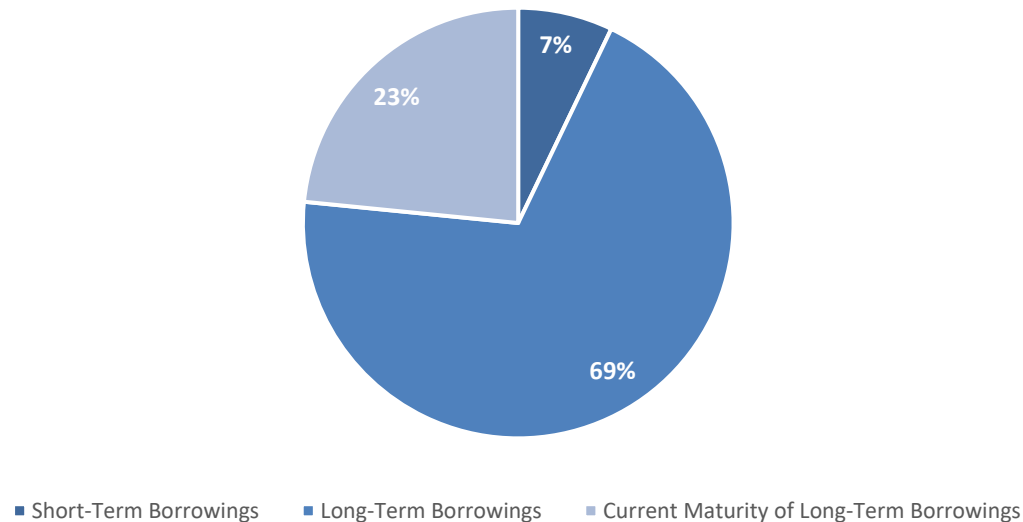
Note: Calculations on the basis of PACRA-rated client, having a market share of ~21% based on number of units, as claimed by the client.

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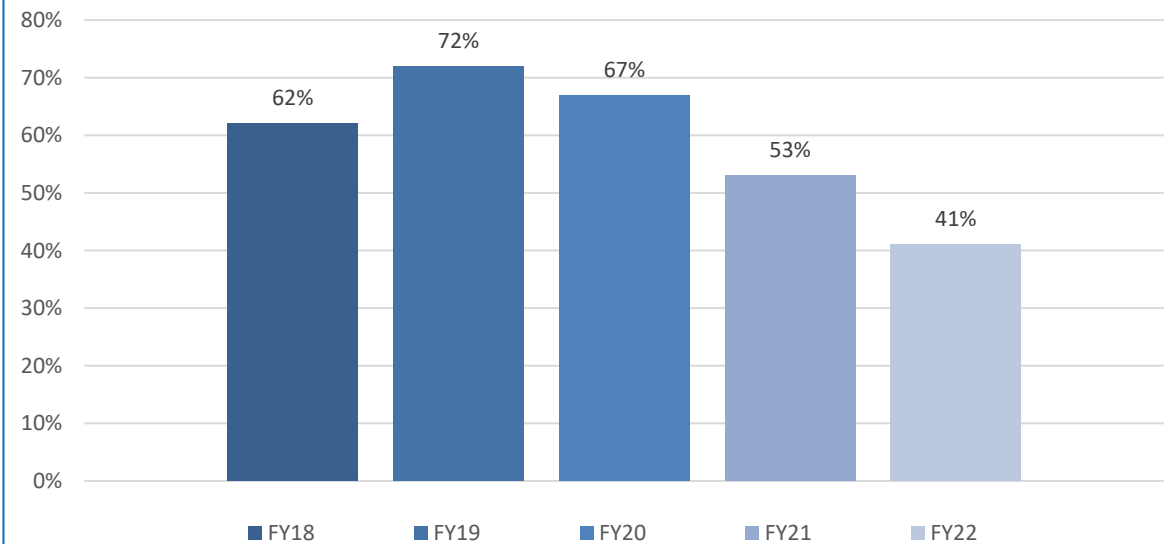
Financial Risk | Borrowings

- Total borrowings for the sector as of Sep'22 stood at PKR~2,641mln as compared to PKR~5,344mln, as of same period last year.
- The largest component of the debt mix are the short-term borrowings (STBs), amounting to ~70% of the total borrowing mix.
- Interest coverage of the sector has taken a freefall from ~4x in FY21 to ~2x in FY22. Although, there was a decrease in short-term borrowings, increase in overall policy rate resulted in higher finance costs in FY22 (increase of ~19%). In 1QFY23, however, interest cover was registered at ~3.5x, compared to ~3.8x in the same period last year, mainly due to lower revenues.
- The sector has improved its capital structure with average debt-to-equity ratio improving from ~53% in FY21 to ~40% in FY22. This was possible on the back of recent listing of one of the largest distributors of the country, resulting in growth in equity and rationalized debt burden.

Borrowings Mix | Sep'22



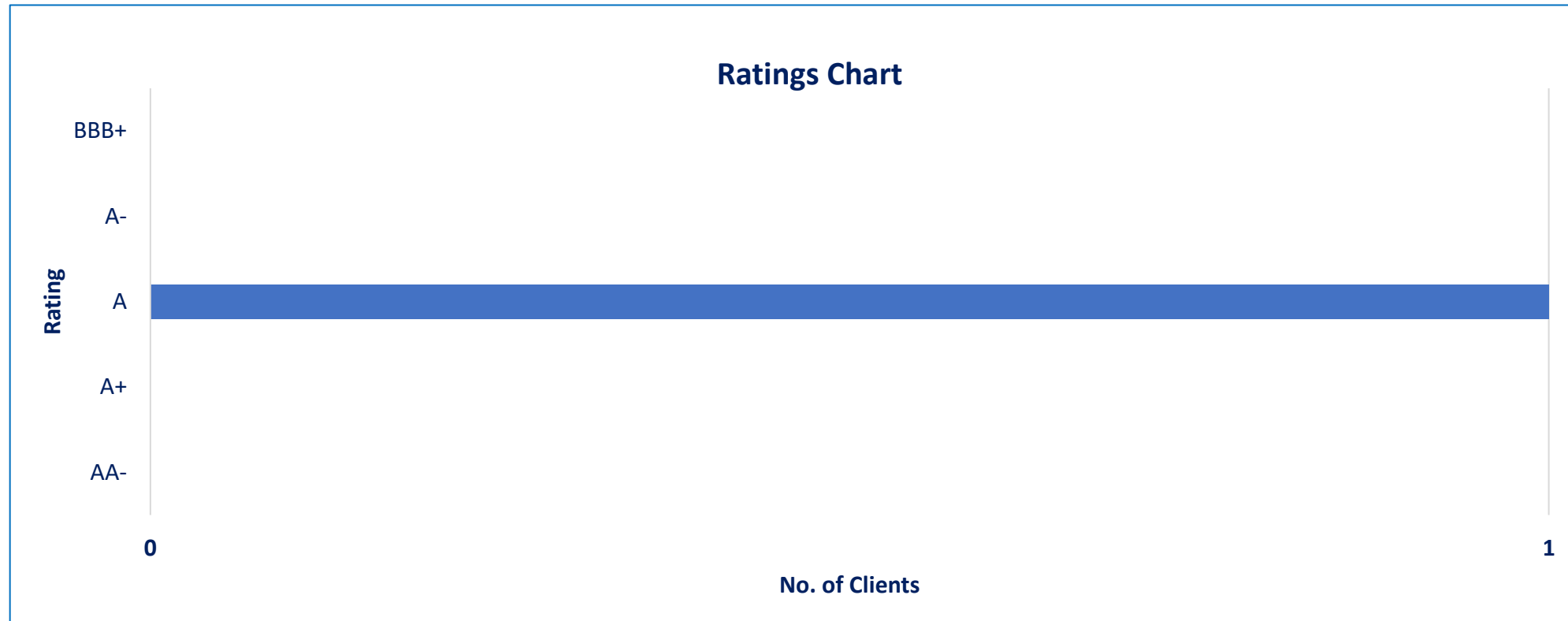
Leverage



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Rating Curve

- PACRA rates a single client in Mobile Phones and Allied Products sector, that is, Airlink Communication Limited.
- It has a long-term rating of A, and a short-term rating of A1.



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Duty and Tax Structure

Duty & Taxes Summary-Finance Act												Punjab Infrastructure Development CESS	
Sr.	CIF SLABS	Sales Tax		Regulatory Duty		Levy		Income Tax		Taxes Total		PRA	
		PKR		PKR		PKR		PKR		PKR		%	
		FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22	FY21	FY22
1.	Up to \$30	130	130	165	165	-	-	70	70	365	365	0.9	0.9
2.	\$31 - \$100	200	200	1,620	1,620	-	-	100	100	1,920	1,920	0.9	0.9
3.	\$101 - \$200	1,680	1,680	2,430	2,430	400	400	930	930	5,440	5,440	0.9	0.9
4.	\$201 - \$350	1,740	1,740	3,240	3,240	1,200	1,200	970	970	7,150	7,150	0.9	0.9
5.	\$351 - \$500	5,400	5,400	9,450	9,450	2,800	2,800	3,000	3,000	20,650	20,650	0.9	0.9
6.	Above \$500	9,270	9,270	16,650	16,650	5,600	5,600	5,200	5,200	36,720	36,720	0.9	0.9

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SWOT Analysis



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Outlook: Positive

- Pakistan's mobile phone industry has historically been majorly import driven, but after the issuance of Mobile Device Manufacturing Authorization regulatory regime, local manufacturing has paced up and surpassed imported units in FY22. DIRBS has contributed positively to the country's mobile ecosystem by eliminating counterfeit device market.
- The local smartphone market is competitive, dominated by established players such as Samsung, Oppo, Tecno, Apple, and Xiaomi, among others. Overall demand for mobile phones has now become less price-elastic. For the mid-range categories and below, where brand consciousness is low, mobile phone demand behavior is close to that of a commodity rather than that of a differentiated product.
- The sector is characterized with low to moderate business risk. As the sector operates on fixed margins, any change in margins is either associated with changes in the duty structure, or changes in other costs.
- Historically, the sector has had a high dependence on debt particularly due to the imposition of SBP's directive to maintain 100% margin for Line of Credit (LC). Most of the debt book is composed of short-term loans. However, the sector's leverage has recently come down to a moderate level (~40% in FY22), after listing of one of the largest distributors of the country.
- The Government's mobile manufacturing policy to attract mobile manufacturing players to establish their plants is a positive step towards the growth of the sector. This is the first step towards establishing a local competitive manufacturing market. Although localization levels are low, currently, the number of mobile phones that are partly local assembled has outgrown the number of completely imported units. This is also benefitting the economy in terms of job creation (for instance, a single assembling unit of one of the major sector players provides ~1,000 jobs to skilled and semi-skilled educated youth in the country). Going forward, the policy should stimulate progress on localization levels to ultimately develop a fully competitive local market creating opportunities for export as well.

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