

Banking Publication 2023

Navigating the Future of Opportunities and Challenges





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1. Foreword

We are delighted to release our "Banking Publication 2023: Navigating the Future of Opportunities and Challenges" - the first of its kind Thought Leadership Initiative in Pakistan, providing detailed trends, insights and analysis for 2022 and beyond.

This publication is an outcome of extensive research and analysis of industry's financial performance and 10 core themes impacting commercial banks: (1) Financial Inclusion (2) Digital Banking & Payments (3) Customer Experience (4) Islamic Banking (5) Enterprise Transformation (6) Risk Management (7) Anti-Financial Crime (8) Environment, Social & Governance, (9) Culture & Talent; and (10) Tax Regime.

Insights shared reflect wide range of opportunities and associated enablers; notably priority sector intervention, inclusive financial services, next-gen lifestyle banking, ecosystem collaborations, alternative lending, digital adoption, cash-less engagement, invisible banking, embedded finance, institutional agility and cost optimisation.

Besides these opportunities, many critical challenges that banks are facing have also been analysed including cash dominance, access to credible data, portfolio quality, integrated risk management, capacity building, compliance sustainability, ESG readiness, talent alignment, and Islamic banking conversion.

This document leverages valuable perspectives of various industry leaders and senior professionals, who we interacted with for the purpose of this publication. Their views reinforce the diversity and scale of opportunities, as well as intensity of challenges identified. Our insights are further complemented by findings from different PwC global and local publications, surveys and experiences across relevant themes.

Along side this publication, we are sharing another comprehensive compendium on Banking & Economic Analytics that provides financial analysis and select industry trends, with few economic highlights, to aid readers relate better to key messages.

We hope this document provides useful perspectives and a platform for you to initiate discussions on strategic forums.



Salman Hussain
Territory Senior Partner



Syed Faraz AnwerPartner, Consulting



We would like to thank all industry leaders and senior professionals who have contributed immensely to our strategic knowledge sharing endeavour:



Syed Salim Raza
Former Governor
State Bank of Pakistan



Muhammad Aurangzeb
President & CEO
Habib Bank Limited



Irfan Siddiqui President & CEO Meezan Bank Limited



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2. Executive Summary



Executive Summary

Financial Performance

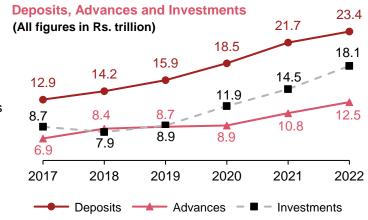


2022 proved to be a year of growth for the banking industry, as reflected by most of the indicators detailed in section 3.

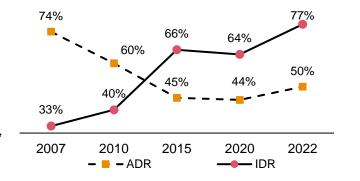
Balance sheet growth

Deposits showed modest increase of 8% to reach Rs. 23.4 trillion and advances grew by 16% to cross Rs. 12 trillion. Significant expansion of 25% was noted in investments touching Rs. 18 trillion with a rising trajectory, while borrowings increased exponentially by 63% to reach Rs. 7.5 trillion.

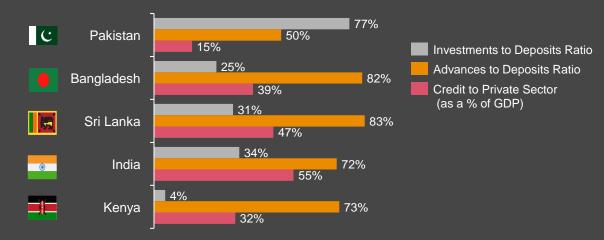
Pakistan's Advances to Deposits Ratio (ADR) has been gradually contracting and stands at 50% as of Dec-22, with lending to private sector at 15% of GDP as of Dec-20. Investments to Deposits Ratio (IDR), on the other hand, has elevated from 33% in 2007 to 77% in 2022. These key benchmarks, relative to certain other economies. indicate enormous potential for credit penetration in the country.



Advances to Deposits and Investments to Deposits



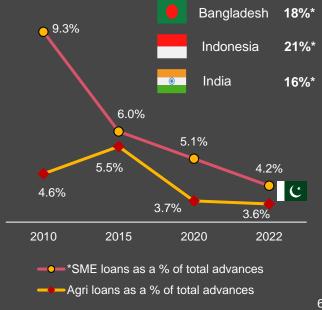
Pakistan vis-a-vis certain other economies



Contribution to priority segments of SME and Agri was less than 8% of total loans with declining trends, and almost same ~70% concentration in corporates over the last 5 years. In this regard, one of the key areas to address is the sub-optimal level of cashflow based financing, indicated by unsecured lending at only 2% of total loans.

To materially scale development finance, our credit bureau infrastructure may need to be infused with credit and alternate data, contributed by a host of market participants beyond banks. Ideally, this can be achieved by a national level big data initiative, along the lines of few successful regional experiences (details on page 77).

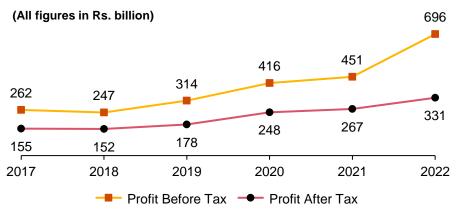
Loans to priority sectors as a % of total advances



Rising profits and operating costs

There was a sharp rise in profitability on the back of higher margins/ spreads and non-funded income from different avenues. However, higher tax charges triggered disproportionate moderation in baseline profitability.

Profitability



Operating expenses registered an increase of 25% compared to relatively lower variations during the last few years. Considering current inflationary pressures and Rupee devaluation, these costs may continue to surge in the foreseeable future. Institutions may therefore target programme driven efficiencies under digital excellence, process reengineering and cost optimisation initiatives.

Operating expenses (All figures in Rs. billion) 481 508 552 691 2019 2020 2021 2022

Financial Inclusion

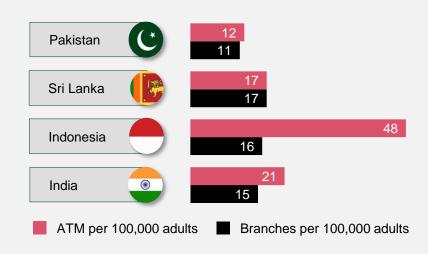


Section 4 highlights substantial space in Pakistan compared to certain regional peers and emerging economies where financial inclusion is well above 50%.

Although rate of women inclusion reached double digits from 7% in 2017 to 13% in 2021, relative state vis-à-vis certain regional economies represents vast untapped potential. Rural inclusion of 15% is also below other jurisdictions.

Pakistan vis-à-vis **Financial** Women Rural other economies inclusion inclusion inclusion 15% Pakistan 21% 13% 53% 49% Bangladesh 43% 52% 46% Indonesia 52% 78% 78% 78% India

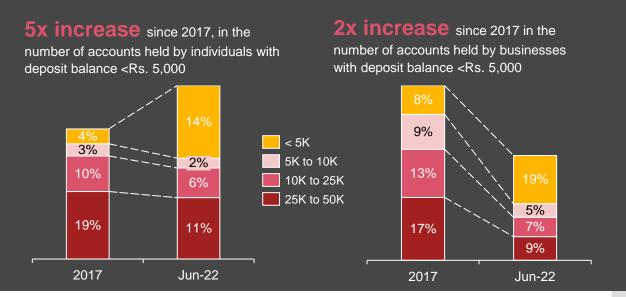
ATM and branches per 100,000 adults

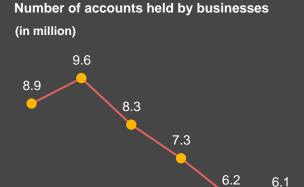


While physical distribution network has expanded over time, there may still be some room for penetration, more across rural and underserved areas. This may help further align 'branch and ATM to adults' benchmarks with those in few regional peers.

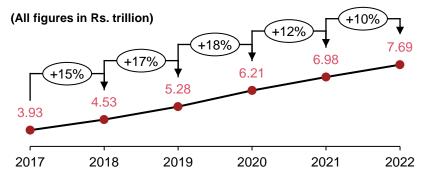
In relation to banked population, there has been gradual increase in low value accounts since 2017, relative to the total number of accounts.

Recent trends also indicate 31% decline in the number of accounts held by businesses i.e. from 8.9 million in 2017 down to 6.1 million in 2022.



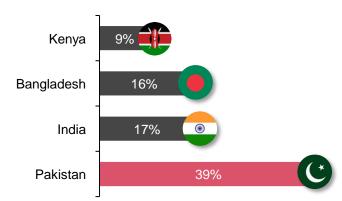


Cash in Circulation



Cash in circulation stands at Rs. 7.69 trillion, a huge 96% increase from Rs. 3.93 trillion in 2017, now approximating 1/3rd of total deposits held at banks. This increase in cash exceeds 84% growth rate in total deposits over the same 5-year period.

Cash-in-circulation ratio continues to remain higher in Pakistan at 39%



Financial inclusion may remain a persistent challenge, particularly due to inherent country dynamics and recent inflationary wave, creating further financial burdens and reducing the already low propensity to save.

2019

2020

2021

Jun-22

2018

2017

Relentless collaborative efforts by regulators and industry stakeholders may augment overall capacity to deliver affordable, digital and customer centric financial products to the unbanked and underserved.

Digital Banking & Payments

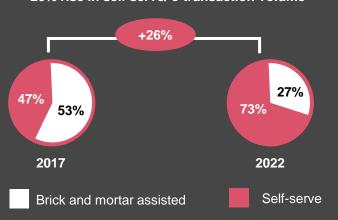


Evolving customer behaviours, changing competition landscape with new Digital Financial Services (DFS) players, regulator's push for innovation and industry embracing the change are few developments likely to stimulate a promising digital future in the medium-long term. Section 5 elucidates these trends as well as underlying opportunities and challenges, together with global learnings from few emerging/ developed economies.

Transitioning from bricks to clicks

Banking industry has experienced digital proliferation with 26% decline in the share of brick and mortar assisted transactions since 2017. Particularly, mobile banking has picked up markedly with its contribution in total e-transaction volume surging from 3% in 2017 to 31% in 2022.

26% rise in self serve/ e-transaction volume

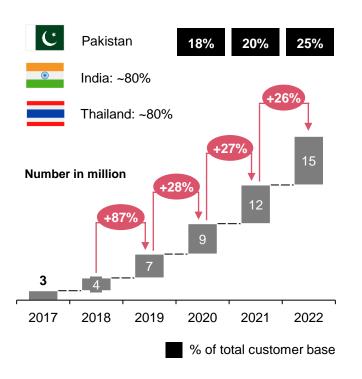


Mobile banking penetration

Although mobile banking adoption has been scaling, there is sizeable room for uptake considering that 25% of individual account holders have registered for this option, lesser than certain emerging economies where this ratio is around 80%.

Mobile banking adoption in Pakistan vis-àvis few other countries

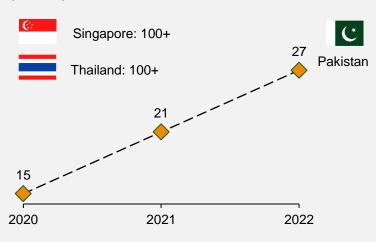
As % of total customer base



Accelerating mobile and internet banking engagement

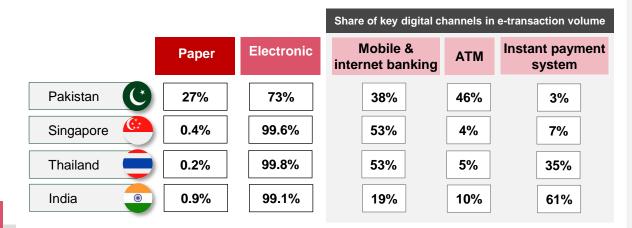
There is also space for higher engagement through mobile and internet banking platforms where transactions (per annum) per registered user approximates 27 (2 per month), being lower than certain other countries.

Mobile/ internet banking transactions per user (annual)



Potential for cash displacement and P2M digitisation

Considerable opportunity for cash displacement and digital disruption exists considering 27% paper-based transactions and 46% ATM composition in total number of e-transactions, relative to negligible relative mix in regional economies.



While industry stakeholders may need to collaboratively promote a behavioural shift by pursuing structured loyalty/ digital engagement programmes, broader government and regulatory support is inevitable in creating a wider eco-system that incentivises digital and disincentives cash through aligned tax measures or other initiatives.

Industry stakeholders believe that incentivisation/ reward model is needed at 3 levels: (1) Customers: to move away from cash, (2) Merchants: to prefer digital and (3) Banks: to invest in acceptance technologies.

With diversion of P2M cash transactions to digital being a key objective, POS deployment grew by 18%. There is still a large untapped space for penetration and need for greater POS engagement.

	No. of POS (in '000)	Accounts per POS	Card use on POS
Pakistan C	109	552	18%
Indonesia	1,762	130	90%
Thailand	915	124	35%
India	4,720	535	49%

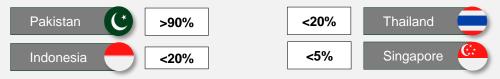
As of Dec-22, there were 26 million RAAST ID registrations, with 41 million transactions crossing Rs. 892 billion. RAAST transaction mix stands at 3% of total transaction volume, with enormous prospect indicated by intervention levels in other economies.

Introduction of RAAST for P2M payments may well be a game changer with possibility to offer cost concessions to customers.

Cash preference with implications for a vibrant e-commerce market

Digital payments for online purchases remains negligible given dominant preference for cash, and certain structural and logistical challenges associated with e-commerce in Pakistan.

Cash on Delivery - Pakistan vis-à-vis certain other jurisdictions



Digital lending – a potent enabler for expanding credit access innovatively Secured lending vs unsecured lending

There may be vast potential to lend digitally through model-based credit decisioning, harnessing diversified set of credit/alternate data.

The level of unsecured lending stands at 2% of industry's total credit portfolio, which indicates massive scope for cash-flow based lending including digital credits.

99% 98% 1% 2% Jun 18 Jun 22 Secured lending Unsecured lending

Few global developments and evolving trends

To remain competitive, banks globally are focusing on mobile-first; end-to-end friction-less journeys and hyper-personalised experiences, through an eco-system of third parties, leveraging customer data to offer smart propositions tailored around lifestyle needs.

Ambitions to super-apps is particularly trending in Asia, where certain banks intend to plan transitioning from a financial app into an every-day use super-app. Only when well-strategised, these banks may gain from higher rates of customer acquisition, satisfaction, retention and brand loyalty.

Global institutions are also increasingly adopting the growing trend of invisible banking. Examples of embedded finance continue to grow, from no click payments on ride hailing apps to point-of-sales loans from BNPL providers built into mobile shopping apps.

Meanwhile in Pakistan...

Industry stakeholders may be operating at varying levels of maturity, warranting a view on state of readiness and consequent digital transformation journeys that enable harnessing the true potential of digital. Depending on their relative positioning, banks may pursue following initiatives:



Design data-driven digital banking and payments strategies that create an attractive proposition to acquire and retain the digitally native generation



Revisit digital banking and payments strategies around customer segments, products, services and value propositions; aligned with consumer digital engagement levels, behaviours and expectations



Diversify solution suite, **move into adjacent financial products** notably, savings, investments and consumer loans



Introduce app features and value-added services around customer convenience e.g. voice commands, embedding payments into messengers, new digital payment use cases



Become the central contact for daily banking, building the B2B ecosystem - from deals to loyalties, ride hailing, food deliveries – and joint offering with non-traditional players



Provide one window solutions addressing e2e financial needs of MSMEs – deposits, collections, e-invoicing, payments, employee banking, financing, etc.



Focus on increasing app user base through brand rejuvenation, continuous improvement in UI/ UX and targeted campaigns



Actively pursue digital lending propositions backed by automated credit decisioning



Effectively integrate into the e-commerce space and consider embedded financing options

To effectively deliver on disruptive digital strategies, reality is that the entire organisation has to undergo deeper digital transformation. This, in itself, is an uphill journey extending beyond technology and process digitisation to people, culture and mindset change, poised to adopt new business and operating models.

As the world turns towards eco-system banking, our institutions may need to further explore collaborative business models and the associated possibility of alternate revenue lines. This is critical as we move into an era of banking where net margins from payments business may shrink over time.

On the regulatory front, there may be certain gamechanging initiatives at various stages from conceptualisation to launch, including blockchainenabled shared KYC platform and strengthening the Agency Banking framework. Open Banking and Central Bank Digital Currencies (CBDC) are also on SBP's agenda. Once implemented, these initiatives are expected to contribute significantly to the maturity of digital eco-system in Pakistan.

Customer experience



While banks globally have been investing substantially in customer experience (CX), an ever-increasing risk of customer churn persists, amidst intense competition for market share.

Certain incumbents internationally, as may also be the case locally, continue to pursue multi-channel engagement strategies that target general audiences, leading to broken or incomplete journeys that may reflect poorly on the brand.

Precisely for this reason, banks in Pakistan may need to go beyond interpreting obvious behaviors to deeply connect with the customer as a whole person. In general, they may be facing certain structural challenges along the customer lifecycle to:

- provide seamless on-boarding experience
- understand cognitive, emotional and behavioral nuances that influence customer led journeys
- deliver hyper-personalised solutions through the right channel at the right price
- capitalise on cross-sell and up-sell opportunities

Insights from PwC Pakistan Digital Banking Experience Survey - Banking in the Digital Age (% of respondents)

Factors enticing switch from the primary bank



57% Customer care



39% Value added product features



35% Security



Attractive mobile banking propositions



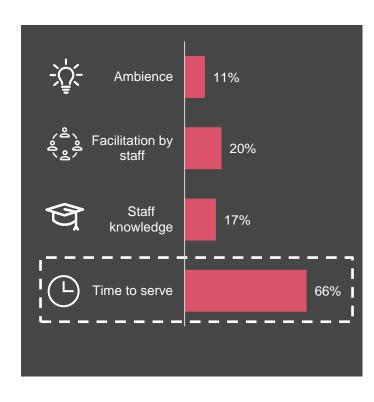
% Rewards



5% Service agility

As emphasised in section 6, consistent delivery on brand promise requires revisits and refinements to CX strategies, organisation and governance models on an ongoing basis. This does not only imply the incorporation of technology into core capabilities but also entails deeper CX led transformation across the entity.

Concerns during branch visits



As part of the programme, banks may wish to deploy customer-centric; mobile-first strategies for acquisition, leverage design thinking, enrich UI/ UX and establish strong governance around customer conversion and satisfaction.

Enterprise Transformation



To stay competitive, banks may need to convert constant disruption into more efficient, agile operations by pursuing sustainable transformation agendas across the following key themes, detailed in section 8:

- 1 Digital transformation
- 2 Tech modernisation
- 3 Cost optimisation
- 4 Emerging tech adoption
- 5 Branch re-modelling

For such transformations to be successful, banks may need to (1) take a medium-long term view, (2) execute the journey in a phased manner, (3) prioritise impact areas based on criticality and opportunity size and (4) have full sponsorship of the Board and senior management.

Risk Management



In these times of economic volatilities and fast paced digital evolution, there may be a need to support business agility by providing proactive and optimum risk value, driven from initiatives presented in section 9.

Credit risk dimensions

On the credit risk front, dynamics have changed manifold due to sharp and sudden shifts in Pakistan's economic outlook in 2022 which may alter portfolio quality going forward. Banks may consider upskilling credit risk functions to better manage varying risk profiles.

In 2023, we may also see some contraction in credit demand. In the wake of a cautious economic and credit outlook, banks may consider reassessing (1) risk strategies and appetite, (2) customer segments and products, (3) risk acceptance criteria, (4) rating models/ scorecards, (5) portfolio management capacity and (6) related tools and technologies, to optimise lending books.

While large scope exists for SME and agri penetration, a major challenge cited is availability of data. For this, there may be need to augment national data infrastructure and eco-system by establishing/ enhancing various records/ registries including credit, land, collateral etc. and expanding credit/ alternative data contribution by non-banks. In the short-medium term, banks may consider collaboration with fintechs and agritechs, etc.

ERM and GRC convergence

It is also an apt time to invest in ERM, with focus on non-traditional/ emerging risk categories and convergence with Governance, Risk and Compliance (GRC), to address general disparity in management of operational, compliance, and financial risks. Considering existing challenges and in the light of PwC Global Risk Survey 2022, banks in Pakistan may pursue holistic risk transformation that cuts across organisation, people, process and technology to deploy a futuristic, data driven approach, enabling enterprise-level dynamic view of risks.

Insights from PwC Global Risk Survey 2022



are planning to increase integrated spend across data analytics (75%), process automation (74%) and technology to support the detection and monitoring of risks (72%)

38%

report that their risk functions have to actively seek external insights to assess and monitor risks

54%

complement risk technology investments with people and process changes

Risk modelling

Globally, banks are validating and recalibrating their risk models given changing dynamics. International regulators and bodies are also emphasising on constant updates of risk rating solutions.

With profound changes in Pakistan's credit risk landscape and outlook, banks may consider validation and recalibration of existing risk models, besides constructing quantitative tools for other customer segments/ products. Focus may initially be on SME, agri and consumer segments which are more likely to be impacted by current economic conditions.

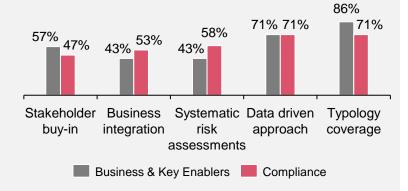
Anti-Financial Crime



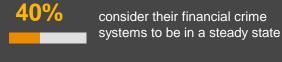
With fast-paced shifts in financial crime risk landscape amidst domestic economic vulnerabilities and geo-political instability, we may see increasing threats of varying financial crime risks. This calls for a dynamic and robust path to further progress on the maturity ladder, which will also help in ensuring that the country remains sustainably compliant with FATF requirements.

One of the critical areas covered in section 10 is Regtech, where well-deployed technology can reduce overall cost of compliance by as much as 30% - 50%. Structured tech optimisation reviews/ validation and resultant remediation, aided by data driven models, may up the game for banks in their anti-financial crime readiness.

Another enhancement opportunity may exist in relation to enterprise-level financial crime risk assessment programmes. Findings from PwC Pakistan 2nd Financial Crime Survey reveal that 50% of respondents consider the level of maturity of risk assessments as "Needs Improvements", with significant areas reported as under:



Insights from PwC Pakistan 2nd Financial Crime Survey (% of respondents)





find space for improvement with respect to holistic coverage of financial crime risks



shared feedback that their financial crime technologies have not been validated in the last 2 years



institutions where such validations were conducted, this was done internally by Compliance function itself

Environment, Social & Governance



Banks are expected to play a key role in purpose-driven ESG by using their influence as industry actors and may need to align their business models to accommodate:



Current and future regulatory changes



ESG strategy and reporting



Their product strategy and future growth

SBP envisions that banks will fully implement Environmental and Social Risk Management (ESRM) manual (issued in 2022) by 2025 while SECP also launched its own ESG roadmap in 2022. These developments may act as key levers in shaping how capital flows are channelised and investment portfolios analysed in the near future.

Banks may have to move swiftly to adapt to these developments and meet rapidly evolving needs of stakeholders. Within the possible ESG response options, banks in Pakistan may opt for a "Strategist" posture that:



fully integrates sustainability into business model



considers ESG part of the institution's purpose



sets ambitious sustainability targets with responsibility at Board level

ESG led transformation journey has to be comprehensive and holistic, covering every aspect of business including (1) strategy, (2) governance, (3) product design, (4) policies and processes, (5) information systems, (6) data and reporting, (7) people and culture. Section 11 emphasises that banks embark on this transformation journey early to reap full benefits.

Islamic Banking



Over the years, Islamic Banking Industry (IBI) has shown phenomenal growth, with 20% share in total assets, 25% in advances and 22% in deposits of the overall banking industry as of Dec-22. Today, IBI network comprises 22 Islamic banking institutions, i.e. 5 full-fledged Islamic banks and 17 conventional banks (~80% of total), having Islamic banking branches.

There is considerable potential as acknowledged by many researches including one undertaken by SBP and Department for International Development, UK. This suggests robust demand from diversified customer clusters, with following example insights:



As per decision of Federal Shariat Court, all conventional banks are to be converted to Islamic mode by Dec-27. Following are key areas, explained in section 7, where banks may face challenges that can be addressed through holistic Islamic transformation and conversion programmes.



Culture & Talent





Culture has risen sharply up the leadership agenda in recent years. Of the C-suite and board members who participated in PwC Global Culture Survey 2021, 66% were of the view that culture is more important to performance than the institution's strategy or operating model.



²⁰¹³ **53%**







As highlighted in section 12, banks in Pakistan not only face talent scarcity; particularly in the areas of technology, digital, data sciences, financial engineering, Islamic banking, risk management, financial crime compliance etc. but also grapple with the need to recruit, retain and upskill their workforce on a continuous basis.

Top 10 HR challenges as per PwC HR Tech Survey 2022 (% of respondents)

39% Recruiting/hiring

27% Retention of key talent

22% Benefits

28%

Learning and development/ employee upskilling

22% Remote or hybrid work



A medium-long-term but critical response strategy would be to collaborate with the academia to design and deliver targeted up-skilling programmes for the youth. Another important initiative that may be considered is establishing indigenous Centres of Excellence for trainings in requisite disciplines.



Diversity, equality and inclusion are key elements for improving working environment, driving innovation and enhancing business performance.



Designing experiences for employees including cultural adaptability for the next-gen workforce may be at the heart of transformation to ensure employee productivity, commitment and engagement.

PwC | Banking Publication 2023 - Navigating the Future of Opportunities and Challenges

2022 proved to be a turbulent year for Pakistan with acute slowdown on the economic front. In Part B "Economic Analytics" of the compendium to this publication, we have shared trends on few key variables, which may be indicating long-standing structural imbalances and the enormity of challenges at hand.

Our difficult economic conditions are at a time when the world is also encountering different levels of shocks, making the road to recovery even more daunting.

Experts we interacted with for the purpose of this publication are of the view that there have been historically persistent foreign exchange reserve imbalances, with past reliance on foreign aids/ grants and loans. Increasing import and consumption orientation has led to severe impacts on domestic economic value add.

They also feel that on the export front, while there may have been some progress at different times, lack of consistent intervention might not have produced desired level of sustainable outputs.

In their opinion, short-term measures may only serve as stop gap arrangements and a long-term revival plan is absolutely critical focusing on (a) optimising foreign exchange inflows through exports, investments and remittances (b) rationalising outflows primarily through a viable import substitution framework and roadmap; and (c) substantially managing flows by dissuading consumption of non-essential items.

Amidst a murky economic outlook, we appreciate the criticality of banks playing a pivotal role in economic rehabilitation, and the need for lasting support in these vulnerable times.



3
Industry's financial performance



Industry's financial performance

A Snapshot of Key Performance Indicators:

2022 proved to be a year of sustainability for the banking sector, as signified by majority of the benchmarks.

Balance Sheet Indicators

All figures in Rs. trillion

Indicator	2022	2021	% change
Total assets	35.3	29.8	18%
Advances	12.5	10.8	16%
Investments	18.1	14.5	25%
Deposits	23.4	21.7	8%
Borrowings	7.5	4.6	63%
Total liabilities	33.3	27.9	19%
Non-performing loans	0.88	0.81	9%

Sources: PwC proprietary insights and analysis, SBP

Profit & Loss Indicators

All figures in Rs. billion

Indicator	2022	2021	% change
Profit before tax	696	451	54%
Profit after tax	331	267	24%
Net interest income	1,162	826	41%
Non-funded income	289	231	25%
Operating expenses	691	552	25%

Key Ratios

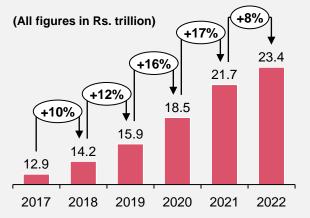
Ratio	2022	2021
Capital adequacy	16.8%	16.4%
Advances to deposits	50.1%	46.3%
Investments to deposits	77.3%	66.8%
Non-performing loans to advances	7.1%	7.5%
Return on equity (before tax)	36.2%	24.8%
Return on assets (before tax)	3.7%	2.9%

Banking industry registered positive growth for most of the indicators, exhibiting continued financial stability. In this section, we analyse certain key areas of sector's financial performance, related trends, opportunities and challenges. These are complemented by Part A "Banking Analytics" within a comprehensive compendium to this publication.

1. Deposits

Growth trends

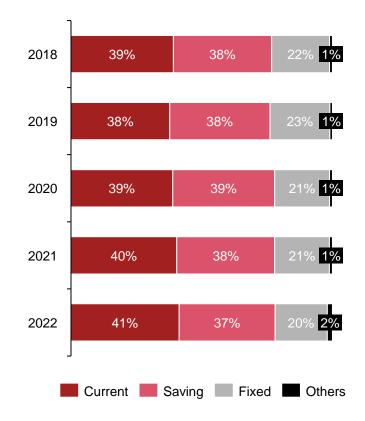
Deposits recorded steady accretion over the last 5 years as evidenced below. However, there was a modest rise of 8% in 2022 (2021: 22%).



Sources: PwC proprietary insights and analysis, SBP

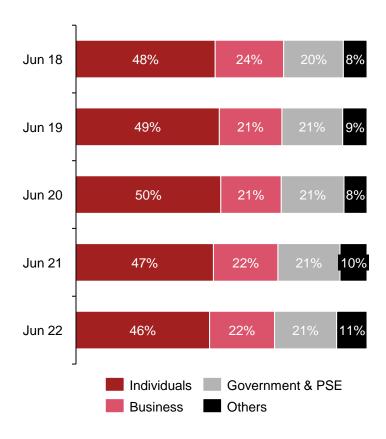
Current and CASA mix

Customer deposit mix remained broadly consistent over the years with current accounts contributing 41% and CASA 78% in 2022.



Customer segment mix

Customer segment mix showed minor variations over the years with individual deposits at 46%, business, government and PSE deposits cumulatively at 43% as of Jun-22.

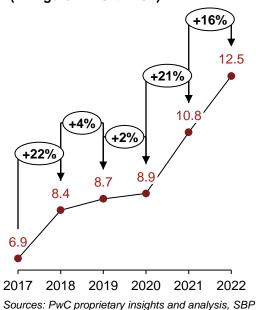


2. Advances

Growth trends

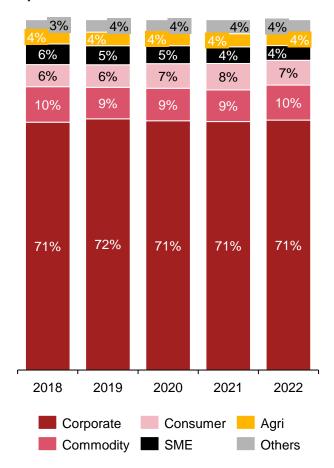
Advances exhibited YoY growth of 16% (Dec-21: 21%) with trajectory over the years and % change from last year depicted below:

(All figure in Rs. trillion)



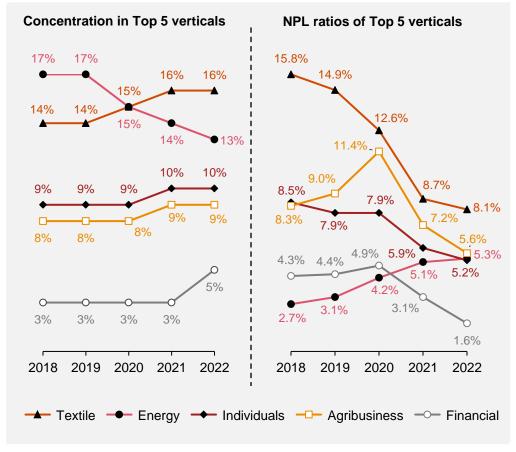
Customer segment mix

Around 70% of loans are to corporates with almost similar segment mix witnessed over the last 5 years.



Top industries/ verticals and concentration

Textile, production and transmission of energy, individuals, agri-business and financial services are the top industries/ verticals comprising more than 50% of credit portfolio, with following concentration and NPL ratios over the last 5 years:



Priority sector penetration – long term trajectory

Contribution in priority segments of SME and Agri was less than 8% of total loans, with SME at 4.2% and Agri 3.6%. These penetration levels have been declining over the last several years.

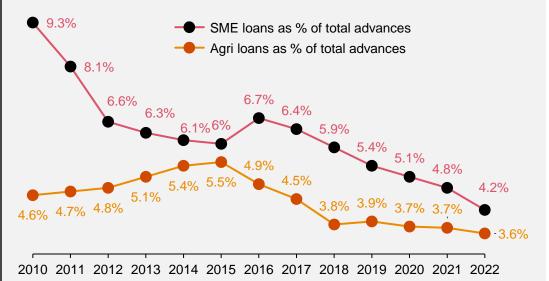
"

With Pakistan's private sector credit to GDP ratio of 15% (as of Dec-20) and ADR at 50% (as of Dec-22), its positioning relative to certain emerging economies reflects large untapped potential to scale development finance."

Mr. Salim Raza, Former Governor State Bank of Pakistan

Loans to priority sectors as % of total advances

Sources: PwC proprietary insights and analysis, SBP

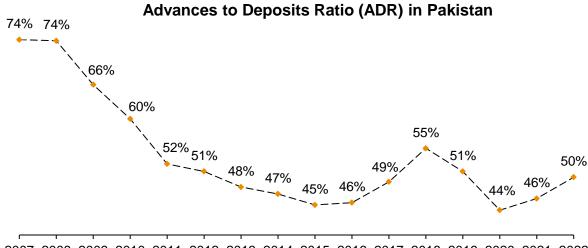


We also analysed SME credit intervention in Pakistan vis-à-vis in certain regional economies, signifying a sizeable opportunity:

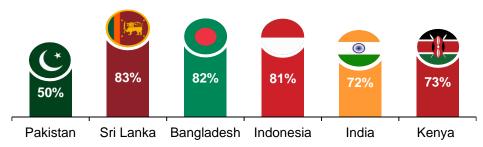
21%

Pakistan Indonesia Thailand India Bangladesh Vietnam

Multiple reasons are cited for gradual contraction since 2007 in (1) ADR from 74% to 50%, as depicted below, (2) SME loans as a % of total loans from 9.3% to 4.2%, (3) agri loans as a % of total loans from 4.8% to 3.6%. These include NPL experience over time (please see graph on the next page), limited credit appetite/ capabilities and lack of access to credible data.

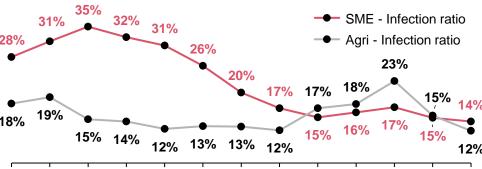


ADR in Pakistan vis-à-vis certain other economies



Sources: PwC proprietary insights and analysis, SBP, central banks

NPL ratio of priority sectors



2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 Sources: PwC proprietary insights and analysis, SBP

We see some examples in the industry where SME and agri segments are well-served through niche business, risk, people and technology models, which recently also include collaborations with fintechs/ agritechs.

In the present vulnerable times, while there may be heightened credit risks, banks may consider improvising their credit appetite and readiness to lend to such segments and work on real capacity augmentation for effective penetration.

For scalable impacts, some major enablement support is required to create the right eco-system in relation to SME and agri lending.



In Brazil, China, India, Turkey and other major emerging jurisdictions, development finance is also fueled by public sector development banks. For example, in India there is a separate institution for SMEs and another one for agriculture. Our development banks are very small with next to zero contribution.

To rejuvenate priority segments, we need to have a fully functional Planning Commission and a priority-sector led industrial policy with clear objectives for next 3-5 years, vitalisation of special enterprise zones and specialised banks to deal with SME and Agri."

Mr. Salim Raza, Former Governor State Bank of Pakistan

Another key imperative is to support data enabled credits/ digital credits. For this, national level collaborative effort has to be put in place for big data/ registry, with the intervention of Government, regulators, banking and all industry stakeholders who can enable/ contribute alternate data for optimum credit bureau infrastructure. For details, please refer to section 9 on risk management (page 76).

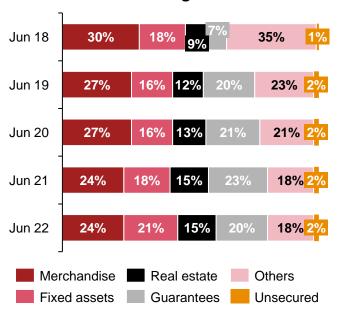
Potential to add in productive capital through sustainable lending strategies...

Minimal level of cashflow based financing is indicated by unsecured lending at 2% of total loans, with different types of physical and other collaterals preferred for large majority of portfolio (as reflected on next page). Credit risk tools need to be significantly upgraded to support cashflow credits, incorporating alternate data.

Sources: PwC proprietary insights and analysis, SBP

Secured lending vs unsecured lending 99% 98% 98% 98% 98% 1% 2% 2% 2% 2% Jun 18 Jun 19 Jun 20 Jun 21 Jun 22 Secured lending Unsecured lending

Collateral-wise lending as a % of total loans

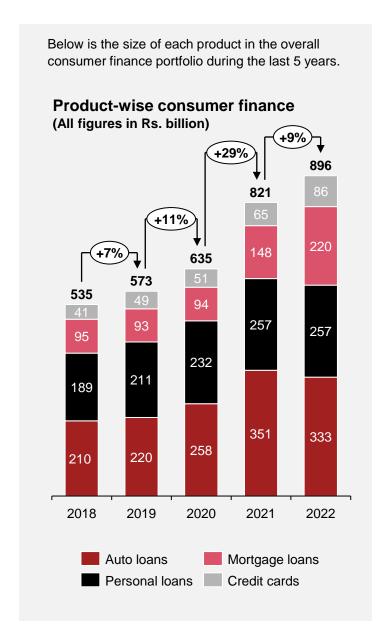


Consumer finance

Consumer finance posted a modest growth of 9%, with concentration at 7.1% of total advances (7.5% in 2021).

During the year, we have seen significant traction in mortgage finance increasing by approx. 50%. Further, there was a 32% increment in credit cards portfolio, whereas auto loans contracted by 5%.

Sources: PwC proprietary insights and analysis, SBP



Commodity finance

Commodity finance portfolio grew by 27% with component wise break-down as under:

Commodity	2022	2021	Changa
Commodity	Rs. in t	Change	
Wheat	955	804	19%
Sugar	113	95	19%
Cotton	59	44	34%
Rice	31	27	15%
Others	103	21	490%

Corporate loans

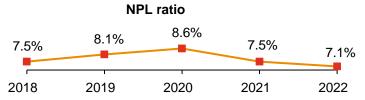
As mentioned earlier, corporate loans constitute ~70% of total advances, with following financing type mix:

	2022	2021	
Financing Type	Concentration in percentage		
Fixed investment	43%	45%	
Working capital	37%	34%	
Trade finance	20%	21%	

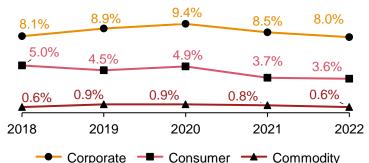
It appears that banks are managing exposures in fixed investment that has higher NPL ratio of 9.2%, while trade finance curtailed possibly due to import restrictions imposed in later 2022. There is a funding shift towards working capital that has relatively lower NPL of 7.4% (significantly improved from 9.5% in Dec-21).

Non-performing loans

On an overall basis, NPLs declined from 7.5% in Dec-21 to 7.1% in Dec-22.



Following provides a segment wise break-down of NPLs (in addition to SME and agri ratios indicated earlier):



o corporate – consumer – commot

Sources: PwC proprietary insights and analysis, SBP

The prevailing economic situation in the country suggests that while banks may be inclined towards lending and expanding their balance sheets, an initiative incentivised by support from SBP, they may be confronted with the challenge of NPLs over the next couple of years."

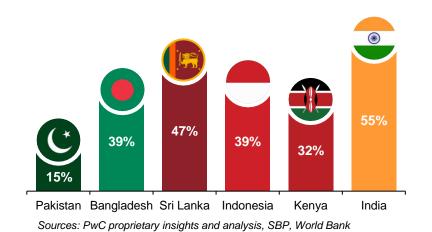
Mr. Yousaf Hussain, President & CEO, Faysal Bank Limited

Improved NPL performance suggests that banks are managing current set of challenges through prudent financing on limited scale. Further, as credit to vulnerable sectors is minimal, any portfolio specific impacts of economic vulnerabilities may be more visible in the future.

Lending to private sector

Overall lending to private sector in Pakistan is significantly lower at 15% of GDP, compared to certain other jurisdictions. As discussed earlier, a more inclusive credit strategy targeted to priority sectors/ segments may help elevating this key benchmark to a reasonable level in medium-long term.

Credit to private sector (as a percentage of GDP)



"

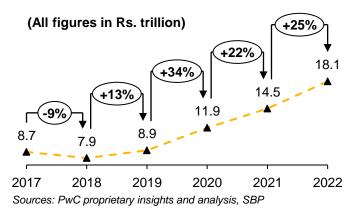
Banking sector, being the front-runner, has to rethink and revamp business models. A deeper sector understanding is required to penetrate SME and agriculture space.

Banks have historically been inclined to a collateralbased lending model. This approach warrants a complete transformation towards more interactive, cashflow based lending to better serve these sectors."

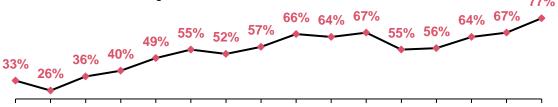
Mr. Muhammad Aurangzeb, President & CEO, HBL

3. Investments

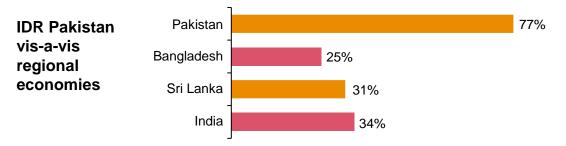
Investments surged by 25% with ~90% concentration in government securities. Considering the risk-free nature and reasonable returns, this may be offering an alternate avenue to place funds and hence, results in a lower ADR.



Consequently, Investments to Deposits Ratio (IDR) has been rising and now stands at 77%, with the following trend over time:



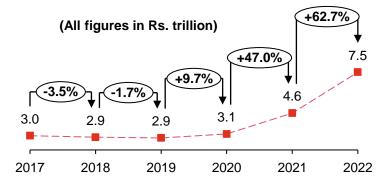
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022



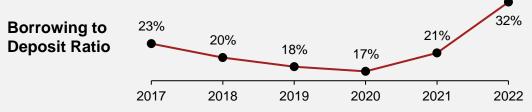
Sources: PwC proprietary insights and analysis, SBP, other central banks

4. Borrowings

We are witnessing a rising trend in borrowings with major accretion in the last two years. There was an exponential increase of 63% to Rs. 7.5 trillion, compared to Rs. 4.6 trillion as of Dec-21.



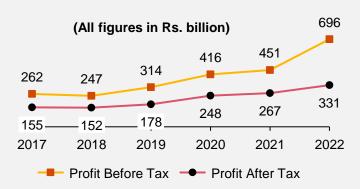
Sources: PwC proprietary insights and analysis, SBP



Sources: PwC proprietary insights and analysis, SBP

5. Profitability and taxation impacts

Profitability and RoA/ RoE amplified sharply on the back of higher spreads and non-funded income from different avenues. However, tax charges triggered disproportionate moderation in baseline profitability (for details, please refer to section 13 on tax regime.



For FY22, tax rates were raised from 35% to 45% (effective tax rates jumped to 49% from 39% in 2021). An additional impact might be of heightened tax rates on income from federal government securities, linked with ADRs, as summarised in table below.

Gross ADR	FY22	FY23
Upto 40%	40%	55%
Exceeding 40% but not 50%	37.5%	49%
Exceeding 50%	35%	42%

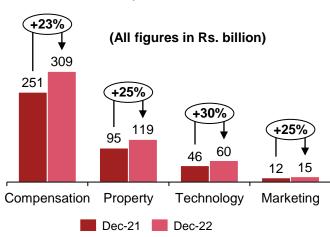
Sources: PwC proprietary insights and analysis, SBP

6. Operating expenses and Cost to Income Ratio

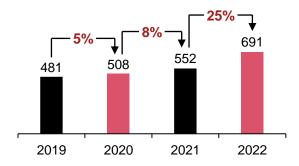
Operating expenses registered an increase of 25% in 2022 compared to relatively lower variations during the last few years.

With a strong revenue base (75% growth in mark-up income), industry's cost to income ratio, however, improved to 48% compared to 53% in Dec-21.

We have selected 4 cost components that comprise over 75% of total operating expenses and analyse below relevant escalation over last year:



(All figures in Rs. billion)



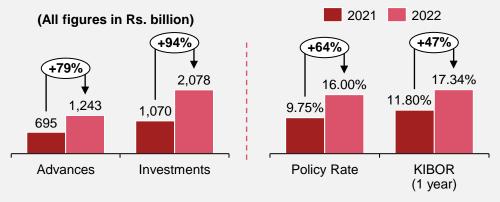
Considering the current economic situation, inflationary pressures and Rupee devaluation, costs may continue to surge in the foreseeable future. It is therefore an apt time for the banking sector to consider pursuing enterprise transformation journeys including digital excellence, cost optimisation, process reengineering and branch re-modelling to better manage cost base. These themes have been covered in subsequent sections of this publication.

For such pursuits to be successful, banks may need to take a (1) medium-long term view, (2) execute the programmes in a phased manner, (3) prioritise impact areas based on criticality and opportunity size and (4) have full sponsorship of the Board and senior management.

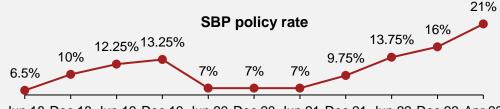
Sources: PwC proprietary insights and analysis, SBP, banks' annual reports

7. Mark-up income

Mark-up income increased considerably to Rs 3.4 trillion, at the back of rising mark-up rates. Below provides a comparison of mark-up income from advances and investments, along with SBP policy rate and one-year KIBOR as of Dec-22 vs. Dec-21.



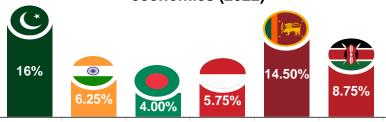
Policy rate was further raised to 21% in April 2023, in the backdrop of economic uncertainties and rising inflation, generating a cumulative impact of 1,400 basis points since June 2021.



Jun 18 Dec 18 Jun 19 Dec 19 Jun 20 Dec 20 Jun 21 Dec 21 Jun 22 Dec 22 Apr 23

Policy rate in Pakistan as of Dec-22 is much higher relative to certain other economies, as summarised on the next page. Key reason cited is to avoid inflation getting entrenched i.e., persisting over a longer duration.

Policy rate in Pakistan vis-a-vis certain other economies (2022)

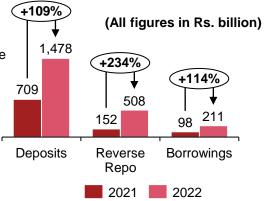


Pakistan India Bangladesh Indonesia Sri Lanka Keny Sources: PwC proprietary insights and analysis, SBP, other central banks

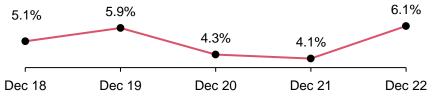
8. Mark-up expense

Unfavorable rate variance on deposits, driven by policy rate increases, led to mark-up expense rising by 126% to Rs 2.2 trillion. Component-wise break-down along with percentage variation are as follows:

Industry's spread stood at 6% in 2022 vs. 4% in 2021, with trends over time below:



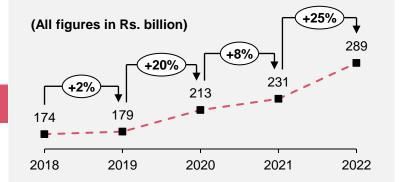
Spread between lending and deposit rates



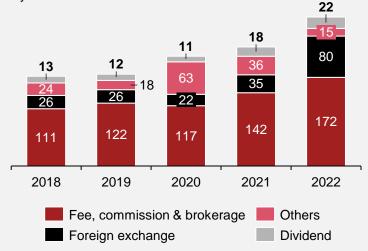
Sources: PwC proprietary insights and analysis, SBP

9. Non-funded income

Non-Funded Income (NFI) comprised approx. 20% of banks' total income with growth of 25% over 2021.



Following is the break-up of NFI components over the last 5 years:

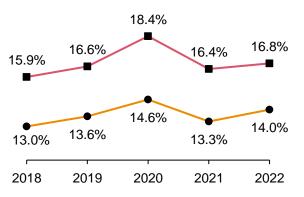


10. Capital adequacy

Capital Adequacy Ratio (CAR) edged up to 16.8% from 16.4% as of Dec-21 whereas Tier-1 capital to Risk Weighted Assets (RWA) ratio rose to 14% (Dec-21: 13.3%) depicting financial soundness/stability.

This is also propelled by sizeable investments in and earnings from risk-free government securities.

5-year trends in CAR and Tier-1 capital to RWA are provided below:



Capital Adequacy Ratio

Tier 1 Capital to Risk Weighted Assets

Financial inclusion:

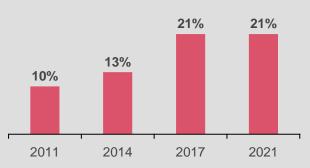
Banking the unbanked and underserved



Financial inclusion: banking the unbanked and underserved

1.4 billion adults remain unbanked across the globe. With 120 million adults financially excluded in Pakistan, the country accounts for 9% of world's unbanked population.

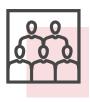
Account Ownership (%, age +15)



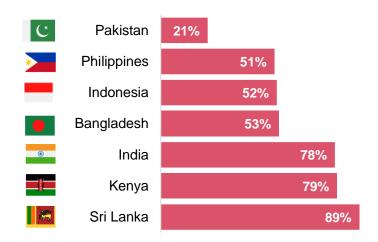
Sources: PwC proprietary insights and analysis, World Bank

Global Findex Database 2021 reports financial inclusion ratio of 21% for Pakistan, stagnant since 2017. Financial Inclusion Survey released in February 2023 by Karandaaz Pakistan, however, indicates a rise in this ratio to 30% in 2022.

9% of the world's unbanked population resides in Pakistan



Compared to certain regional peers and emerging economies such as Bangladesh, Sri Lanka, Kenya and India where financial inclusion is well above 50%, Pakistan's positioning reflects enormous space.



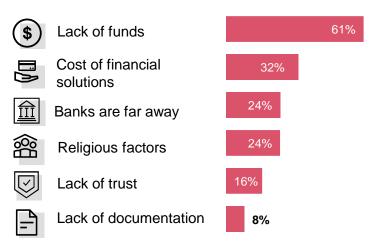
Sources: PwC proprietary insights and analysis, World Bank

On-going measures by the Government and regulators around limited KYC account schemes, broadening access to financial services, and financial literacy – to name a few, may help boost this vital benchmark, going forward.

A Underlying reasons for low financial inclusion in Pakistan

According to Global Findex Database 2021, commonly cited reasons for not opening bank accounts range from lack of documentation, lower trust, religious factors, physical proximity of branches, to affordability of financial solutions and insufficient funds.

Global Findex Database 2021 (% of respondents, age 15+)



Sources: PwC proprietary insights and analysis, World Bank

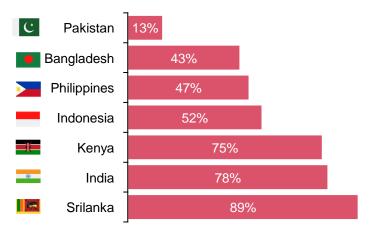
Supply side challenges

Certain banks have set a strategic vision around inclusive banking, with dedicated verticals/ resources driving institutional focus of catering to the untapped segments. However, cost to serve the bottom of pyramid through an expanded infrastructure, may be creating some frictions in scalable financial inclusion. Different priorities may also hinder readiness in innovation, skills and approach to deliver right products, through right channels, at the right price.

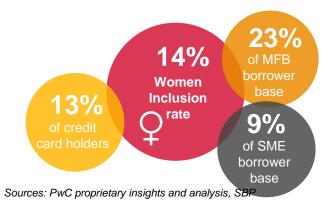
B. Women inclusion in Pakistan

While rate of women inclusion reached double digits from 7% in 2017 to 14% in 2021, relative positioning vis-à-vis certain other economies represents vast scope for intervention.

Female Accounts (% age 15+)



Sources: PwC proprietary insights and analysis, World Bank



Lack of CNIC, mobile phone access, and basic numeracy skills are key hurdles commonly cited for low inclusion. Whilst these apply for both genders, widest disparity may exist for financial literacy and mobile SIM ownership.

Over the last 3 years, some banks have introduced womencentric propositions, with females at these institutions now comprising 20%-25% of the customer base, with an active account ratio between 60%-70%.

SBP, recognising the fact that gender-neutral policies and practices at banks may not be effective given inherent gender inequalities, launched the gender mainstreaming policy "Banking on Equality: Reducing the gender gap in financial inclusion".

Under this policy, banks are expected to achieve the following targets by 2023-2024:

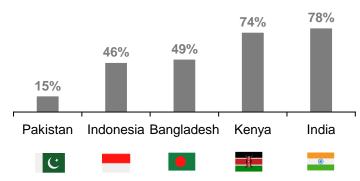
- Place Women Champions at 75% of all bank touch points
- Increase ratio of women branchless banking agents from current 2% to 10%

- Impart gender sensitivity trainings to all employees
- Increase outreach of products, services and financing to women entrepreneurs; to reach 20 million unique active digital accounts

C. Rural inclusion

Generally, people who are unbanked are also those who are the hardest to reach and may mainly include those residing in rural areas. Financial inclusion in rural Pakistan stands at 15%, and in terms of value is 16% of total deposit balance held by individual customers as of June 2022.

Rural Accounts (% age 15+)

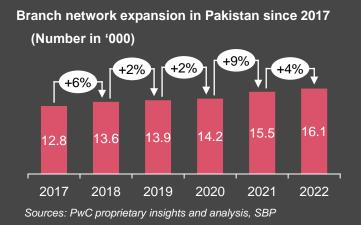


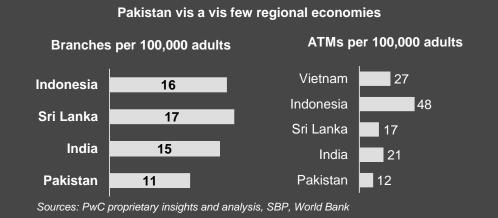
Sources: PwC proprietary insights and analysis, World Bank

Some banks are actively working on broadening access to financial services through physical footprint complemented by digital propositions. They have managed to optimise rural accounts in the range of 25% to 35% of the total individual customer base.

20%-25% of those that predominantly transact digitally with such banks reside in rural areas, thus highlighting the potential of digital as a lever to financially include the unbanked and underserved.

Although physical network has expanded over time, there may still be some room for penetration, more across rural and underserved areas. This may align 'branch and ATM to adults' ratios, as seen in few other regional economies.





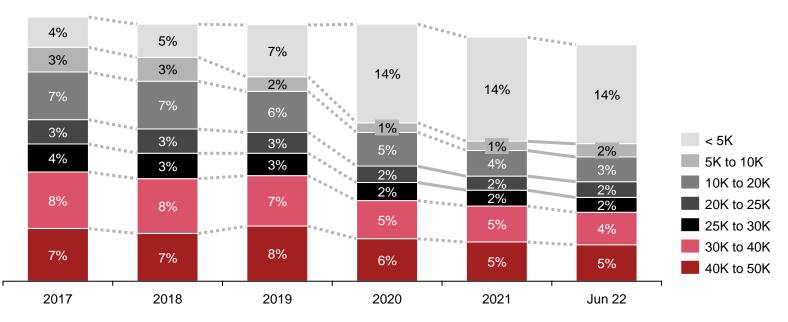
D. Increasing number of low value accounts

The number of accounts held by individuals rose by 49%, i.e. from 40 million in 2017 to 60 million as of June 2022. Of these, there are 8 million accounts with balance of less than Rs. 5,000 comprising 14% of the total base for individuals. However, in 2017, there were only 1.7 million such accounts, representing 4% of the aggregate.

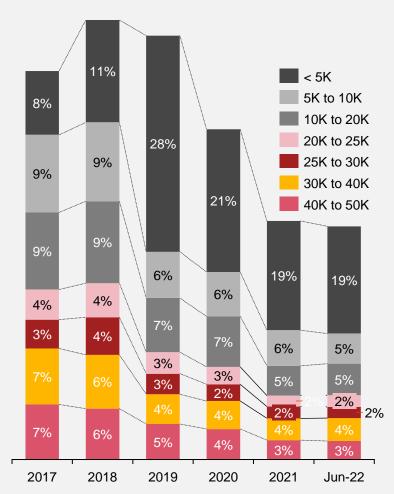
Similar trends are noted for business accounts where low value accounts comprise 19% of the total number of business accounts, up from 8% in 2017.

5x increase since 2017, in the number of accounts held by individuals with deposit

balances <Rs. 5,000 Sources: PwC proprietary insights and analysis, SBP



2x increase since 2017 in the number of accounts held by businesses with deposit balances <Rs. 5,000

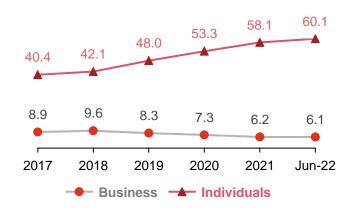


Sources: PwC proprietary insights and analysis, SBP

A fivefold increase since 2017 in these low value accounts may be reflective of sub-optimal engagement of underlying customers.

Recent trends also indicate 31% decline in the number of accounts held by businesses, from 8.9 million in 2017 down to 6.1 million in 2022.

Number of accounts held by individuals and businesses (in million)

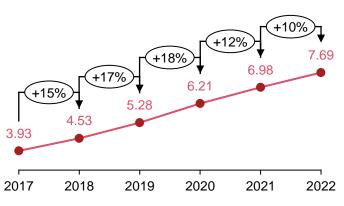


Sources: PwC proprietary insights and analysis, SBP

Cash dominance

Cash in circulation stands at Rs. 7.69 trillion, a huge 96% increase from Rs. 3.93 trillion in 2017, approximating 1/3rd of total deposits held at banks.

Cash in Circulation (in Rs. trillion)



Sources: PwC proprietary insights and analysis, SBP

This increase in cash exceeds 84% growth rate in total deposits over the same 5-year period.



If cash-in-circulation somehow contracts to around 5% to 6% of deposits, there may be a sizeable increase in mobilized funds, which through the banking multiplier has the potential to exponentially expand our banking system. This is where digitisation can make the biggest difference."

Mr. Salim Raza, Former Governor State Bank of Pakistan

Cash dominance, as also covered in section 5 on digital banking and payments, may have major implications for the economy. This may motivate continuous use of cash by households and businesses alike and limit financial empowerment of the marginalized segments of our society.

E Islamic Banking – strong potential to accelerate financial inclusion

Pakistani market is ripe for Islamic banking as elucidated in section 7. There is growing acceptability, considering the surge in Islamic banking deposits market share from 14% in 2017 to 21% in 2022. This has potentially deeper impacts on financial inclusion as also highlighted by Mr. Irfan Siddiqui, President and CEO, Meezan Bank Limited.

As per the Global Findex Database 2021, 8% of unbanked respondents may not be having an account due to religious reasons.

A study conducted by SBP underscores the demand for Islamic banking solutions in unbanked segments, with 45% of related respondents even willing to pay more for Shariah compliant products. For more insights, please refer to section 7 (page 62).

F. Government and regulatory initiatives to promote financial inclusion

Financial inclusion is a national priority. In 2015, Government of Pakistan launched National Financial Inclusion Strategy broadly focusing on:



Facilitating account opening through mobile wallets



Implementing national payment gateway



Promoting e-commerce



Raising financial awareness



Increasing physical touchpoints for banking services



Enabling receipt and management of inwards remittances in real-time



Capacity building for banks to lend to micro and small businesses

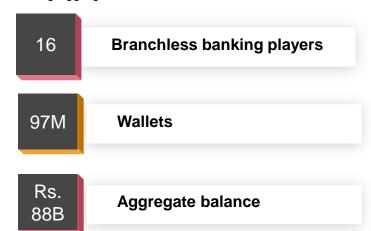
SBP has undertaken several initiatives over the past two decades to enable inclusive economic growth, notable ones include:

- Fostering a diversity of financial institutions through separate licensing regimes for microfinance banks, digital banks and Electronic Money Institutions (EMIs)
- Facilitating account opening through mobile wallets
- Expansion and modernisation of online credit information bureau (e-CIB)
- Interoperable inter-bank card payments platforms
- Tiered approach to KYC, with Branchless Banking (including Asaan Mobile Account) enabled via mobile wallets and USSD
- Limited KYC account schemes such as Asaan Account, Asaan Digital Remittance Account, Freelancer Digital Account etc.
- RAAST instant payment system
- Digital on-boarding of merchants
- Nationwide Financial Literacy Programme
- Child and Youth Financial Literacy Programme

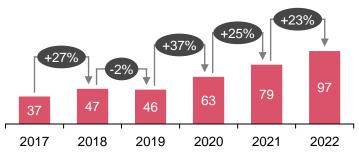


G. Branchless Banking in Pakistan

Introduced in 2008 with the primary objective of financial inclusion and option for remote on-boarding, today there are 16 Branchless Banking players with 97 million wallets, holding aggregate balance of Rs. 88 billion.



Growth trajectory of Branchless Banking wallets (number in million)



Sources: PwC proprietary insights and analysis, SBP

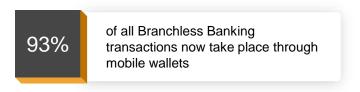
Over the last 5 years, balance per wallet has slowly increased from Rs. 565 to Rs. 900. The active account ratio over the same period, however, has declined from 52% to 44%.

"

Industry has been successful in acquiring new to bank customers on wallets but the activity in those wallets needs to significantly increase."

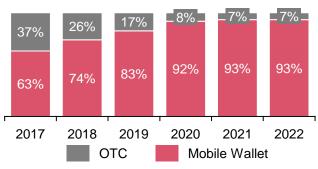
Mr. Muhammad Yahya Khan, Group Head-Digital Banking, Bank Alfalah Limited

Branchless Banking proposition pivoted two key use cases for digital in banking. The first being customer acquisition with limited KYC, the second is fund transfers through mobile.



The share of Over-the-Counter (OTC) transactions has decreased phenomenally; from 37% in 2017 to 7% in 2022.

Branchless Banking transaction composition – OTC Vs. m-wallets



Sources: PwC proprietary insights and analysis, SBP

Around 1/3rd of the 16 Branchless Banking players are more active in this space. Of those, few have rebranded their platforms aiming to provide a digital experience to the tech savvy youth, with the objective to shift those customers from branchless to mainstream banking.

Within the banking sector, in some cases, value proposition is narrow with limited, if any, options for savings, loans and insurance. This together with high transactional charges leads to low use and, hence, dormancy of over 55%.

Leveraging the wallet proposition to build scale, few banks are re-strategising and investing in brand rejuvenation. Recent trends also indicate increasing focus on Islamic Branchless Banking proposition and corporate partnerships for last-mile disbursements.

Relatively mature banks are considering expansion of solution suite, offering savings, nano-loans, embedded finance and white-label wallet solutions.

To increase engagement, certain banks have introduced e-commerce marketplace enabling cross-sell and up-sell to customers. Agent commissions and transaction cost structures are also being rationalised for optimum customer experience.

Asaan Mobile Account Scheme

Through this initiative introduced for low-income segments, any Pakistani holding a valid CNIC can open a bank account digitally, without the need for internet connectivity. These accounts can be opened using the SIM of any mobile operator in the country and transactions can be conducted through feature or smart mobile phones.

As of October 2022, there are 5.7 million Asaan Mobile Accounts, with over 7 million transactions valuing Rs. 43 billion.



Sources: PwC proprietary insights and analysis, SBP

H. Agents expanding outreach to unbanked and underserved

Agents have played a critical role within the Branchless Banking space, with ~623,000 touchpoints across Pakistan, but an active agent ratio of only 47%. This lower activation may be attributed to model complications, commission-based structure, low profitability and, possibly, overall absence of a coherent approach for financial inclusion.

Agent network coverage in Pakistan

Some banks active in Branchless Banking space and desirous of expanding agent network have entered into agreements with entities that have wider geographic footprints, such as courier companies, to extend branchless banking solutions to the masses.

Comparison of Pakistan's agent coverage with Bangladesh and Kenya highlights the extent to which agent network augmentation may be considered. Ratio for 15+ population to agent outlets stands at 240 in case of Pakistan, vis-à-vis 105 and 150 for Bangladesh and Kenya respectively (refer table below).

Strategising for a sustainable agency banking model

Agency banking economics may continue to remain under pressure, unless there is diversification in the use of agent network, expanding beyond Branchless Banking to full-service accounts. This may be complemented by a wider, more diverse solution suite, as is the case of Bangladesh, Kenya, India and other emerging economies.

	Adult Population	No. of Agents	Adults per Agent
C Pakistan	152M	623K	~240
Bangladesh	121M	1.1M	~105
Kenya	33M	224K	~150

Sources: PwC proprietary insights and analysis, SBP, other central banks

Regulatory interventions may involve enhancing the agency banking framework to extend agent-facilitated banking to all customer segments, with a wide range of products/ features for more every-day banking services beyond transactional needs. Banks may be encouraged to create the required interoperability providing agents access to their core solutions, subject to comprehensive risk assessments.

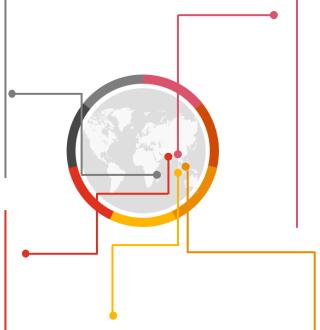
Certain initiatives/ schemes that helped promote financial inclusion in few other jurisdictions

Sri Lanka



- Banks required to open a minimum of two branches in rural areas, for each new branch established in urban areas
- Credit delivery through refinance schemes and interest subsidy/credit guarantee schemes
- Focus groups under this scheme include agriculture, livestock and MSME
- Introduction of agency banking
- Postal savings account system

- Pradhan Mantri Jan Dhan Yojana a financial inclusion programme aimed at providing universal access to banking facilities, RuPay debit card with in-built accident insurance cover
- Micro-insurance and unorganized sector pension schemes
- Introduction of Business Correspondents under agency banking model, able to render diversified services through enabling solutions
- Banks required to open at least 25% of their total number of branches in unbanked rural areas
- Establishment of Small Finance Banks for unserved businesses, marginal farmers, micro and small industries
- Establishment of Regional Rural Banks to meet credit requirements within rural areas
- Establishment of Common Service Centres for delivery of essential social welfare schemes, healthcare, financial and agriculture services in rural and remote areas



Indonesia



Laku Pandai Programme

- · Three party programme between banks, agents and customers
- · Offers basic saving account, microinsurance and micro-credit products
- Supported by an agent network of over 400,000

Bangladesh •



- Introduction of No Frill Accounts opened and maintained with zero balance and no levies
- School banking facilities any student under 18 can open a school banking account by depositing minimum BDT 100
- Special accounts for street and working children, which can be opened with a minimum deposit of BDT 10 (referred to as BDT 10 accounts)
- Revolving refinance fund of BDT 2 billion introduced for BDT 10 account holders, with BDT 50,000 as the highest limit of refinance
- Introduction of agency banking
- Credit facilities for cottage, micro, small and medium enterprises outside of Dhaka and Chittagong

Malaysia



Framework formulated by central bank to advance the financial inclusion mandate. Key areas relate to:

- Introduction of extended agency banking
- Introduction of flexible microfinancing, micro-saving and microinsurance products
- Structured trainings for financial inclusion
- Improving financial literacy
- Leveraging technology to provide innovative solutions
- Measurement of financial inclusion index

"

Financial inclusion may remain a persistent challenge, particularly due to inherent country dynamics and recent inflationary wave, creating further financial burdens and reducing the already low propensity to save.

Nonetheless, there are regional success stories we can learn from. In those economies, innovative players leverage technology, customer networks and data to lower transaction costs and deliver financial products most suited to low-income consumers.

We all must remain committed to financial inclusion. I believe that everyone, regardless of their background, should have access to financial services. That's why the industry should be investing in digital banking and other initiatives to make it easier for people to bank.

Data-driven insights enable banks to provide more contextualised products to the right audience and extended relevant banking services to previously unbanked communities."

Mr. Muhammad Aurangzeb, President & CEO, HBL

A constant collaborative effort on the part of regulators and industry stakeholders may augment overall capacity to:



 Develop affordable digital
 financial products that address unbanked and underserved



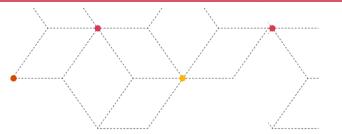
2 Design customer-centric solutions that overcome behavioral barriers



3 Strengthen financial infrastructure by expanding credit reporting systems and collateral registries (as highlighted in Section 9 "Risk Management: Embracing risks in the face of disruption)



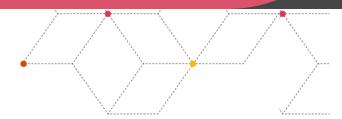
Protect customers
through rules for
disclosure, fair treatment
and recourse





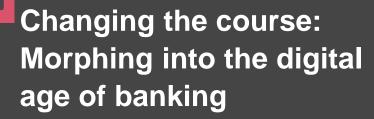
There is a need to augment the national data infrastructure - enhance data registries, land registries etc. for greater financial inclusion and progression towards documentation, that may also enable efficient financing."

Mr. Salim Raza, Former Governor State Bank of Pakistan



Changing the course:
Morphing into the
digital age of banking





Driven by the need to sustain market share, prevent margin compressions, right-size operating cost base and provide seamless mobile-first customer experience, we have witnessed the financial services landscape rapidly evolve over the last decade.

While banks experience wide-ranging pressures from increasing regulatory scrutiny, economic downturns and climate change, to shifting customer preferences and demand for instant solutions, fintechs; with their innovative business models have emerged all over the world.

These non-traditionalists, leveraging nimble disruptive technologies are targeting the most profitable parts of the banking value chain. With solutions that offer similar customer interactions as GAFA (Google, Apple, Facebook and Amazon), these players seize opportunities by addressing unmet financial requirements of unserved and underserved segments.

In the wake of this storm, emerge key market trends and developments witnessed not only globally but also in Pakistan, highlighting possible opportunities for a promising digital future in the medium-long term, backed by evolving socio-economic dynamics, technology, connectivity, and an emerging start-up eco-system.

Key trends and market developments

Appreciating Digital as a strategic business partner

In the past, certain banks cognisant of a digital future, created digital banking functions for dedicated focus to digitally transform the entire organisation.

The case in Pakistan

The role and importance of this function has evolved over the years, with certain banks realising the criticality of digital as a key business lever.

At other institutions, however, these functions might be viewed as working in silo, focusing on automating manual processes more than driving innovation across the organisation, products and customer journeys. There, *digital* is perceived as a channel. Resultantly, it may be challenging to appreciate the true value digital can unleash.

Opportunities to re-strategize and re-invent

Such institutions have the opportunity to re-invent themselves by designing data-driven digital strategies that create an attractive proposition to prevent market share bleed, acquire, and retain the digitally native generation.



Data is key to a bank's digital journey and Chief Digital Officers should capitalise on institutional data through a well-defined data strategy."

Mr. Sohail Aziz, Former Chief Digital Banking, Allied Bank Limited

Even for relatively mature banks, there may be potential to revisit digital strategies around customer segments, products, services and value propositions; considering consumer digital engagement levels, behaviours and expectations, global developments and emerging competition on the domestic front.



Digital banking functions today have started to operate as strategic business units, with their own clientele and service strategy, own P&L and KPIs that highlight the value created.

These functions are needed for market relevance, and to enable institutions address customer personas desiring to engage digitally."

Mr. Sharjeel Shahid, Group Executive - Digital Banking , United Bank Limited

Digital banking functions at some banks are playing the role of real catalysts, through efforts to foster the omni-channel experience.

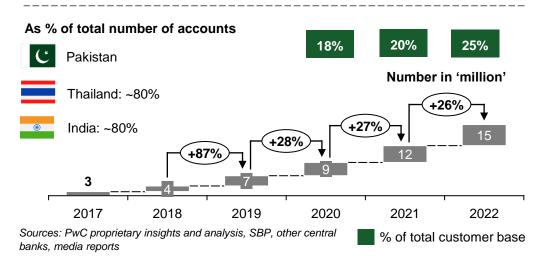
They are also continually driving enterprise transformation including traffic migration strategies, providing opportunities to save operating costs, with other stakeholders continuing to focus more on core business-as-usual.

Migrating traffic from bricks to clicks

Previously dependent on consumer demographics, customer technology adoption, trust and willingness to bank online in Pakistan has now transformed post COVID-19. Pandemic pushed customers to transact remotely reducing their frequency of branch visits, and similar trends are continuing as we see increasing adoption of mobile banking and demand for convenience-oriented 24/7 banking solutions.

Although mobile banking adoption has been scaling, there is substantial room for uptake considering 25% of individual account holders having registered for this option, lesser than certain emerging economies where this ratio is around 80%.

Significant uptake of mobile banking since 2018



Decreasing branch visits in Pakistan

PwC Digital Banking Experience Survey "Banking in the Digital Age: Exploring Pakistan's Potential" reveals decreasing branch visits generally across all age groups, with 82% of surveyed individuals visiting the branch once in a few months, or only once to open their accounts.

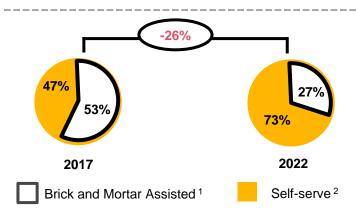
Fueled by evolving customer behaviours and enabled through enterprise digital readiness, banks report that 65% to 70% of their total transactions are conducted on channels other than a branch, as also highlighted by Mr. Muhammad Yahya Khan, Group Head-Digital Banking, Bank Alfalah Limited.

82% h

of surveyed individuals visit the branch

once in few months

26% decline in the share of brick and mortar assisted transactions from 2017 to 2022, indicating increasing preference for self-service with shifting consumer behavior continuing post-COVID



Since 2017, ATM remains the most used self-serve channel for retail payments. Its share in total etransactions, however, has been decreasing from 81% in 2017 to 46% in 2022.

2nd highly utilised channel after ATM is mobile banking, its contribution in e-transactions surging from 3% in 2017 to 31% in 2022.

Sources: PwC proprietary insights and analysis, SBP



Customers are hungry for adaptable technology. If we deploy technology that solves real problems, they will definitely migrate to it."

Mr. Muhammad Yahya Khan, Group Head-Digital Banking, Bank Alfalah Limited

¹Branches, RTOB, Contact Centre ²Mo

²Mobile Banking, Internet Banking, ATM, POS, e-Commerce

Attracting mobile-centric youth through digital brands

To capitalise on the opportunities presented by dynamic millennials and Gen Z, certain international banks have introduced niche brands catering to target sub-segments but may generally feel challenged in creating the required branding, perception, and engagement.

For some, it has been difficult to create requisite agility in product personalisation and delivery, with low value generated often concealed within the Bank-in-a-Bank model.

Resultantly, these banks may be losing customers to fintechs and digital banks given latter's ability to extend contextualised low-cost financial solutions.



Any bank with the right understanding and focus on digital will be able to capture the market much faster than it's competitors."

Mr. Irfan Siddiqui, President and CEO, Meezan Bank Limited



Traditional banks' market share at risk in niche customer segments



Shifting depositor composition impacting customer's average age in Pakistan

Current and future pool of young customers represents 45% of Pakistan's population, with 15 – 24 years old comprising around 19%, and 36% under the age of 14.



Institutional agility - call of the hour

Cognisant of Pakistan's favourable population dynamics and global trends, certain banks have invested in creating a brand or perception for the youth.

These banks; standing at different levels on the digital maturity ladder, operate on a similar Bank-in-a-Bank digital model as their international peers, in some cases with a separate enabling pillar supporting the niche brand.

There is wider recognition of the need for institutional agility and proactive strategies, since consumers in the local market now have more options for digital solutions with:

- 5 digital banks preparing for market entry;
- 4 EMIs already live; and
- a host of fintechs operating within digital payments and lending spaces

Average depositor age has reduced from 50+ to mid-30s over the last 3 years."

Mr. Muhammad Yahya Khan, Group Head-Digital Banking, Bank Alfalah Limited

Enriching the mobile banking experience, leveraging partner eco-systems and transitioning to a super-app

In efforts to remain competitive, banks globally are focusing on mobile-first; end-to-end friction-less journeys and hyper-personalised experiences, through an ecosystem of third parties, leveraging customer data to offer smart propositions tailored around lifestyle needs.

Ambitions to super-apps is particularly trending in Asia, where few banks are intending to plan transitioning from a financial app into an every-day use superapp. Only when well-strategised, these banks may gain from higher rates of customer acquisition, satisfaction, retention and brand loyalty.

Key focus areas prevalent in Pakistan

Similar to international trends, few banks in Pakistan are seeking ventures targeting cross over into a lifestyle platform, as single go-to-resource for customers' everyday interactions. These institutions may be focusing on all or some/ most of the following four fronts:

1

Diversifying solution suite, moving into adjacent financial products notably, consumer loans, savings and investments

2

Introducing app features and value-added services around customer convenience e.g. voice commands, embedding payments into messengers, new digital payment use cases - tap and pay methods, pull payments with instant transfers etc.

3

Becoming the central contact for daily banking, building the B2B ecosystem - from deals to loyalties, ride hailing, food deliveries — and joint offering with non-traditional players



Providing one window solution addressing e2e financial requirements of MSMEs – deposits, collections, e-invoicing, payments, employee banking, financing, etc.

Further, as part of traffic migration efforts, some banks are emphasising on enhanced app user base through brand rejuvenation, improvement in UI/ UX and targeted campaigns.

~20%

of information-only call centre traffic at few banks expected to be diverted to WhatsApp and Facebook Messenger with the introduction of conversational banking

Collaborating with eco-system players for customer acquisition and service

Around the world, banks are also actively partnering with third parties including fintechs/ start-ups for greater outreach, lead generations, cocreated solutions and data monetisation to create new revenue streams.

Certain banks in Pakistan have forged strategic alliances to (1) build franchise value (2) deliver on financial inclusion and development finance objectives (3) amplify ease of remittance flows (4) expand card acceptance points (5) digitise supply chain and lend innovatively to MSMEs (6) expand agent network.

To further nurture the eco-system, few banks are also conducting hackathons, holding design thinking and mentoring sessions, funding/investing in start-ups and fintechs for mutual value creation.



Banks need to focus on creating partnerships for key experiences that customers expect."

Mr. Sohail Aziz, Former Chief Digital Banking, Allied Bank Limited



5 Digital payments and new check-out options

Some banks in Pakistan are working across multiple verticals to enable seamless checkouts and digital payment journeys. To begin with, there is evident focus on expanding acceptance points through soft POS and m-POS, also given regulatory impetus. Here, we see few banks expanding into wider eco-system, prioritising e-commerce, channelising B2B flows, leveraging data to develop value added services and new revenue streams.



A. Regulatory blueprints for digital payments

To accelerate digital payments, central banks in few emerging countries such as Thailand, Indonesia and India, have designed master plans and roadmaps with initiatives around:

- building and strengthening infrastructure and security of payment systems
- instant payment systems and use of registered IDs to transfer funds at lower costs for SMEs and e-commerce merchants
- Expanding card acceptance points
- Digital IDs
- E-tax and e-document systems to promote ease of doing business
- Literacy projects to promote use of e-payments

Launched in 2019, Pakistan's National Payments Systems Strategy addresses similar pillars as other countries in the region. However, given general preference for cash, achievement of targets calls for holistic national level policies, roadmap and actions that help foster the digital eco-system and push greater digital adoption across the nation.



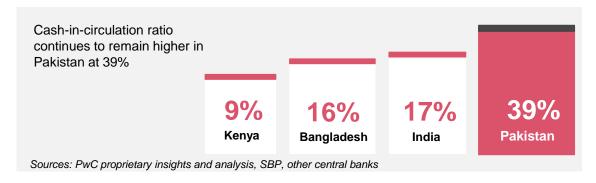
Government needs to set active targets for digitisation. Further, steps should be taken to ensure all disbursements by and payments to Government are digitised."

Mr. Salim Raza, Former Governor State Bank of Pakistan



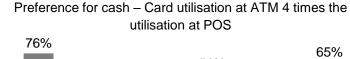
B. High cash-in-circulation ratio

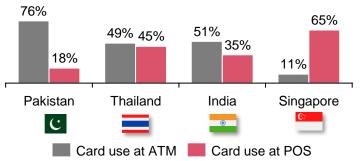
Cash prevails as the key payment medium despite other conveniently available payment options: cards, RAAST, online fund transfers and QR.



There is huge potential for card and other digital payment methods, which remain untapped due to the following key reasons:

- Limited acceptance points
- Lack of trust in PoS machines
- Costs associated with card transactions
- Documentation
- Increased administration around reconciliation of payments particularly where multiple payment methods are involved





Sources: PwC proprietary insights and analysis, SBP, other central banks





C. Greater digital engagement and deposit mobilization through attractive payments propositions

Banks in Pakistan have employed multiple strategies to digitise payments across all customer segments. By capturing their payment cycles through new use cases, incentives, and value-added services, certain banks have experienced rising deposit balances without deploying targeted deposit acquisition strategies, a fact recognised by industry stakeholders.

While cardless transactions whether NFC enabled or QR based, have certain inherent challenges associated with technology, connectivity and charged devices which may break the customer journey, introduction of RAAST for Person-to-Merchant (P2M) payments may well be a game changer.



D. Incentivising digital payments

Industry stakeholders are of the view that uptake in RAAST P2M transactions may be scaled through incentivisation at 3 levels: (1) Customers may have to be rewarded to move away from cash (2) merchants; to not accept cash, and (3) banks; to invest in acceptance technologies.

Steps taken by the Government to promote digital payments in Punjab may be extended across Pakistan. Further, there are opportunities to learn from regional practices such as India, where various initiatives were taken e.g., waiver of service tax on card transactions up to INR 2,000, discounts on purchase of petrol and railway tickets, imposition of higher tax levies at source on cash withdrawals.



DFS eco-system in Pakistan is still in its early stages, and several challenges need to be addressed to scale it up. One of the biggest impediment is the lack of a coherent national policy framework, without which, it is difficult for stakeholders to work together and coordinate their efforts. A favourable taxation structure is critical to encourage DFS in Pakistan."

Mr. Muhammad Aurangzeb, President & CEO, HBL

In Pakistan, merchants may be considering cash alternatives counter-productive since they have to pay MDR. In case of certain businesses, economic volatilities have adversely affected inventory costs. They are soliciting MDR reduction to prevent further revenue losses and, in the meantime, most of such chain outlets are reluctant to accept cards.

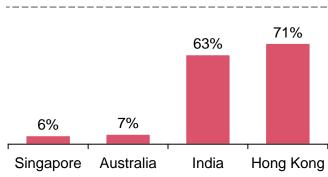


E. National instant payment systems

A revolutionary development in digital payments has been the introduction of national instant payment systems in several countries, with varying uptake depending on maturity levels of and general preference for payment options such as cards.

Concentrating on low value mass retail transactions, payments through such channels can comprise over 50% of transaction volumes, and just 1%-4% in value, thereby offloading a large part of traffic to low-cost alternatives.

Instant payment systems transactions as a % of total retail payments



Sources: PwC proprietary insights and analysis, SBP, other central banks

Introduced by regulators also as a means for financial inclusion, these national payment systems have broadly similar use cases built around P2P payments, merchant payments, bills and donations, salary disbursements and business collections.

Adoption of instant payment systems

Adoption levels vary from region to region, depending on the state of digital eco-system. Uptake of Unified Payments Interface in India for instance, has been unprecedented, triggered mostly by demonetisation. In 2022, approximately 74 billion transactions (2021: 38 billion) worth INR 126 trillion (2021: INR 72 trillion) were conducted through this platform, registering over 90% growth in volumes over a year.



Within 3.5 months, Faster Payment System in Hong Kong received over 2 million registrations, representing a ratio of 27% to total population size. Enhanced utilisation of such platforms is also attributed to the fact that transactions through these channels for most part are free or are subject to charges only beyond a specific threshold.

Varying from country to country depending upon the enablement in place, average value per transaction may range from USD 20 – USD 950.

As uptake of this channel increases regionally, utilisation of cards has been on the decline, and which is why in certain jurisdictions customers migrate directly to mobile, leapfrogging cards.

RAAST uptake

As of Dec-22, there were 26 million RAAST ID registrations, with 41 million transactions crossing Rs. 892 billion.

It is envisioned that similar to global trends, RAAST will significantly transform the digital payments space. Few stakeholders are of the view that its uptake may considerably increase should bank account holders not be required to register for RAAST IDs.



F. Collaborations with non-banks for acquiring, as-a-service and whitelabelled solutions

Considering margin pressures, banks globally are focusing on their core businesses and shifting to acquiring services offered by non-bank entities. They are collaborating to fill gaps within the payment life-cycle, exploit the potential for customer engagement data leveraging regulatory flexibilities available for data sharing.

Similar trends are emerging within the acquiring business space in Pakistan. Certain banks are either considering or have already partnered with fintechs on a revenue sharing basis to expand acceptance points. Few banks are also actively exploring options to provide payments-as-a-service, embedded payments and white-labelled solutions to fintechs, other start-ups and platform businesses.

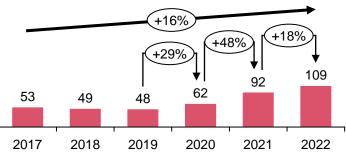


G. Point-of-Sale eco-system

There has been 18% YoY growth in POS deployment largely supported by:

- Regulatory push for improving payment card acceptance infrastructure, including changes in MDR regime
- Increasing number of registered merchants
- New players entering into acquiring business space

POS deployment in Pakistan (Number in '000')



Sources: PwC proprietary insights and analysis, SBP

With historically negligible but rising POS deployment, card use is limited in comparison to other economies. There exists a wide gap in diversifying and optimizing payments through cards. Recent regulatory enablement may likely help by creating a viable merchant eco-system to displace cash.



Significant space exists for greater POS uptake, also given abundant untapped every-day merchants across brick and mortar.

Country	Number of POS (in '000)	Accounts per POS	Card use on POS
Pakistan C	109	552	18%
Thailand =	915	124	35%
Indonesia	1,762	130	90%
India	4,720	535	49%

Sources: PwC proprietary insights and analysis, SBP, other central banks

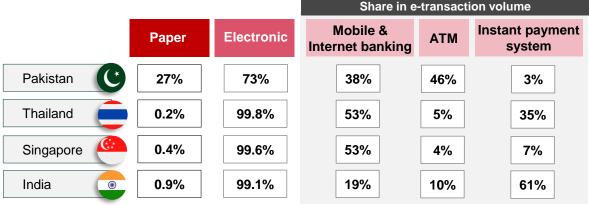


H. Electronic vs. paper-based retail transactions and channel mix of electronic transactions

With Government and regulatory interventions highlighted in point 7 of this section, Pakistan has come a long way in digital adoption within banking and payments.

There may, however, be room for greater digital intervention considering higher proportion of paper-based transactions and ATM utilisation, relative to negligible relative mix in regional economies.

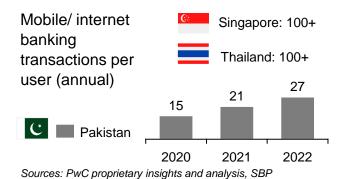
While industry stakeholders may need to collaboratively promote behavioural shift by pursuing structured loyalty/ digital engagement programmes, broader government and regulatory support is inevitable in creating a wider eco-system that incentivises digital and disincentives cash through aligned tax measures or other initiatives.



Sources: PwC proprietary insights and analysis, SBP, other central banks

Accelerating mobile and internet banking engagement

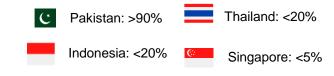
There is also space for higher engagement through mobile and internet banking platforms where transactions (per annum) per registered user approximates 27 (2 per month), being lower than certain other countries.



Cash preference with implications for a vibrant e-commerce market

Digital payments for online purchases remains negligible given dominant preference for cash, and certain structural and logistical challenges associated with ecommerce in Pakistan.

Cash on Delivery – Pakistan relative to certain other jurisdictions



Sources: PwC proprietary insights and analysis, SBP, other central banks, media reports



I. The need for exploring alternate revenue lines

Banks both internationally and locally find it challenging to continually meet changing customer demands while balancing their investments and costs. To capitalise on market opportunities, banks in Pakistan may consider designing disruptive digital payments strategies aligned to their growth aspirations, building segment-specific customer-centric solutions with compelling value propositions.

As the world turns towards eco-system banking, our institutions may need to further explore collaborative business models, consider the evolving competition landscape and the possibility to explore alternate revenue lines. This is critical as we move into an era of banking where net margins from payments business may further reduce over time.

To effectively deliver on disruptive digital strategies, reality is that the entire organisation has to undergo deeper digital transformation. This, in itself, is an uphill journey extending beyond technology and process digitisation to people, culture and mindset change, poised to adopt new business and operating models.

Cognisant of expansive implications that emanate from such holistic redesigns, there are some institutions that prefer to invest in creating differentiated user experiences through an end-to-end digital model. Here we also see the likes of BNP Paribas, Standard Chartered, Bank ABC, UniCredit – to name a few, opting to set up digital bank subsidiaries for niche segments, and in some cases also supporting the parent entity in its digital transformation.

6

Digital banks adding competition to the financial services landscape

Built from scratch or transitioned from a fintech, digital banks have attracted attention from regulators and investors alike.

Today, there are 80+ digital banks operating in almost all parts of the world, originating from Europe and now emerging rapidly in regions that have introduced separate licensing regimes, despite deeper financial intermediation structures in place.

The objective is to further promote financial inclusion, ease credit access to unbanked and underserved and enrich customer experience, by opening the field for more innovative players to complement in a more differentiated, agile and cost sensitive manner.

Separate digital bank licensing regimes have been introduced in over 10 countries, which are home to around 40% of digital banks in the world. Largely concentrated within APAC region, in most cases backed by regulatory intervention, these disruptors have emerged across Hong Kong, Singapore, Indonesia, Philippines, Malaysia, China, UAE, Saudi Arabia, Taiwan, and South Korea.

With release of the Licensing and Regulatory Framework for Digital Banks in 2022 and award of No Objection Certificates to 5 out of around 20 aspirants, competition landscape for traditional banks is expected to change once digital banks roll out operations in Pakistan. Traditional banks may pursue enterprise-wide transformative efforts and revisit their digital strategies, target segments, value propositions, eco-system collaborations and delivery model, leveraging global learnings and local market experiences.

Government/ regulatory initiatives enabling new ways of banking

Countries across the region have developed flagship strategies and implementation roadmaps to drive digital adoption and make themselves fit for the digital age. Programmes such as Smart Nation Singapore and Digital India focus on multiple domains ranging from banking and payments to health, education, transport, and environment.

Through broadly similar holistically designed blueprints, forward-looking countries have taken radical initiatives to promote innovative business models. Regulators in those jurisdictions work closely with industry stakeholders to create and foster an enabling eco-system for incumbents and disruptors to thrive.

It is with government and regulatory interventions that banks can:

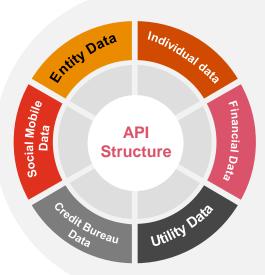
a. Remotely onboard customers with options for digital ID, selfie videos/ video chats/ liveness proof to identify and verify customers; thus eliminating the need of brick and mortar for KYC. This is widely prevalent in countries such as UAE, UK, Germany, India. In Singapore, digital data vault MyInfo and DigiLocker in India can also be leveraged to digitally on-board customers.

To create a centralised repository of KYC records, efficiently manage digital identities with greater efficiency, transparency and cost effectiveness, certain countries such as UAE and India have undertaken blockchain-based e-KYC utility projects.

b. Share data and integrate with third parties in financial and non-financial spaces through open APIs for eco-system banking, enabled via national infrastructure, frameworks and playbooks for guided implementation.

With banks being primary data contributors in most cases, open APIs have been introduced with key objectives to increase competition, offer innovative financial solutions, promote access to finance, and overall financial inclusion. Some countries such as Singapore, Australia and India support a multiple regulator model with extensive use cases extending beyond payments to lending, investments, insurance and trade.

The IndiaStack API infrastructure through access to public and private data has played a major role in transforming the credit value chain in the country. Lenders may undertake verification of borrowers and assess their future credit behaviours through access to personal, financial, utility, social and mobile data, along with information held by credit bureaus and government entities.



Entity Data

- Ministry of Corporate Affairs
- Aadhar
- Employees' Provident Fund Organization
- Employees' State Insurance Companies

Individual Data

- Permanent Account Number
- · Voter ID
- · Driver's license

Social and Mobile Data

- Social sites verification
- Geotagging services
- · Calls, SMS log
- Apps data

Financial Data

- Goods and services tax
- Income tax return
- Tax deducted at source
- Taxpayer Identification Number

Utility Data

- Electricity
- Telecommunication
- Internet
- Water and gas

Credit Bureau Data

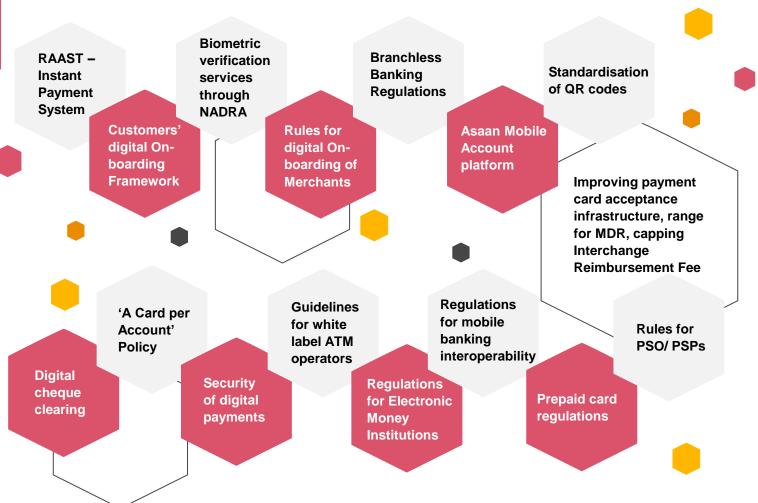
 Commercial and consumer bureau Provide physical touchpoints through low-cost agency banking model

Through the Business Correspondent model as it is known in India, and Agency Banking in Bangladesh, Kenya, Sri Lanka and other emerging economies, agents extend wide ranging banking services beyond cash transactions to underserved areas. They have access to all accounts, not just those with limited KYC requirements and serve the masses by leveraging low-cost technologies such as micro-ATMs, mobile PoS, biometric scanners etc.

- d. Operate a low-cost model backed by CAPEX light **cloud-based solutions** with service providers locally and abroad, for material and non-core functions and systems
- e. Outsource critical business and operational activities to other entities within or outside of the banking group
- f. Use Al and advanced analytics for faster; smarter albeit responsible decision-making, real-time insights and response to market disruptions. Certain regulators such as the Monetary Authority of Singapore have introduced principles for the responsible use of Al in the financial sector
- g. Test innovation, in collaboration with entities within the FS and non-FS sector through the regulatory sandbox
- Protect consumer data, with regulations for data protection and privacy introduced in respective regions, applicable to collection, use, storage and disclosure of personal information

Responsible innovation at the core of SBP's regulatory agenda

Over the years, SBP has introduced several enabling measures for digital banking and payments, including but not limited to:





In a recent revolutionary move, SBP has introduced cloud friendly policies for its regulated entities, enabling banks to use both onshore and offshore cloud service providers.

Other initiatives in the pipeline

There are certain other game-changing initiatives at various stages from conceptualisation to launch, including blockchain-enabled shared KYC platform and strengthening the Agency Banking framework. Apart from the above, SBP has been engaging with industry stakeholders on Open Banking.

With regulators in almost every region either evaluating CBDCs and smart currency issuance, or conducting pilots, this too has been on SBP's innovation-enabling agenda.

On the AI front, the Government has recently issued a draft on National AI Policy, meant to embrace AI use at scale.



SBP has been creating an enabling environment for the last many years, but a lot has to be done collectively as an industry.

Regulatory and policy intervention will help rapidly shape customer behaviors towards digital, which if left to normal evolution, may take another decade. It would also help create a multiplier effect in tax revenues."

Mr. Sharjeel Shahid, Group Executive - Digital Banking, United Bank Limited

S Digital on-boarding

With the launch of Customers' Digital On-boarding Framework in September 2021, around half of commercial banks in the country offer customers flexibility to open fullservice current and savings accounts through their mobile.

We conducted a digital on-boarding study in Pakistan, involving detailed analysis of the experience at certain commercial banks. Insights gained indicate opportunities for banks to further optimise acquisition journeys for better customer conversion, as elaborated in section 6 on customer experience.

To improve digital uptake, banks may consider deploying customer-centric; mobile-first strategies, leverage design thinking, enrich UI/ UX and establish strong governance around customer acquisition and satisfaction.

With respect to Roshan Digital Accounts offered to non-resident Pakistanis, the response has been quite encouraging with over 500,000 accounts opened till Dec-22, having received funds of over USD 5.5 million from different countries.

Digital lending

Digital lending initially commenced in Pakistan with certain banks accepting personal loan and credit card applications online, to others introducing instant auto finance facilities. There may be room to become truly disruptive and lend collaboratively with innovative players through customer data sharing.

Certain institutions have deployed few data-driven behavioral scorecards/ models for MSMEs and individuals, with scale planned to be achieved in terms of portfolio growth. Product suite ranges from vanilla offerings e.g. credit cards, to innovative solutions such as BNPL, embedded finance and working capital loans.

Enormous potential for seamless digital lending, harnessing transactional data and models

For banks, there may be vast prospects to lend digitally through data driven credit decisioning, as indicated by the disruption within the lending landscape through growth of SECP licensed digital lending fintechs.



Banks have fantastic data showing daily, hourly, and by minute basis; debit and credit transactions of merchants.

This can be leveraged to create a digital credit algorithm, enabling banks to lend at a single click."

Mr. Muhammad Yahya Khan, Group Head-Digital Banking, Bank Alfalah Limited

While banks work towards harnessing many possibilities data they hold has, these digital NBFCs have as of June 2022, disbursed cumulative loans worth over Rs. 33 billion to more than 2.5 million borrowers.

Targeting the unserved and underserved segments with instant nano lending, BNPL, and pay-day loans, their average loan size may range from Rs. 1,000 – Rs. 80,000, depending upon the nature of business and target markets.



Digital banking has massive potential to improve financial inclusion. Availability of alternative data can help evolve this process further. There is need for data-enriched credit bureaus in the country to enable banks in taking prudent credit decisions through a diverse set of data points."

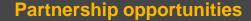
Mr. Sohail Aziz, Former Chief Digital Banking, Allied Bank Limited

Start-up ecosystem and opportunities for embedded finance

Particularly over the last two years, Pakistan has emerged as an important jurisdiction for some start-ups, with foreign investments across various industry verticals.

Since 2015, the country attracted over \$890 million, 2021 alone attracting \$350 million across 80+ deals. But with fears of global recession and geopolitical pressures, start-ups funding restricted to \$347 million in 2022, with the last quarter attracting a mere \$15 million – the lowest since early-2020 pre-covid levels.

Similar to trends prevailing in emerging markets, most investments have been made within B2B or B2C e-commerce, fintech and logistics.



These start-ups are disrupting the supply chain, with business volumes in billions of Rupees. They may now be playing a pivotal role in converting over-the-counter orders to digital, as emphasised by Mr. Muhammad Yahya Khan (Group Head – Digital Banking, Bank Alfalah Limited).

This provides banks with the opportunity to (1) enter the playfield, (2) collaborate with such entities, (3) leverage their data, (4) own capabilities to understand; calculate; and price risk and (5) increase their lending book through explicit and embedded finance options.



Eco-system banking is a promising trend that has the potential to revolutionise the financial industry. Done in the right way with the right partnership model, eco-system banking brings opportunities to drive new businesses, focus on areas of strengths by each player, and create win-win situations for all the partners. Banks could leverage this by bringing in new clients, offering their balance sheet and better client solutions".

Mr. Muhammad Aurangzeb, President & CEO, HBL

Industry stakeholders note that over 70% growth of courier companies today is attributed to booming e-commerce industry, growing in Pakistan at an unprecedented rate. There may be number of mom-and-pop stores, operating through Instagram, Facebook and WhatsApp on Cash on Delivery basis, not accepting cards but ready to accept online transfers. Such retail and e-commerce delivery payments can be revolutionised through mPOS. Recognising the opportunity to digitise payments, certain banks piloted mPOS application, providing merchants the option to set up more economical card payment mechanisms instantly.



Invisible banking on the rise

The uptake of start-up activity globally created inroads for banks to explore the world of embedded finance. Enabled by banks through open banking, Banking-as-a-Service (BaaS), white-labelled back-of-house infrastructure, embedded finance reduces barriers to complete an experience with consumer brands. According to Insider Intelligence, embedded finance is predicted to become a \$7.2 trillion opportunity by 2030.

Global Institutions are increasingly adopting this growing trend of invisible banking and readjusting their strategies. Examples of embedded finance continue to grow, from no click payments on ride hailing apps to point-of-sales loans from BNPL providers built into mobile shopping apps.

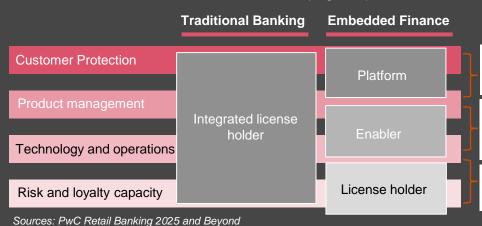
Moving towards embedded finance

New to Pakistan, it is another space that only few banks have started to explore. Banks in the country may need to assess how to play within this rapidly evolving landscape that provides an opportunity to augment the bottom line.

Focusing on infrastructure (in which banks develop and manage the technical and operational 'plumbing' of the future financial services eco-system), and on customer

experience (in which banks establish a strong brand and control all customer interactions across a wide array of products and services) will become key to creating a distinctive client proposition.

It is expected that larger players will be able to do both simultaneously, or through some combination of the criteria listed below, reaping the benefits of cross-collaborative innovation and developing new products and services that complement each business line's strategic agenda.



Platform aggregate services cross providers to offer a network of interconnected solutions, allowing customers to access effective solutions through a friction-less experience.

Enablers provide technology infrastructure and connectivity capabilities via APIs and banking as a service – these are the pipes through which platforms and license holders exchange information and data.

License holders plug offerings into platforms to increase distribution and improve customer retention.

1 Metaverse

Aiming to be one-stop-shop for virtual commerce, advising, metabanking and crypto-dealings, international banks have only recently entered the metaverse while hospitality, retail, gaming, fashion, and even food brands earlier.

JPMorgan Chase became the first bank to open a lounge and an office in metaverse while HSBC plans to open an office on Sandbox. American Express filed trademarks for a virtual marketplace and cryptocurrency services. The first ATM has also been launched.

Pakistan entered the metaverse with the country's first mega web3 project, Cloud City Metaverse. Massive uptake with revolutionary business opportunities can be expected for us. Similar to global trends, few banks in Pakistan are either considering or have already set foot in the metaverse. How bright the future will be, depends on use cases for consumers and enterprises, but more importantly, regulatory stance, support and intervention critical to dive into this unexplored zone.

Customer experience:
A key ingredient to
win



Customer experience: A key ingredient to win

Over the past decade, banks around the world have been investing substantially in customer experience (CX), a foundational driver for brand success.

Institutions which have prioritised the delivery of superior CX have witnessed elevated rates of referral, higher wallet share, in addition to greater opportunities for cross-sell and upsell.

To be successful in business transformation initiatives, certain banks in Pakistan have realised that CX has to be rooted into core business strategy.

They acknowledge the need to be clear about who target customers are, what they really want, and how that translates into real benefits for the business.

"

There is a huge opportunity to improvise our digital on-boarding journeys and data driven processes to enable seamless, near real-time service delivery experience for clients. The industry must continue to invest in digitisation, personalization and innovation to ensure that clients remain satisfied."

Mr. Muhammad Aurangzeb, President & CEO, HBL

Know Your Customer Context...

Today's customers are spoilt for choice when it comes to where, when and how they engage with a bank. They are more educated, aware, avid social media users, vocal and do not shy away from raising voices on any platform. They have more options in the market, greater access to information and tend to be loyal to the best deals instead of a particular brand.

Their attributes are what disruptive market players view as an opportunity, thus attracting more customers who look out for best price and speed in a transparent transaction, a trend strongly observed in Millennials and Gen-Z.

Customers are now accustomed to hyper-personalised, friction-less experiences in digital interactions and expect the same from banks.



An ever-increasing risk of customer churn has motivated financial institutions internationally to examine their operations more critically and identify headroom to offer greater customer-centricity and personalisation, thus retain and grow market share.

They are taking a broad view of CX since it's the aggregate impact of every interaction a customer has with the bank's product, service, channel, personnel and brand.

Certain incumbents internationally, as may also be the case locally, continue to pursue multi-channel engagement strategies that target general audiences, leading to broken or incomplete journeys that may reflect poorly on the brand.

Precisely for this reason, banks in Pakistan may prefer going beyond interpreting obvious behaviors to deeply connect with the customer as a whole person, based on more-refined understanding of their underlying influences, motivations and aspirations.



There may be several entities that have well-thought-out business and customer strategies, but which are not accompanied by well-executed plans.

Under pressure to grow revenues, banks may generally run the risk of investing heavily in creating experiences their customers may not appreciate as they might not have that expectation.



Customers have simple needs. They want to be served with respect, on time, all the time."

Mr. Sharjeel Shahid, Group Executive – Digital Banking, United Bank Limited



Re-configuring the bank – putting customers and their data at the centre of everything a bank does

Consistent delivery on brand promise requires revisits and refinement to CX strategies, organisation and governance models on an ongoing basis. Institutions may need to be prepared to constantly change and customise, as agile solution delivery has to evolve with the customers.

This does not only imply the incorporation of technology into core capabilities but also entails deeper CX led transformation across the entity, changing legacy culture, mindset and performance/ accountability structures, putting customers and their data at the heart of everything banks do.

In addition to modernising infrastructure to optimise data driven growth, banks have started to use data to build emotional connections with customers, identify new segments, create streamlined acquisition processes and customer-centric experiences as fintech firms do. They are also embracing new technologies and platforms, tearing down internal silos and other barriers.

Given these international developments, their appreciation for data and intent to 'Know Your Customer Context', certain banks in Pakistan are strategically investing in emerging and big data technologies as they gear up to capture customer mind and wallet share.



Banks which are going to be adaptive, agile and will collaborate, are the ones that will be future winners."

Mr. Muhammad Yahya Khan, Group Head-Digital Banking, Bank Alfalah Limited

Long mile to go despite significant investments

>90%

of individuals surveyed by a leading cloud platform provider, want their questions answered quickly, but just

58% experience this. The challenge for banks is daunting as they embrace artificial intelligence, intelligent automation, Internet of Things, machine learning, and other emerging technologies to better serve customers.

Whether to simply stay relevant with the changing environmental dynamics, prevent market share bleed or create a replicable digital model, these banks have been investing billions. Despite this, they may have restricted abilities to generate desired Rol due to their size, geographically diverse footprint, legacy technology, hierarchal structures, culture, and human dependencies. Adding to these is the intense competition incumbents face from non-bank disruptors earlier in the form of fintechs, and now also from Big Techs as they unbundle

Despite investing billions, spending may not be translating into proportionately higher NPS

	Investments in digital transformation	NPS
Large global bank	\$205-210M	25 - 30
Top UK bank	\$2.5 - 4B p.a. since 2018	50 - 55
Leading global bank	\$B p.a. since 2018	50 - 55
UK-based bank	\$1 - 2B	30 - 40

Sources: PwC proprietary insights and analysis, banks' annual reports, media reports

banking, leveraging their core assets – data, third-party relationships, technological superiority and compelling partnerships.

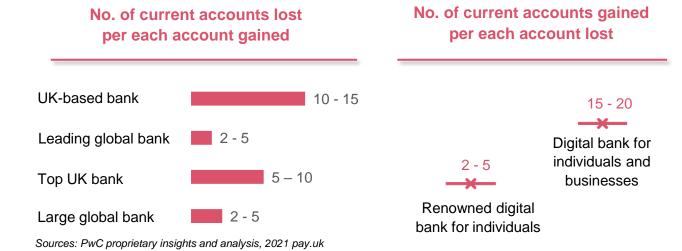


Emerging fintechs and digital banks may lead by offering superior experience and personalised digital banking services to capture the market."

Mr. Irfan Siddiqui, President and CEO, Meezan Bank Limited

Resultantly, in international markets customers are willing to switch...

With the option of Current Account Switching in the UK, customers are moving to digital banks



PwC Pakistan Digital Banking Experience Survey "Banking in the Digital Age: Exploring Pakistan's Potential", showed similar trends when it comes to consumer inclination for switching banks and willingness to shift to digital banks.



willing to switch to another bank if it meets their needs better than their primary bank



comfortable in opening an account with a digital bank

Insights from PwC Pakistan Digital Banking Experience Survey uncover what motivates a customer to switch to another bank

Factors enticing switch from the primary bank







Customer care

International acceptance

Attractive mobile banking propositions



39%



☆ 37%



⟨2} 35%

Value added product features

Rewards

Service agility



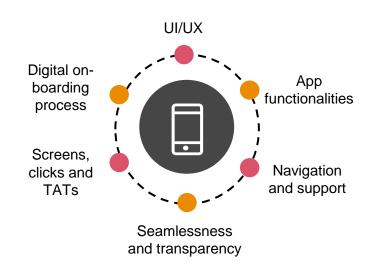
In Pakistan, similar to global trends, banks in general may be facing structural challenges along the customer life-cycle to:

- identify and tap into new segments
- provide seamless on-boarding experience
- understand the cognitive, emotional and behavioral nuances that influence customer led journeys
- deliver smart, contextualised content through the right channel at the right price
- diversify products and value propositions
- identify cross-sell and up-sell opportunities
- sustain customer loyalty
- reduce customer churn

PwC Pakistan digital on-boarding study

We also conducted one of the first types of a digital onboarding study in Pakistan, involving detailed analysis of the experience at certain commercial banks, offering customers the flexibility to open full-service current accounts through their mobile.

Various dimensions were analysed cutting across:



Insights gathered highlight certain opportunities to further streamline acquisition journeys.



Takes an average of ~80 clicks to open an account - slightly lesser than UK high street traditional banks' average



Large set of requirements:



~4

~40 fields

fields per screen

% of banks requiring branch/ ATM visits for biometric verification





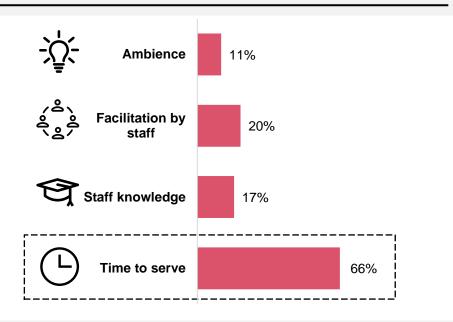
~20 minutes to complete the

application online



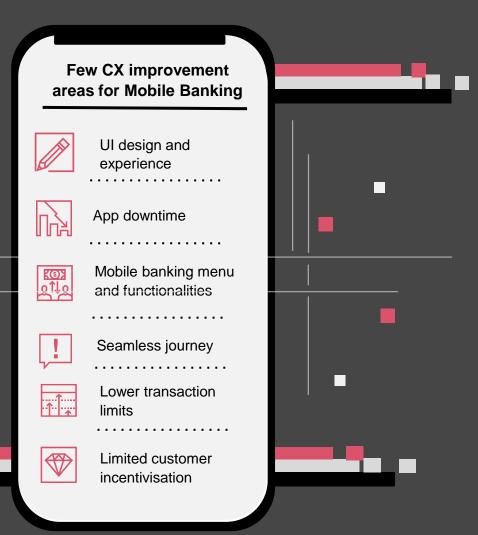
of the banks have service and solutionoriented attitude of call centre staff PwC Pakistan Digital Banking Experience Survey "Banking in the Digital Age: Exploring Pakistan's Potential" also provides insights for declining preference for branches.

Concerns during branch visits



Millennials and Gen Z are the most sensitive regarding 'time to serve'





Top 5 opportunities to further optimise digital onboarding journeys:

- Customer-centric, mobile-first strategy for digital customer acquisition
- 2 Design thinking for friction-free experiences
- Well-designed system architecture and optimal processes for minimal interruptions
- Stronger governance and performance metrics around conversion, abandonment, TATs
- 5 Balancing CX and compliance

Banks most likely to lead in the new normal in Pakistan will be those that place the customers at the center of their digital transformation efforts.

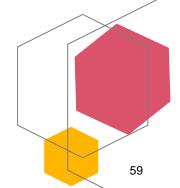
Certain institutions are already stepping beyond brand repositioning to enhance and deliver greater customer journeys, through integrated CX models characterised by Voice of Customer, Voice of Employee and Voice of Process. By prioritising more agile ways of working and increasing efficiencies, these banks may be better poised to benefit from greater customer loyalty, better productivity and a more engaged workforce.

However, broader industry focus may be needed on CX with considerable investments in understanding customer demands, how they interact with banks and what the moments that matter are. Banks may have to create feedback loops that allow learning from customer patterns and behaviours and adapt services to meet the consumers' ever-changing needs.



Data needs to be seen with due recognition – as an asset and should be used to the data owners' advantage. Only then would this translate into a delightful experience for customers."

Mr. Sharjeel Shahid, Chief Digital Banking Officer, United Bank Limited



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Rise of Islamic Banking in Pakistan



Rise of Islamic banking in Pakistan

In recent years, Islamic Banking Industry (IBI) has been growing at a rapid pace, not only in Muslim-majority countries but also in other parts of the world. Pakistan has the second largest Muslim population, with Islamic mode of banking receiving overwhelming response from the people in general.

Islamic banking was introduced around two decades ago and the industry has shown significant growth since then. IBI now accounts for 20% share in total assets, 25% in advances and 22% in deposits of the overall banking industry as of Dec-22.

At present, IBI network comprises 22 Islamic Banking Institutions, including 5 full-fledged Islamic Banks (IBs) and 17 conventional banks (~80% of total) having Islamic Banking Branches (IBBs).

Strong growth momentum may be attributed to, among others, key role played by SBP in providing an enabling environment. Besides introducing a supportive regulatory and supervisory framework, SBP is actively engaged in promotion and capacity building of IBIs. SBP has also been proactive in issuing regulations and guidelines in creating level playing field for IBs. Complementing these initiatives, the Government has introduced different policies and incentives to encourage Islamic banking.

22 Islamic Banking Institutions

5

Full-fledged Islamic Banks

7 Conventional banks with Islamic banking branches



Progress and market share of Islamic banking industry

According to SBP statistics, during the period from 2017 to 2022:

Share of IBI's total assets increased to

20%

From 12%

Share of IBI's deposits rose to

22%

▲ From 14%

Assets recorded at

Rs. **7,229B**

by Rs. 4,957B



Advances surged to

Rs. **3,113B**

▲ by Rs. 2,352B

Deposits crossed Rs 5 trillion mark to reach

Rs. 5,160B

▲ by **Rs. 3,275B**

Investments rose to

Rs. 3,051B

by 471%

Growth potential: depicted by insights from a study conducted by SBP and Department for International Development, UK

67%

sole-proprietors prefer only Islamic

Willing to pay more for Shariah compliant products



62% of

45% of

banked respondents

un-banked respondents

74% of banked willing to switch to Islamic banking

69% of banked indicate inability to switch to Islamic, citing no Islamic banking branch in vicinity

64% of non-individuals prefer financing on PLS basis



Islamic banking has added considerably to the financial inclusion. As the pie is getting bigger, this does not mean share is being taken away from conventional banking system, it is actually adding New to Industry."

Mr. Irfan Siddiqui, President & CEO, Meezan Bank Limited



There is inherent customer preference for switching to Islamic banking. Not only is the unbanked market available, but conventional market is also transitioning to Shariah compliant banking."

Mr. Yousaf Hussain, President & CEO, Faysal Bank Limited

Conversion to Islamic banking

In April 2022, Federal Shariat Court instructed provincial and federal governments to complete the necessary legislative process to ensure a Riba free banking system in Pakistan by Dec-27. This decision has significant implications for the industry as all conventional banks are to be converted to Islamic modes by the said date, based on the current state.

While conversion to Islamic banking is a significant step, it is not without challenges. Considering that majority of banks have IBBs, they may have some experience of relevant products, services and technology. However, Islamic banking size and maturity at these conventional banks may largely vary.

They can hence be divided into following 3 broad categories:

- a) banks operating with significant number of IBBs
- b) banks operating with fewer number of IBBs
- banks operating without any IBBs.

Intensity of complications associated with conversion may therefore be dependent on the scale of maturity. Following are some key areas where banks might face challenges, which can only be addressed by executing a comprehensive, holistic Islamic transformation and conversion programme:



People & Culture



Retail Business



Corporate & Investment Business



Non-Performing Loans



Marketing & Communication Plan



Technology



Policies & Processes



Retained Earnings



Borrowings & Treasury



Accounting Policies & Procedures





People & Culture

People are the cornerstone of successful Islamic conversion. There may be limited set of capacity/ capabilities forcing banks to considerably upskill resources on Islamic finance and Shariah compliant products.

Depending on maturity, banks with IBBs may have some head start in terms of expertise. However, capacity building is key for sustainable progression. For banks without IBBs, transition may involve more rigorous efforts involving induction, with inherent complications in view of restricted supply.

Perhaps one make or break consideration is how to inculcate real Islamic banking cultural values and conduct including persistence in cause and approach.



Policies & Processes

Converting to Islamic banking requires introduction of new policies and processes, aligned with Shariah principles and relevant regulatory requirements. This may entail substantial investments and efforts, and involve talent augmentation through a combination of induction and upskilling measures to support operational readiness.

Banks with IBBs may already have some set of policies and procedures which they can leverage, depending upon their intended diversity of operations. However, they may still have to review and update existing practices to align with expanded scope of Islamic Banking in terms of business line and product diversity.



Technology

One of the major enablers for conversion is technology infrastructure, capable of providing requisite functionalities and scale to accommodate transformation and operations on an on-going basis.

For banks having any IBBs, some form of core technology platforms may be available. Depending on current Islamic product sophistication/ scale and destination/ growth model post conversion, certain institutions may significantly augment or amend systems and create scalability.

For those without Islamic Banking model, intensity of challenge may be manifold with change involving deployment of new systems, following rigorous implementation cycle.



Retail Business

Retail banking may probably be one of the largest impact areas in the conversion journey for banks with IBBs or otherwise. For banks without IBBs, an extensive deposit or lending product development, review and approval cycle may be followed by systematic conversion guidelines and consent on the lay-out of converted products. Product designing and benchmarking are to be complemented by requisite documentation changes which may be onerous particularly in the case of lending segment.

Portfolio conversion may entail largest set of complications arising from customer consent requirements, risk of churn in different products/ schemes, level of readiness to

contain this and strong governance on conversion process, targets and achievements.

Banks with IBBs may prefer product suite augmentation in which new product development protocols may have to be followed. Nature of product and portfolio conversion may remain similar to those highlighted above for banks without IBBs, however, intensity and impact may differ.

Portfolio exits through divestment or other options may also have to be explored where no product alternates are available or where commercial feasibility is challenged.



Retained Earnings

Conversion of retained earnings is a critical consideration and banks may need to formally raise this with Sharia governance boards for resolution.



Corporate & Investment Banking

Depending on the presence of Islamic banking window, thrust may have to be on designing entire product suite for corporate and investment banking or new product introduction to extend the menu.

For banks with IBBs, product benchmark exercises may enable product conversion in a streamlined manner to create Shariah compliant versions.

As documentation requirements materially differ from conventional modes, those may also take due time to design, approve and launch.

From portfolio conversion perspective, risk of customer churn may be moderate/ high owing to change in banking mode and extensive documentation formalities. Portfolio conversion may need to be carefully planned with roadmap, targets, and achievements clearly identified, complemented by a robust conversion process, guidelines and support framework for relationship managers and others concerned.

Customer awareness and training is pivotal to reducing churn and streamlining the portfolio conversion journey.

For products where there may not be any alternates or commercial assessments indicate least feasibility, exit strategies may have to be employed exercising divestment or other options.



Non-Performing Loans

Managing NPLs is a major challenge for banks, regardless of their being conventional or Islamic. However, converting to Islamic may bring forth incremental NPL challenges. Banks may need to develop new NPL management and collection strategies and processes compliant with Shariah principles, such as in relation to restructuring or rescheduling loans.

Banks may also have to introduce clear Shariah approved policy for due application of any recoveries. Those having IBBs may have some expertise in this domain, however, it will be imperative to gear up capacity.



Borrowings & Treasury

Borrowing and treasury will also have similar product and documentation implications, as applicable broadly to retail and corporate/ investment businesses, albeit with varying complexities and implications.

Banks may have to either ring fence or dispose conventional portfolios that are not convertible into Shariah compliant modes.

Supply of these products may also have to be continually assessed to mitigate any emerging risk on a proactive basis.



Marketing & Communication Plan

Marketing and communication plans are targeted to both internal and external stakeholders, and set the tone for any successful conversion and underlying organisational transformation.

Designing customer awareness campaigns driving knowledge of new or converted products is critical to ensuring that growth or conversion remains sustainable, with bare minimum risk of churn and consequent financial implications.

Another important consideration while crafting marketing, communication and messaging strategies is to amplify brand perception while maintaining alignment with Shariah principles and regulatory requirements.



Accounting Policies & Procedures

Banks with IBBs may already have accounting policies and procedures aligned with Islamic products, which may be leveraged during conversion. However, for any new products, accounting treatments may have to be documented and incorporated into technology platforms.

For banks without IBBs, the task may involve more capacity consumption as frameworks may have to be developed from scratch, with relevantt systems deployed to support the entire cycle.

Portfolio conversions may also involve requisite accounting modifications and associated financial implications, all to be addressed in a carefully conceptualised conversion and transformation programme.



Transition to Islamic banking must be planned meticulously. Every aspect be it systems, products, processes, HR, or business feasibility, needs careful evaluation from an implementation perspective.

Customer is imperative to the process and his/ her sentiments must be in focus at all times. One of the biggest challenges was mindset conversion. We had to transform people through conversion-oriented capacity augmentation. Mindset and culture transformation that we were able to achieve was the most significant."

Mr. Yousaf Hussain, President & CEO, Faysal Bank Limited

8.

Enterprise transformation for optimised performance





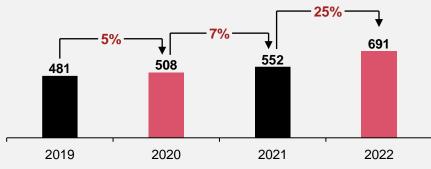
Evolving banking landscape

Across the evolving banking landscape, institutions are challenged to address competition dynamics, digitisation, regulatory pressures and other market movements with agility and velocity. Traditional growth models are a thing of the past, as regulations, digital adoption trends and tech modernisation drive the urge to re-assess business and operating models, product offerings and customer experience.

To stay competitive, banks may need to convert constant disruption into more efficient, agile operations, not just keep pace in the face of change but be confident to accelerate into it. To this end, industry players may consider pursuing a sustainable revamp agenda.

Now, also with the rising cost of operations, there are significant opportunities for institutions to initiate their transformation journeys, move away from legacy technologies, increase operational efficiencies through digitisation and adopt emerging technologies.

Industry's total operating expenses (Rs. in billion)



Sources: PwC proprietary insights and analysis, SBP

Digital adoption

The pace of digital adoption has moved into top gear, more with the onset of pandemic in 2020. This along with emergence of fintechs, EMIs and going forward, digital banks in Pakistan may likely create more disruption necessitating our institutions to strategically rethink, transform and realign their operating models for a purpose agile organisation.

Future-proofing the business and operating models

Any business is about its customers, its people, its processes and how those are managed. By focusing on how people work, what they do and why they do it, banks can refine the execution of their business and operating models for significant efficiency and productivity gains.

To this effect globally, banks have executed various programmes entailing the following to yield significant advantage:



"

To remain successful and competitive in the financial space, transformation, technology and operational excellence related initiatives have to be viewed on an ongoing basis rather than as a one-time opportunity. This should be ingrained within the DNA of every institution."

Branch re-modelling

Mr. Muhammad Aurangzeb, President & CEO, HBL





PwC research and analysis identifies few key industry pain points as follows; which are also relevant for the Pakistan banking industry, and related impacts international institutions were able to achieve through holistic transformations:

Customer experience & penetration

Capacity/ FTE release/ cost rationalisation

Process optimisation/ Revenue/Income uplift/ business growth

inertia and break free of such limitations should become an easier one to make.

Industry pain points

· Higher on-boarding TATs/ wait time

- · Lower CSS and NPS
- · Higher customer churn

- · Mounting cost pressures
- Declining employee productivity
- Lack of sophisticated workload assessment models
- Inadequate system utilisation
- Redundant activities/ hand-offs
- · Major potential for centralisation/ automation

automation

- Stagnant business growth
- · Loss of business due to economic conditions
- Declining NFI to total income

Transformation impacts from select global banks

20-40% improvement:

- Customer on-boarding/ wait TATs
- Service standards
- · NTB acquisition
- · ETB penetration
- CSS and NPS

- Productivity gains > 20% - 30%
- · Capacity release 200 to 600 FTE
- Cost reduction > 15% -25%
- 10% 20% branch traffic migrated to digital/ ADC channels

- 20% 40% improvement:
 - System optimisation
 - o Process steps/ handoffs
- Centralisation > 100 activities
- RPA > 200 processes
- Intelligent Automation efficiency gains > 40% -60%

- Revenue > 10% 20%
- Cross sell > 15% 25%
- Sales conversion > 20% -30%
- Profit > 20% 30% in 2-3 years
- Rol 2 to 3 times in 2 to 3 years

We have examples of banks in Pakistan taking initiatives relating to technology modernization, while some are also in the process of implementing emerging tech including Intelligent Automation (IA)/ Robotic Process Automation (RPA) albeit at a relatively cautious pace.



Transformation relates more with people and culture than technology. Its about mindset and fresh perspectives, challenging the status quo and not tying down to legacy ways of managing business."

Mr. Sharjeel Shahid, Chief Digital Banking Officer, United Bank Limited

Digital transformation

Transformation is daunting and, in many cases, does not always live up to expectations. This is why it must be given every chance of success. It is imperative for those running legacy tech platforms and processes that they transform sooner rather than later.

The real winners will be those who recognise that such venture is not a one-off exercise but a process to ensure ongoing change is achievable. If the alternative is standing still, shackled to old ways of working and legacy technology while competitors pull ahead, then the decision to overcome





According to a recent **PwC Annual Global CEO Survey**, most banking CEOs believe skills gap is "undermining their organisations' ability to innovate effectively and provide a winning customer experience."

Globally, banks have been investing billions of dollars in multi-year projects to digitally transform themselves; taking a customer-led, digital-first approach to all aspects of their business - from business models, to how customer experiences are delivered, their processes and operations. Transformation can only happen when banks rethink how they serve their customers, how they can develop new capabilities and products, and how they can use technology to enable customer success.

Given legacy challenges, culture, and limited cohesive strategic sponsorship; not all institutions may have been able to provide a truly digital experience to their customers. Added to these are implications associated with restrictive tech, people and process agility, data limitations and product centricity which further limit institutional abilities to explore real eco-system banking, pivotal to creating personalised, contextualised experiences.

Key digital transformation pillars



Harness innovation and define business strategy

Assess mega trends and envision the future. Identify innovative new digitally enabled products, services and business models. Execute on the vision with a technology enabled strategy



Invest in data and analytics

With opportunities to combine information from across the organisation, enabling a unified view to gain more valuable insights from already owned data



Master enterprise agility to increase resilience

Embed the agility and innovation that will allow to evolve in the future. Put in place new technology capabilities which accelerate delivery of business strategy



Building a digital-savvy workforce

People drive transformation. There is a need to have in place the right digitalsavvy leaders together with capacities built for workforce of the future



Create value through cost optimisation and growth

Reduce costs and invest in strategic ventures. Optimise the organisation and right size the cost base to meet long-term strategy. Identify strategic bets and invest the capital released by efficiency initiatives in new growth ambitions



Adopt latest technologies

Integrate emerging technologies into all areas of business, upgrade existing processes, and change the way these work to fit the demands of technology



Reshape your culture and operating model for business agility

Build a strong operating model to capitalise on any opportunity. Prepare for future disruptions by building the culture critical to thrive in a digital world. Address complex operational and delivery challenges through short projects

Cost optimisation

Today, more than ever, the cost side is crucial, and banks internationally as well as locally have undertaken many cost optimisation initiatives - frequently with a lot of efforts but not always with the intended success. Personnel-intensive banking has a lot of unrealised potential, particularly in the back office. A crucial lever that lowers the cost base while also securing new business opportunities is the employment of right reorganisation measures and digital technology.

Certain local banks have gradually upgraded their legacy systems, exited low-return businesses, undertaken time and motion studies or workload assessment for different positions, converted branches to energy efficient solar power, improvised premises area etc. Time is apt to assess where holistic programmes could be run/ re-run as operating costs particularly compensation, technology, marketing and property etc. are mounting, as mentioned in Section 3 "Industry's financial performance" (page 26).

To adapt to the ever-changing landscape and manage rising costs; there are significant opportunities to rethink the entire operating model and be future-proof. Banks may consider conducting radical strategic reviews while simultaneously focusing on short and mid-term improvements.

Increase in Operating Expenses (Dec-2022 vs Dec-2021) **NBP** HBL (UBL 37% 34% 34% 33% 33% 30% 22%

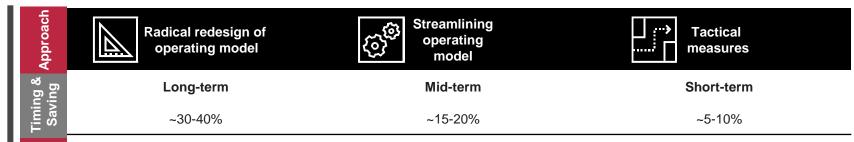
Sources: PwC proprietary insights and analysis, banks' annual reports

Results of PwC's three-tiered simultaneous approach show that 40% of the cost base reduced over three to four years, with most results achieved in the second and third year.



Banks need to work on minimising their costs in terms of operations, redundant processes, or extra nodes in decision-making that add no value to the process in such a way that the requirements of the future will not necessitate going back to the drawing board as far as the technology architecture is concerned."

Mr. Irfan Siddiqui, President & CEO, Meezan **Bank Limited**



- · Requires a fundamental rethink of the operating model, often involves **Description** extensive changes to the organisation and can require up to 3 - 4 years of phased roadmap to be put in place
 - Examples include end-to-end process digitisation and a revamped IT landscape
- Selective measures that impact parts of the business in mid-term (1.5 - 2)years)
- · Changes to processes that require a medium-term timeframe
- Examples include BPR, process automation/ centralisation, capacity planning exercises
- Tactical measures can be implemented quickly and may not always require deeper transformation
- These measures can fund the longerterm initiative e.g. BPR to reduce process TATs
- · Examples include discretionary spend review, applying rigorous zero-based budgeting

Tech optimisation

Changing landscape due to new market entrants

Technology has dramatically changed banking, with Bigtechs and fintechs clawing market share from global incumbents. New and nimble competitors, serving through low-cost models, continue to emerge with more efficient solutions, allowing them to add on new products and services demanded by digitally oriented customers. In Pakistan, fintech journeys have picked-up some speed and with the emergence of digital banks, traditional players may feel challenged in the mid to long run, the same way as their global counterparts.

Pandemic and digital banking implications

Covid-19 has also played a major role in accelerating the shift to digital banking and customers have come to expect the same mobile-centric solutions from their banks as in other areas of their lives. They want to be able to switch easily between online banking, using an app or visiting a bank branch. At the same time, banks continue to navigate an increasingly complex and costly regulatory regime.

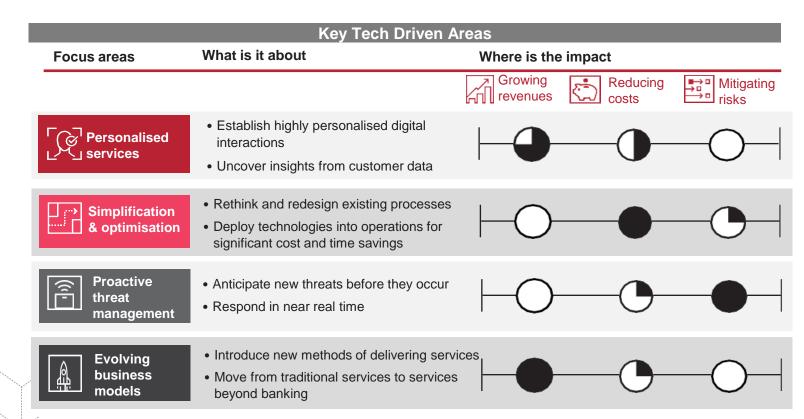
Pillars for successful tech transformations

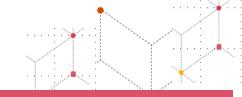
Adapting to the fast-changing environment is a question of survival. There are essentially two main pillars around which banks can build a successful foundation for tech transformation.

First, they may continue to modernise IT systems. Banks might be having legacy platforms built in piecemeal over decades and an overhaul may be preferred. Institutions also suffer from data and technology investments that are siloed by function or business and not clearly connected to organisation's strategic direction. Banks today may need the technology stack to be more flexible, secure, and scalable. A further streamlined and data-rich platform aligned with enterprise-level technology and data strategy may enable banks to anticipate demands of their customers and offer relevant services.

Second, institutions may also adapt to new ways of working, with more agility and digital skillsets. They may have to create an environment which allows innovation to flourish.

According to PwC analyses, applying an agile method of working can increase efficiency by 20% and productivity by around 30%, while also driving cultural change.





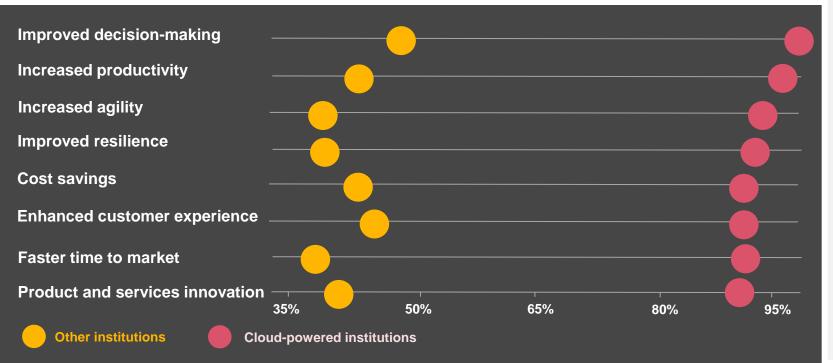
Cloud transformation

Cognisant of the benefits this evolving technology has to offer, SBP has issued the Framework on Outsourcing to Cloud Service Providers with the objective of providing an environment for banks to use capex-light cloud-based models for core and non-core operations.

Globally, cloud transformation is taking the centre stage of successful digital revamp measures, with many financial institutions using cloud services for critical and other technologies. In line with global trends, banks in Pakistan may consider devising cloud programmes along with roadmaps and operating model and align the same with enterprise-wide technology and data strategies to seek maximum benefits.

Benefits of using cloud-based technology model

As per PwC 2023 cloud business survey, cloud transformation is more likely to create measurable value in the following areas:



Challenges in cloud transformation

No transformation is without underlying challenges, and such is the case with cloud implementation as well. Banks may remain mindful of any bottlenecks and ensure effective mitigation for smoother journeys. Some of these challenges may include:



Lack of clear ops model understanding—from risks and regulations to customer expectations, from how customer journey will unfold to how things might go wrong



Seeing cloud only as a cost-saving operational IT project instead of a catalyst for business value creation



Choosing the right cloud service provider with deeper knowledge of what is required to build a cloud solution that delivers business value



Rapidly changing operating environment and regulatory landscape



Data governance, privacy and security considerations



Risk management including proactively identifying and mitigating new/ emerging risks from cloud implementation



Talent availability and competency for cloud transformation



Cloud transformation journey

Cloud transformation may be carefully planned and aligned with the institutions' business, technology, risk, compliance and data strategies. Like any such venture, it is a medium to longer term programme which may take 2-3 years to completion and requires:



Ownership of the Board and senior management



Involvement of all business and enabling functions (by not treating it only as a technology initiative)



Setting clear and practical objectives and KPIs for continuous monitoring

Open API architecture

With innovation at the core of technology agenda, together with the objective to provide avenues for better customer experience, banks may also need to put in place an effective Open API technology infrastructure, enabling:

Collaborative environment that empowers customers, accelerates innovation through partner eco-systems and responds to opportunities with accelerated time to market

Secure operating environment for partners to work together and develop innovative, integrated banking and related financial services that improve customer experience

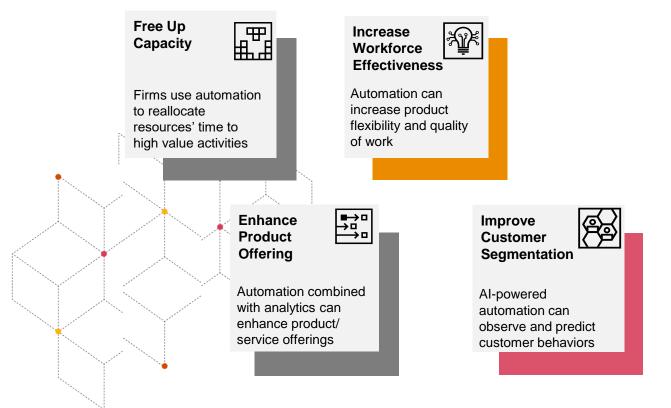
Through open API architecture, banks may focus on creating alliances and an eco-system where partners collaborating with the bank may offer large set of possibilities to customers.



Emerging Tech - AI, RPA/ IA

Emerging tech is central to enabling the next generation banking enterprise – one that focuses on the customer and relies on real-time insights through streamlined processes. International institutions are adding layers of intelligent automation e.g. Artificial Intelligence (AI) and Machine Learning (ML). These complement the earlier RPA journeys primarily intending role/ process automation through very efficient task bots and yielding much higher RoI by focusing more on economic and business value add.

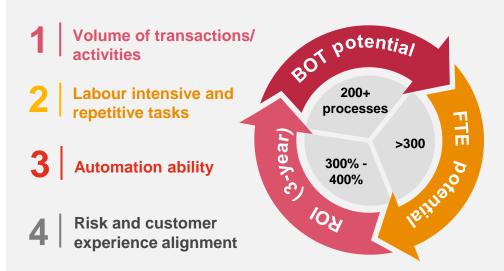
While certain banks in Pakistan have initiated implementation of disruptive technologies particularly centered around process automation through RPAs, the pace may need reconsideration, based on feasibility assessments and strategic planning, to unlock the full potential it presents.



Banks may consider evaluating which emerging technologies are key to accelerate their transformative pace and prepare for future trends. Critical technologies including AI, RPA/ IA, ML and Big Data already have a high degree of impact across the banking sector globally.

Effective implementation of such technologies requires a systematic journey for delivery of a holistic emerging tech drive. This comprises a well thought out strategy, roadmap, governance and operating model, aligned with overall digital vision.

A key success factor for any RPA/ IA programme is the way processes are identified and analysed. For this purpose, banks may identify good candidates for automation based on factors such as:



Branch remodeling

The above-mentioned changing trends and resultant transformations also call for banks to revisit their branch business and service models, and to align them with the overall enterprise business/ operational strategy.

While Pakistan's dynamics are unique, there is opportunity to learn from enablement in relevant markets such as Singapore, Vietnam, Indonesia, India etc. It is expected that branches will continue in the foreseeable future given customer preferences for face-to-face interactions and hybrid experiences, but role of a part of branch network may gradually shift to advisory instead of transactional activity that can otherwise be executed digitally.

The right strategic direction for branch design requires decisions along several "building blocks", while responding to customer and business requirements. This involves first understanding what motivates customers to visit the branch. and then redesign customer journeys for better branch experience with improved offerings, service standards, convenience and self-service to reduce queues.

> Banking industry in Pakistan is adopting new technologies and investing in operational excellence as it gets more competitive and responsive to customers demand for speedy and seamless delivery of products and services but there is still a long way to go. These efforts will definitely help in achieving strategic goals of serving customers at scale and optimising the cost-of-service delivery."



Building blocks



Main considerations



operating model

Branch



Products, services. channels

Which products and services should be offered in branches (and in each branch type)? Which products and services should only be provided in digital channels?



Branch models and roles

- And how should migration be handled? Which branch models to consider in which area (e.g. smart branch, hybrid model)?
- Which banking and non-banking roles should be included in each branch model (e.g. more focus on advisory role than transactional roles)?



In branch automation level

- What is the right teller/ device ratio for every branch type?
- Which activities should be restricted in each branch model?
- What are the tech considerations to enable new branch models? (e.g., telepresence, intelligent call routing)



Operations and processes

- Process variances to account for different branch models
- Process improvements and back-end support to deliver on expectations
- Process automation



Customer acquisition

- Which client segment is strategically relevant for each branch type?
- What should be the customer acquisition and penetration strategies for each branch model?



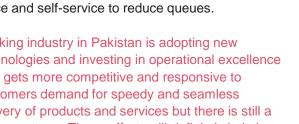
Queuina approach

Basic single queue/ queuing by visit type (transaction, sales or service)



Layout

- What are the principles of layout that should be executed in different branch models?
- What should be the size (based on the number of customers and employees)



Mr. Irfan Siddiqui, President & CEO, Meezan Bank Limited

Risk Management:
Embracing risks in the face of disruption



Risk Management - Embracing risks in the face of disruption

Risk environment changing at a high velocity

The financial world is very different from what it was few years ago and so is the risk environment in which banks operate. Change is fast and disruptive.

Globally, banks that have stood out from the pack have not just managed risks. They have taken on risks with confidence.

These institutions have an agility advantage backed by effective risk management tools, technologies, and right resources engaged in making risk-informed decisions at the right time.

In these times of rising economic volatilities and fast paced digital disruption, there is need to support business agility and to contribute proactive and optimum risk value. In an environment where change is constant, only strong risk and resilience capabilities can provide a real competitive edge.

Industry players in Pakistan may be operating at varying levels of risk maturity. Depending on their current state, as they plan future progression to augmented risk capability model to better embrace uncertainties and capitalise on opportunities, rejuvenated focus may be on:

- (1) true inculcation of ERM covering non-traditional, emerging risk categories
- (2) more holistic and integrated risk identification
- (3) dynamic, data driven risk assessments
- (4) representative quantitative models across risk streams
- (5) risk transformation for greater integration and efficiencies



Credit risk management

Credit risk dimensions have changed manifold due to sharp and sudden shifts in Pakistan's economic outlook in 2022 which may alter portfolios' underlying risks/ quality going forward. The ongoing circumstances may warrant credit risk functions to be significantly upskilled and kept dynamic to manage varying risk profile.

In 2023, we may also see some contraction in credit demand. In the wake of a cautious economic and credit outlook, banks may consider reassessing their (1) risk strategies and appetite, (2) customer segments and products, (3) risk acceptance criteria (4) rating models/ scorecards, (5) portfolio management capacity, and (6) related tools and technologies, to optimise lending books.

Augmenting national data infrastructure for alternative lending

Responsible banking demands that banks deploy renewed risk strategies for management of existing portfolios and penetration into existing and new lending segments. This can be achieved by distinguishing between good/ bad borrowers and ability/ willingness to repay through access to repayment capacity indicators which will require an innovative shift in mindset. Further, increasing credit risk sensitivities due to rising interest rate risk coupled with the impacts of economic challenges require proactive and data-enabled credit portfolio management. However, major challenge continues to be availability of data, for which there is a need to augment national data infrastructure and eco-system by establishing/ significantly enhancing various records/ registries including credit, land, collateral etc. This may not only accelerate progression towards documentation of economy but also enable efficient financing.

Globally, such infrastructures have been set up to make borrower's information and credit history available for scrutiny by potential lenders. These repositories collect a large pool of customers' financial (and in certain cases also alternative) data from a wide range of market participants including banks, other financial institutions, telcos, government bodies, utility entities, ecommerce businesses, internet companies etc. The table below provides few examples of similar initiatives by some emerging and developed economies.





- Public Credit Registry a single point for data reporting by all credit institutions and shall contain data on entire credit life-cycle
- India Stack contains public and private information such as credit history, utility bills, tax, social and mobile data etc.
- Central Repository of Information on Large Credits - a borrower-level supervisory dataset (threshold of INR 500 million total exposure)
- Information Utility contains financial information that helps to establish defaults and verify claims
- Central Registry of Securitization Asset Reconstruction and Security Interest – contains data of all equitable mortgages to prevent frauds due to multiple financing against the same property



UK

- Bank of England's Online Statistical Collection Application - information includes statistical, regulatory and market data
- Financial Conduct Authority collects data on mortgage lending from regulated entities
- UK finance collects data related to payments, lending and deposits from over 250 member firms
- Office of National Statistics collects, analyses and disseminates statistics about UK's economy, society, population, and household debt
- Credit Reference Agency holds customer data on credit applications, accounts, and financial behaviour.

Germany

- European Central Bankcollects granular credit and credit risk data under AnaCredit project initiated in 2014
- Deutsche Bundesbank collects data from individual credit institutions regarding credits
- Federal Statistical Office responsible for collecting, processing, presenting and analysing statistical information concerning the topics: economy, society and environment



China



- Credit information system composed of a national financial credit information database
- Youth credit system to build a database and develop creditrating criteria, incentives, and services for young people
- Social Credit System to contain data from court judgments, Government agency records, citizen observers, loan defaults, taxes, selling faulty products, traffic violations, etc.
- Corporate Social Credit System data submitted by the government on businesses and data shared by businesses on their operations
- Credit Bureaus obtain credit information from credit providers (including banks, building societies, utility companies and telecommunications carriers), and private entities or public agencies (such as court proceedings and personal insolvency information including bankruptcies)
- Comprehensive Credit Reporting System - to provide additional positive credit information such as the type of credit and payment history

Eco-system collaborations for MSME intervention

Bringing all stakeholders (e.g. NADRA, telcos, other agencies that hold data) together to enable data collection and sharing to exponentially increase lending across all customer segments, will be a long-term initiative requiring significant time to implement.

In the short-medium term, banks may consider other available opportunities for market penetration in MSMEs, such as collaboration with fintechs, agritechs, etc. Significant intervention has been made in these segments by such digitally powered entities through digital lending and innovative technology.

5 to 7 million MSMEs, 10+ million loans to these entities by microfinance banks/ institutions, fintechs/ agritechs – banks may consider analysing these segments to identify further intervention opportunities

This provides banks with potential collaboration opportunities with such entities to (a) gain access to their customer database, (b) better understand needs of end-user MSMEs/ farmers and connect the whole supply chain eco-system for optimised delivery, and (c) deploy niche business, product, risk, technology and people models.

This may also help banks in improving penetration in priority segments and resultantly optimising the ADR and Pakistan's private sector lending to GDP ratio, compared to emerging economies, which has been explained earlier in section 3 on industry's financial performance.



Enterprise Risk Management and GRC convergence

Driving consistency in risk management capabilities across the organisation can be difficult, with banks potentially standing at varying ERM maturity levels. General challenges to align with globally recognised risk practices may exist around the following:

ERM organisation and skills

Coverage of emerging risks e.g., fraud, digital, cyber-security, conduct, reputational, strategic

Risk processes/ assessments (e.g., lack of integrated risk and control repositories relating to operational, compliance and financial reporting risks)

Alignment and effectiveness of risk models particularly credit models/risk scorecards

Quality of risk data, technology and analytics

Risk productivity and efficiencies

Risk integration, industry analytics and capital management



Governance, Risk and Compliance (GRC) has an essential role to play with long-term impacts on the organisation. The industry has some way to go for sustained GRC performance and convergence given the general disparity in the management of operational, compliance, and financial risks and controls. As an industry, we need to invest further in GRC domains, be able to attract the right talent and leverage technology for improvised performance."

Mr. Muhammad Aurangzeb - President & CEO, HBL

Insights from PwC Global Risk Survey 2022

75% consider that having technology systems that do not work together is a significant risk management challenge

54% complement risk technology investments with people and process changes

respondents are increasing their spending towards adding technology and digital capabilities to the risk function workforce

Investments in risk processes, frameworks and enabling systems, coupled with GRC convergence, all part of a holistic risk transformation, is the call of the hour for a future-proof approach to risk management. Some global institutions are also implementing COSO's ERM framework in their risk sophistication journey.

Banks may assess whether risk capabilities go beyond traditional risk analysis with deep dives performed on fast-moving, high-priority risks. This may help understand interdependencies between risks driving the institution's risk profile, while an evaluation of risk management plans may identify necessary actions to foster institutional resilience.



Embedding ERM into an organisation is not just a policy decision. It entails (1) a cultural change, (2) serious expenditure, (3) patience at the top, and (4) buy-in at the field level. More than a process, it's a cultural transformation journey where identification of issues rests with the entire institution. It's a 360 view of an organisation, all the way from design to execution."

Mr. Tariq Masaud, Chief Risk Officer, HBL



Fraud risk

- Organisation and skills
- Methodologies and tools
- Risk assessments and analytics
- Consideration of emerging fraud trends and major industry frauds
- Mitigation plans/ strategies
- Fraud thematic and root cause analyses
- Incident database/ register/ inventory
- Entity, function and process driven fraud risk profile
- Fraud risk technology
- Capacity building

Key imperatives in ERM destination model for emerging themes

Conduct risk

- Organisation and skills
- Diverse set of risk data owners and their integration
- Framework, tools and methodologies
- Conduct risk database
- Conduct risk profile
- Integration of conduct and operational risks
- Thematic and root cause analyses
- Capacity building

Conduct risk factors/ sources:

- Compliance/ control monitoring results
- Internal audit results
- Service quality reports
- Complaints/ whistleblow analyses
- Staff opinion surveys
- Regulatory penalties
- Frauds, operational losses and KRI breaches
- Credit portfolio quality

Reputational risk

- Organisation and skills
- Framework, tools and methodologies
- Knowledge sessions
- Reputational risk inventory
- Correlation/ convergence between operational and reputational risks
- Incident database
- Root cause analyses for key exposures
- KRIs for various reputational dimensions

Reputational risk KRI factors/ sources:

- Customer satisfaction surveys
- Customer complaints
- Media mentions
- Compliance breach incidents
- Frauds
- Other operational losses and technology incidents
- Cyber security
- Employee engagement surveys
- Analysts' reports



Key considerations for enabling ERM maturity roadmap



Use a single risk language, remove inconsistencies and redundancies.
Coordinate and leverage between risk and business functions via effective communication



Establish accountability, roles, and responsibilities at all levels, including the 1st LoD, without any grey areas. Position GRC functions at par with business functions



Align GRC and ERM frameworks with business strategies, objectives, and operating models



Use automation tools compatible with technology driven business models and realise the benefits of simplification, integration, relevance, timeliness, and more reliable results



Leverage analytics solutions underpinned by emerging technologies (AI, ML and RPA) to derive insights for risk identification, assessment, and monitoring



Build capabilities required to enable continuous and dynamic risk management for timely results and actions



Risk modelling and analytics

Imperative to long-term sustainable growth in credit portfolio is the systematic process for robust risk assessment of prospective as well as existing customers, and an ongoing analysis of credit portfolio quality. Risk modelling and analytics has far greater importance now given economic indicators and their potential implications on credit risk inherent in banks' lending books, evolving digital lending models and the need for more intuitive, data and technology driven risk capabilities.

Globally, banks are continuously validating and recalibrating risk models given changing dynamics. International regulators and bodies are also emphasising on constant updates of risk rating solutions. For example, European Banking Authority issued a consultation paper in 2022 on validation of rating systems, requiring organisations to have a framework in place and expecting validation of models at all levels to assess their accuracy and consistency.

Banks in Pakistan may be at relatively lesser maturity in relation to credit models and decision engines, with more reliance on expert judgement models. With profound changes in Pakistan's credit risk landscape and outlook, banks may consider validation and recalibration of existing models, besides constructing quantitative tools for other customer segments/ products. Focus may initially be on MSME, agri and consumer segments which are more likely to be impacted by current economic conditions.

Another critical challenge is the dearth of modelling experts and resources in the country. Considering the importance of data backed forward-looking statistical models, banks may require augmented capacity to develop such tools and also create awareness of its benefits to risk and business teams.

For real business value beyond compliance, risk tools may have to pass the in-use test and integrate with business decisions.



Model risk management (MRM)

Global regulators and bodies are also focusing on effective model risk management. Prudential Regulation Authority of the Bank of England issued a consultation paper in June 2022 on Model Risk Management Principles for banks, to support in strengthening their frameworks and practices for identification, management and controlling of risks associated with the use of models.

Global banks are increasingly targeting a model risk function that is lean, agile, and has a more holistic mandate for model risk management, with focus on the following key themes, which are also relevant in our local context:

Holistic mandate and diverse skills across technology, business, regulation and analytics



- Model risk mandate focused on development, challenging and validation of risk models using reasonable statistical techniques and best practices
- A more senior team focused on analysis and specialist inputs
- Diverse skills; more focus on business, technology, regulation and analytics
- Effectively leverage and respond to regulatory/ industry standards and manage risks across the ecosystem

Agile, integrated, and responsive to organisation and regulatory/ best practice change



- Ability to manage and analyse large data volumes; limited resource time allocated to data sourcing, manipulation and production
- Clear understanding of current/ potential value from various regulatory/ best practice initiatives
- Focus on long-term solutions and building capabilities rather than pure compliance
- Change function integrated across the organisation

Seamlessly integrated between modelling, reporting, and monitoring



- Automation of end-to-end processes, supported by a clear understanding of end-user outcomes and benefits
- On-demand planning, scenario analysis and risk analytics, in reasonable run-time on recurring and adhoc basis
- Establishment of central utilities and platforms for data collection, storage, processing, use and reporting, supporting risk analytics and insights



Development/ validation of robust risk models holds the key for effective risk management. It not only ensures on-boarding of risks which are commensurate with the available cushion in the capital of a bank, but also allows for efficient deployment of risk capital. To optimise model performance and prevent model risk, model risk management is pivotal."

Mr. Tariq Masaud, Chief Risk Officer, HBL





Risk appetite and culture

Risk appetite denotes the guardrails within which the Board asks senior management to stay as they make decisions and execute on strategies. A too strong risk and compliance appetite and culture can stifle innovation, for example, while too weak risk and compliance focus can impact brand and reputation. When strategy, risk appetite and risk culture are aligned, business leaders can take decisive actions.

For banks in Pakistan, there may be improvement opportunities in risk appetite and culture by (1) clearly articulating quantitative as well as qualitative risk appetite statements, (2) defining data-driven thresholds, (3) disseminating risk information on timely basis at right levels, (4) introducing automated monitoring tools and (5) creating risk culture awareness throughout the institution.



Banks' response strategies to current challenges can be geared towards supporting credit demand of select customers. For this purpose, they will have to deploy a highly skilled, diverse and an agile risk organisation which is focused on analysing emerging trends and has the capacity to pick winners in a vulnerable economy."

Mr. Tariq Masaud, Chief Risk Officer, HBL

CRO responses to PwC Global Risk Survey 2022

are realising benefits from defining or resetting risk appetite and risk thresholds

are investing in risk culture considering behavioural risk in 2022

are very confident in their risk function's ability to build a more risk-aware culture



Risk data and technology

Results of PwC Global Risk Survey 2022 indicate that institutions are investing heavily on risk data, process as well as technology. Integrating technology and risk data across the 3 LoDs may catalyse a panoramic view of risk across the enterprise.

A major challenge faced by banks in Pakistan is to unleash vast potential the copious amount of data they hold has. Cognisant of the opportunities, certain institutions have undertaken measures relating to data lake and warehouse implementation, data governance, consolidation and cleansing to benefit from data-driven insights both from business and risk perspectives.

Key considerations for a panoramic view of risk include:

- Mine KRIs from internal and external data for real-time risk intelligence
- Take advantage of data availability and risk tools for a bird's eye view of the rapidly evolving risk landscape across all 3 lines
- Establish risk-monitoring capabilities and escalation procedures to respond to rapidly increasing risks



Success of risk functions in countering emerging headwinds would be to have advanced analytical tools which are forwardlooking and focused on "causes" rather than the "effects". Banks' ability to keep pace with digital revolution, making and using available data repository for quick decision making, would be critical going forward."

Mr. Tariq Masaud, Chief Risk Officer, HBL

- 65% are increasing overall spending on risk management technology
- are planning on increasing integrated spend across data analytics (75%), process 3/4 automation (74%) and technology to support the detection and monitoring of risks (72%)
- report that their risk functions have to actively seek external insights to assess and monitor risks

10.
Sustaining the momentum of financial crime compliance



Sustaining the momentum of financial crime compliance

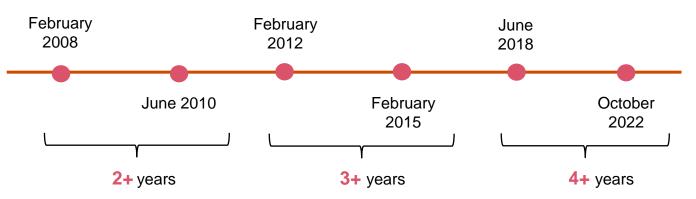
Financial crime risk has been a headline in Pakistan since 2018, with the country included in FATF's increased monitoring list, commonly known as the grey list. Since then, regulators, legislators and industry stakeholders have worked extensively to implement FATF's Action Plan. Resultantly, Pakistan successfully exited the grey list in October 2022. For this achievement, the firm would like to appreciate SBP, SECP, other legislative/ regulatory bodies and industry participants.

Peaking into the history, Pakistan appeared on the FATF grey list three times since 2008, signaling the organisation's heightened scrutiny of money laundering and terrorism financing laws, regulations and practices in the country. Any such grey list designation bears potential impacts on the economy, particularly financial services industry.

With fast-paced shifts in financial crime risk landscape amidst domestic economic vulnerabilities and geo-political instability, we may be exposed to increasing threats of financial exclusion, cash intensity, terrorism financing, use of informal channels etc. This calls for a dynamic and robust path to further progress on the maturity ladder, which will also help in ensuring that the country remains sustainably compliant with FATF requirements.

Pakistan's FATF grey listing journey





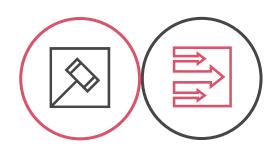
Timelines suggest that we all need to be vigilant and ensure consistent updates to anti-financial crime standards/practices considering emerging trends, global laws/regulations and guidelines released by international bodies.

Banks, being one of the most critical pillars of the financial eco-system, have greater responsibility than ever before to continuously upgrade their financial crime programmes and be prepared to counter the increasing underlying complexities.



The country has taken a quantum leap in terms of compliance with international standards and requirements. However, it is important to maintain momentum as AML/CFT challenges are ever evolving. Continued efforts are required from banks to improve account vigilance, upgrade regtech and strengthen the first line of defence so that nothing rogue slips through right at the start."

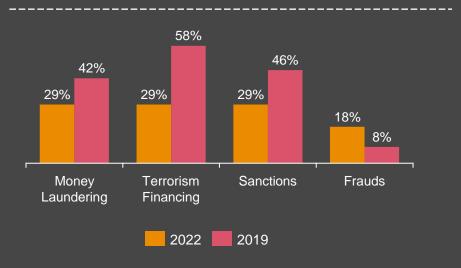
Mr. Haroon Khalid, Group Head Compliance and Control, Bank Alfalah Limited



2nd Financial Crime Survey 2022

PwC Pakistan conducted the 2nd Financial Crime Survey in 2022, primarily targeted to Chief Compliance Officers and Heads of key business and enabling functions, with participation from over 75 respondents. The results of the survey show that the perceived risk of major types of financial crime typologies including money laundering, terrorism financing and sanctions has reduced as compared to responses received in 2019. This is mainly owing to the level of trust respondents place on organisational progression to comply primarily with newer or amended regulatory requirements. However, the risk of frauds has increased during that time which may be mainly due to impacts from economic downturn and flood-driven natural calamity.

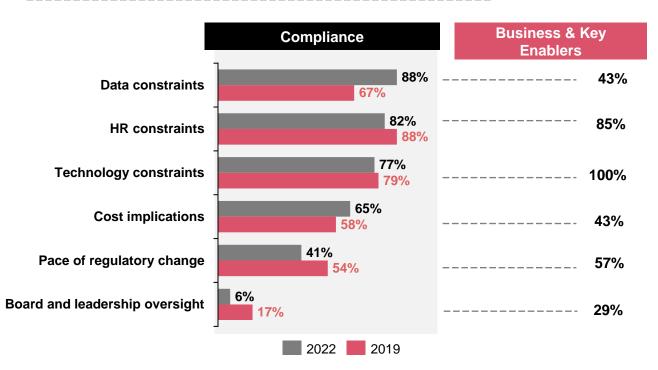
% of Compliance Heads considering risk to be "Very High"



Banks have made major investments in the areas of financial crime technology deployment/ optimisation, resource induction, frameworks and tools enhancements and overall capacity building. However, significant challenges in the areas of data availability and quality, HR and technology constraints continue to be top concerns for banks, although the extent of criticality assigned to data has significantly increased since last survey in 2019. This is perhaps owing to more realisation of its utility in overall financial crime governance, specially for optimisation of technology use and effectiveness of financial crime risk assessment/ appetite setting.

Shifting perceptions - criticality of top challenges...

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Global sanctions regime

Sanctions regime is subject to frequent changes and keeps banks alert all the time. To add to the complexities is the Russia-Ukraine conflict that started in February 2022, materially increasing sanctions compliance risks facing banks globally, particularly due to complications involving primary and secondary sanctions. These, along with earlier sanctions pertaining to Afghanistan and Iran continue to be major threats to banks locally.

Another challenge is understanding what primary and secondary sanctions entail:

Primary Sanctions

These are economic restrictions including full trade embargoes, asset freezes or seizures and travel bans against foreign targets.

They may be imposed against countries, businesses, or individuals deemed guilty of committing international crimes or working against national security interests and are applicable for compliance within the issuing country.

Secondary Sanctions

These are designed to prevent third parties from trading with countries, businesses or individuals subject to sanctions issued by another country – even if these third parties are not citizens of the issuing country or based in the issuing country.

These sanctions are intended to enhance the effects of primary sanctions.

Potential impacts of Russian sanctions on the banks in Pakistan

China is one of Pakistan's major trading partners. China also tops the list of Russian trading partners with exports over USD 50 billion in 2021. This situation makes it challenging to identify all entities, individuals or businesses with links to Russia.

Banks will have to continue updating their sanctions screening systems and protocols to ensure enhanced scrutiny and focus on customer types, jurisdictions (including ports, containers and vessels tracking), products and services that possess a Russian dimension to them.

Advisory bodies such as FinCEN continue to caution banks advising that they must, as a matter of urgency, investigate suspicious activity continually to avert possible sanctions evasion. This also requires banks to alter financial crime risk appetites as well as risk assessments, and link those with business strategies to reflect today's new geo-political landscape.

Few other considerations for banks may include:

- Continuous monitoring of new restrictions
- Updating sanctions lists more frequently and applying them in their entirety
- Expanding capacities to cover additional manual workload for controls
- Improving automated monitoring systems and controls
- More frequent trainings and awareness sessions with 1st and 2nd LoD employees



Lead your compliance team in the right direction – Do institutions fully understand their risk exposure?



Identify the true culprits – Have institutions thoroughly analysed their existing customer base and information?



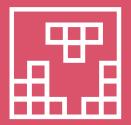
Sharpen your weapons – Are institutions' systems truly up to the task?



Regtech optimisation



Over the last few years, PwC has worked with multiple clients internationally as well as locally to deploy, review, optimise various technologies for financial crime prevention and detection, such as transaction monitoring, sanctions screening and Trade-Based Money Laundering (TBML) solutions. We also conducted numerous diagnostics and review exercises to assess technology deployed and identify optimisation opportunities.



30% - 50% reduction in cost of compliance through technology optimisation and effective deployment

It has been observed that well-deployed technology can shrink overall cost of compliance by as much as 30% - 50% by reducing handling time and increasing quality, thus minimising reworks. Banks in Pakistan have implemented solutions for transaction monitoring and sanctions screening with some also having deployed TBML solutions. Critical challenge facing the industry is on-going technology optimisation and the ability to deploy data-driven models to effectively implement risk-based approach.

Challenges faced by banks in implementing a risk-based approach to financial crime compliance

Based on PwC analysis, top 3 factors which lead to inadequate use of risk-based approach in financial crime technology:

- 1. Lack of skilled resources to develop/ deploy and maintain such data models
- 2. Data quality and availability issues
- 3. Fear of non-compliance and regulatory penalties

These factors can be addressed by inducting resources with adequate skill-set, continuous training and upskilling, introducing system-based controls to manage data quality and putting in place a risk appetite commensurate with the business profile of the bank.

Scenario and threshold optimisation

Another critical challenge is the optimisation of scenarios and thresholds to ensure reduced number of false positive alerts, improved analysts' productivity and STR ratio. There are significant opportunities by leveraging advanced data analytics tools.

Fueled with AI and ML algorithms, these tools can analyse multiple sources of information about the customers and their transactions. These can enable automated disposition of false positive alerts while also identifying true suspicious activities which are not captured by simple rules, ineffective scenarios and outdated thresholds.

By establishing a business-as-usual process that can provide regular and meaningful calibration of thresholds, banks can have more effective and risk-focused alerts that point analysts to high money laundering/ terrorism financing risk transactions and activities.

Results of 2nd Financial Crime Survey



consider their financial crime systems to be in a steady state



find space for improvement with respect to holistic coverage of financial crime risks



shared feedback that their financial crime technologies have not been validated in the last 2 years



institutions where such validations were conducted, this was done internally by the Compliance function itself





The operational burden

Manual data collection from a wide range of internal and external sources for informed decision making

High false positive ratios on screening and monitoring

Lack of insightful MI to inform the business and 2nd line of emerging risks and operational challenges/ inefficiencies

Multiple hand-offs between functions, not supported by workflow and orchestration

Over **80%**

80% - 90%

of KYC analyst time spent on data and document collection activities, rather than real risk assessment and judgement of Transaction Monitoring and Name Screening hits could be false positives

Sources: PwC proprietary insights and analysis

RPA/ IA is another key emerging technology that uses ML algorithms to automate redundant tasks, eliminating human intervention. We have already seen few use cases of RPA implementation within Compliance functions, but at a limited number of banks; and which include entities that are at relatively higher stages of technology adoption in Pakistan.

Examples of RPA use cases may extend to list management, price verification, alert disposition, case management, digitisation of documents, etc.

Banks need to consider enhancing their pace of adopting such technologies. This may benefit them in terms of more improved and efficient compliance, resource utilisation, productivity, reduced false positives, informed decision making and better reporting.

bank

With millions of transactions occurring in a day, no amount of scrutiny can be all encompassing. Hence to give ourselves that capability to have wider coverage especially in terms of rogue patterns, we need Al. The idea is to nip the crime in the bud while it is in the process of taking shape and form."

Mr. Haroon Khalid, Group Head Compliance and Control, Bank Alfalah Limited

Behavioural customer segmentation

Segments are used in transaction monitoring systems to group customers that behave similarly, with each customer segment having a different threshold for same AML scenario.

It is common for banks to establish segmentation for transaction monitoring based on business lines or static values, resulting in very large groups of customers. This approach to segmentation may end up treating customers who behave very differently as the same type.

Application of behavioural and risk-based segmentation to transaction monitoring, with appropriate calibration of thresholds, has the single largest impact on the performance of rule-based systems. Efficiency improves because there are fewer false positives leading to operational savings, while overall effectiveness of the system also increases.

Use of emerging tech

In an ever-changing business environment, growing complexity of banking products, ways of identifying and sticking to true risk and complying with regulatory requirements are key. Al is a way to achieve that in the bank of the future. For all alerts generated by financial crime systems, Al can identify ones that do not pose ML/ FT risk and hence do not require detailed investigation.

Method is based on multiple sources of information about the customer, their profile and historical transactional activity. A set of hard rules, machine learning algorithms and AI engines allow to identify alerts with minimal risk of being actual suspicious transactions.

Financial crime risk assessment

Over the last decade, improved financial crime control measures in the formal financial systems have forced criminals to seek new ways to "move" the proceeds or engage in other economic crimes. That's why regular risk assessments are crucial, enabling banks to identify and address money laundering and terrorist financing risks they face.

Banking in itself has changed significantly over the past few years, and banking of the future will be even more dynamic and hence riskier with increasing digital adoption, emergence of fintechs, EMIs and soon; digital banks. This evolution has deep impacts on the institutions' financial crime as well as overall risk profiles.

Global banks have practices of refreshing their financial crime risk assessments at times even on a semi-annual basis. Hence, there is greater need in our banking community to have a very dynamic risk assessment and banks may consider conducting such exercises on a more frequent basis, and at least annually if not earlier.

"

Every bank can make greater use of past cases and rogue patterns in the making, to work out typologies that can identify financial crime. Similarly, sharing case studies across the industry and getting a complete picture on financial crime trails via regulators can be another effective way to allow banks better comprehend the complexities and layering of certain transactions."

Mr. Haroon Khalid, Group Head Compliance and Control, Bank Alfalah Limited

Chief Compliance Officers' views on potential financial crime risks emerging due to economic instability, geo-political vulnerability and natural calamity

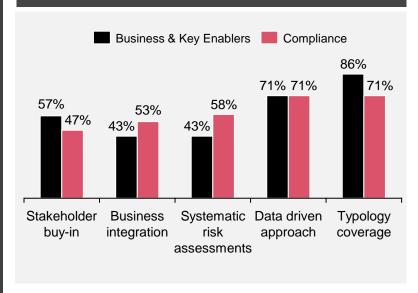
- Financial exclusion and cash intensity
- Terrorism incidents and economic crimes
- Use of informal channels for money transfers
- Change in risk assets properties, automobiles, antiques, portraits etc.
- Phantom shipments and over/ under invoicing
- Corruption
- Drug and currency smuggling
- Human trafficking

Few emerging risks due to increasing digitisation

- Cyber crimes (including social engineering linked frauds)
- Use of crypto related transactions
- Use of gateways, cards and wallets for crossborder transactions
- KYC/ CDD challenges e.g. masked identity, dubious web-based businesses

As per the results of PwC Pakistan's 2nd Financial Crime Survey, 50% of the respondents consider the level of maturity of risk assessment as "Needs Improvement", with significant opportunities identified in the following areas:

Critical improvement opportunities in financial crime risk assessments



(1) Data availability and use (2) model adequacy (3) availability of skilled resources in data modelling and analytics
(4) clarity and understanding of risk-based approach, (5) concern of missing out on high-risk alerts, were identified as major challenges in pursuing risk-based approach to alert investigation.

Anti-financial crime culture

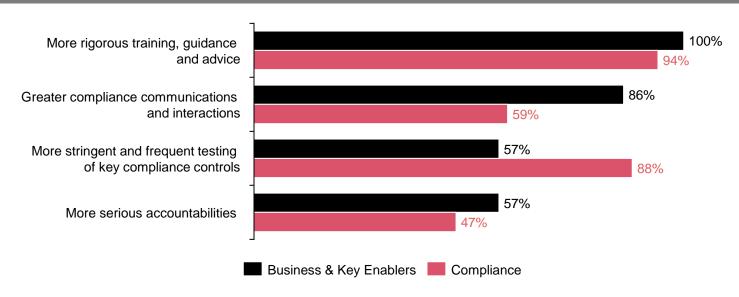
Over the period, there has been some improvement in compliance and financial crime culture, with ownerships and responsibilities more clearly defined and implemented at certain banks.

It is of paramount importance that the fight against financial crime embodies institutional cultural manifestation. Tone at the top is as important as effectively implementing the 3 LoD model with the Board and senior management ensuring effective oversight of the financial crime programme.

Institutions may need to rigorously and consistently put into practice the notion that business and direct enabling functions are primarily responsible for designing and implementing compliance controls.

Majority of respondents to PwC Pakistan's 2nd Financial Crime Survey appreciate that there is still room for improvement in setting the right compliance culture, with training and communications continuing to be top priorities. Other effective ways identified to improve culture include more stringent and frequent testing of key compliance controls and introduction of more robust accountability frameworks.

Most effective ways to improve financial crime culture



Data considerations

Innovations around AI, ML and automation continue to grab the headlines — and the range of data sources being input into investigative analytics platforms will continue to expand. However, amid this proliferation of data, it is vital not to lose sight of data quality: the provenance, existence, completeness and accuracy of the information itself. No matter how sophisticated the analytical tools are, the value and reliability of outputs will only be as good as the inputs.

We are encouraged to see data quality moving up the priority list on banks' strategic agenda, with more effort being put in to create a complete picture about data. Certain banks have initiated their data governance and privacy programmes around capturing, storage, processing, use and reporting. These will enable achieve strategic objectives of data availability and quality to meet business, risk and compliance needs.









11.

ESG and the banking sector of Pakistan



ESG and the banking sector of Pakistan



ESG provides an umbrella framework to consider an organisation's impacts and dependencies on the environment and society, as well as the quality of its governance.

ESG addresses a broad spectrum of topics and can affect all components of an institution's strategy, operating model and execution.

Importance of ESG for banks and financial institutions

Historically, banks and other financial intermediaries have always had a profit-centric business model and strategy. This trend is, however, swiftly shifting towards impact investing and inclusivity of all stakeholders by incorporating the principles of ESG into the overall business strategy that focuses on returns through clean and green products and investment portfolios.

Businesses are responding to ESG challenges and making those an integral part of their business model, with net-zero commitments made or on the cards. Regulators have realised that a fundamental transitioning of the economic and business markets shall expose banks and related financial institutions to both risks and opportunities.

Therefore, they are expected to play a key role in purposedriven ESG by using their influence as industry actors and may need to align business models to accommodate:



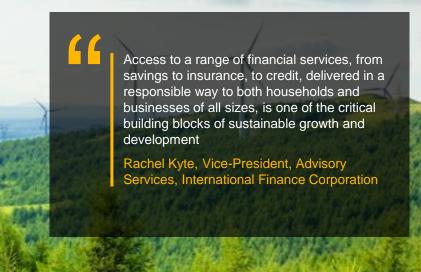
Current and future regulatory changes



ESG strategy and reporting



Their product strategy and future growth







Key global developments on ESG

"from voluntary to regulatory push"

As of now, there are various frameworks and standards that exist to capture the ESG horizon, reporting and public disclosures. Additionally, there are stock market indices and rating agencies. This is generally attributed to global stakeholder push, seeking greater transparency on ESG, its quantified impacts on business, the integration of fundamental ESG requirements and how the business manages and navigates through complexities arising from various risks related to ESG and opportunities that a business may capitalise upon.

Some key developments within the last few years include:



The Net-Zero Banking Alliance founded in April 2021 under the Principles of Responsible Banking brings together a global group of banks, currently representing over 40% of global banking assets, which are committed to aligning their lending and investment portfolios with net-zero emissions by 2050.



Financial regulators such as in China, Singapore, Japan, Australia and Pakistan have either issued green and sustainable banking requirements, recommendations, and frameworks or are in the process of doing so.



cope mandated development and integration of a single standard for ESG reporting, consequently IFRS adopted – ISSB has already launched two standard exposure drafts S1 and S2 focusing on general ESG considerations and specific climate related disclosures respectively that it intends to finalise by the end of 2022.

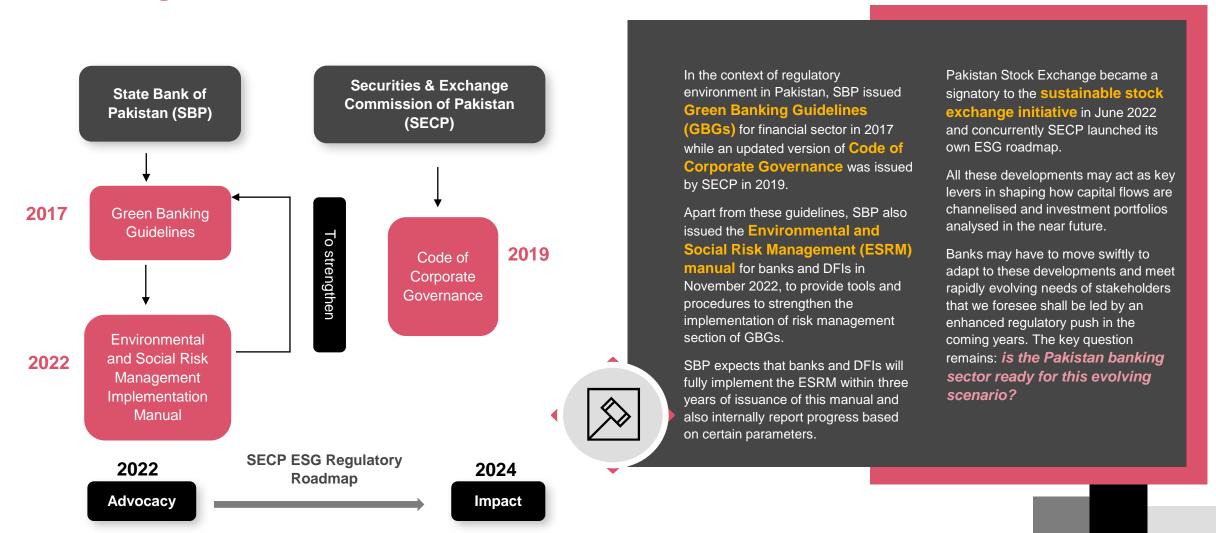
Objective of these standards is to deliver a comprehensive global baseline of ESG-related disclosures based on Task Force on Climate Related Financial Disclosures Framework.

The framework provides investors and other capital market participants with information about companies' ESG-related risks and opportunities and their integration with financial statements, to help them make informed decisions.



EU action plan on sustainable finance in 2018 requires financial institutions in EU to integrate ESG into their business models; this is further relatable to EU taxonomy regulation that encourages sustainable investments in association with SFDR (Sustainable Finance Disclosure Regulation)

Current regulations for Pakistan's financial sector



ESG matters have emerged on strategic agendas globally as well as locally, presenting risks – most notably, reputational damage, loss of business and key relationships. How should our banks create readiness to adopt best sustainable practices and assess where they stand on the ESG health check yardstick?



As Pakistani banks gear up to adapt to ESG risks, we are witnessing an increased focus towards compliance with regulatory and investor expectations. However, in order to cater to these risks more holistically, banks may have to broaden their sustainable finance offering. Sustainable elements must be integrated into banking operations, innovative product offerings and risk management."

Mr. Irfan Siddiqui, President & CEO, Meezan Bank Limited



Banks are exposed to environment and social risks through their own activities as well as their clients. If left unmanaged, these risks can lead to a decline in reputational image, costly litigation, or loss of revenue. In order to mitigate these risks, banks should promote environmental friendliness, climate resilience, social inclusiveness, and improved management of environmental and social risks."

Mr. Muhammad Aurangzeb, President & CEO, HBL

ESG as a priority – Potential transformation of banks

The Sharm el-Sheikh Implementation Plan agreed at the COP 27 summit has highlighted investment needs of at least USD 4-6 trillion a year for global transformation to a low carbon economy. Such levels of funding can only be possible through achieving a sea change in the global financial system that requires comprehensive measures by governments, central banks, commercial banks and other financial sector players.

Major countries around the world have committed to reduce carbon emissions. As financial intermediaries, each of these countries' banks are uniquely placed to support this transition. Besides governments, banks are also being pressured by other stakeholders (including shareholders, customers and employees) to play a pivotal role not just on climate but also positive social change. The ever-increasing interest in ESG has global banks making major efforts to gear up fast to incorporate ESG into their strategies.

Depending on its ESG strategic priorities, a bank can be classified as a (1) Doubter or a (2) Strategist.

- <u>The Doubter considers ESG</u> to be a box-ticking exercise and a regulatory burden. It meets minimum regulatory standards but does not incorporate sustainability into strategy development.
- The Strategist fully integrates sustainability into its business model and considers ESG part of the bank's purpose. It sets ambitious sustainability targets with responsibility at Board level.

Banks in Pakistan should aim to be Strategists. This presents a significant opportunity to improve reputation, lower credit risk while increasing returns. Therefore, ESG has to become one of the top priorities for the Board and senior management and may include social and governance concerns as much as environment concerns.

Banks may also understand that this will require a comprehensive transformation exercise that impacts the entire organisation. Every aspect of business may be impacted including strategy, governance, product design, data management, policies and processes, information systems, people and culture, reporting etc. We recommend banks to embark on this journey early to reap full benefits.

On an overall basis, following key aspects may be integral part of **ESG Transformation Roadmap**.



Strategy and governance



Policies, processes and frameworks



Data and systems



Customers and contracts



Human resources

Strategy and governance

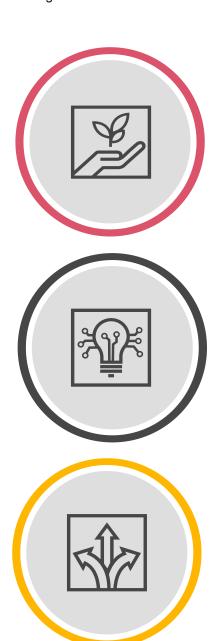


- Overall corporate and BU strategy may be redrawn carefully with clear ambitions and associated metrics defined for the short, medium and long term. This will have a direct impact on risk management and reporting aspects.
- Governance around sustainable products and services may be set up while ESG risks be embedded in all business areas.
 Governance around reporting requirements (i.e. external as well as management reporting) may also be aligned.

Policies, processes and frameworks



- ESG factors may be incorporated in credit approval policies, credit modelling guidelines, loan administration policies, pricing guidelines etc. In addition, ESG risks can be integrated into ICAAP.
- Policies around sustainable or "green" products may be developed or updated to ensure a consistent approach.
- Either separate ESG risk models be developed as an add on to existing risk models or ESG factors be included in existing risks models including models for credit risk, market risk, operational risk, stress testing etc.
- Policies and frameworks may be implemented/embedded in business lines to ensure consistency and compliance throughout the organisation



Data and systems



- Critical data elements as well as the entire long list of data required for each workstream may be defined and collected while developing processes to ensure quality of financial and non-financial data (particularly that provided by clients, customers etc.).
- IT systems (such as core banking applications, loan origination systems, risk management systems etc.) may be updated to allow collection, transformation and use of ESG data.

Human resources



 A comprehensive reskilling/ upskilling programme may be designed and implemented to ensure ESG expertise is available across all front office as well as middle and back-office functions.

Customers and contracts



 Existing contracts may be amended or new contracts signed in order to obtain ESG data from customers, integrate ESG factors and mandatory sustainability requirements.

Adapting to "Adaptation Financing"

Pakistan contributes less than 1% of global emissions while it is among the top 10 countries at risk of being adversely affected by climate change. The recent floods in 2022 are a stark reminder that the risks posed by climate change can have a significant impact on the country's economy, critical infrastructure, key businesses and consequently the entire banking sector. Since banking is one of the largest and most organised industries in the country, it can play a pivotal role primarily in Adaptation Financing.

Given the precarious situation, there is an urgent need to attract greater attention of investors and financers into climate adaptation and resilience. According to UNEP Adaptation Gap Report, cost of adaptation in developing countries is expected to reach USD 300 billion per year by 2030.

While global efforts are underway to meet this requirement (e.g. the recent COP27 breakthrough agreement to provide "loss and damage" funding for vulnerable countries hit hard by climate disasters), there is expected to be a major gap in funding to avoid costly future impacts. According to World Bank, currently only 1.6% of adaption funding comes from the private sector, presenting a significant untapped opportunity.

Pakistan managed to obtain pledges for more than USD 9 billion in recent International Conference on Climate Resilient Pakistan in Geneva, mainly from bilateral and multilateral donors.

Given that Pakistan is faced with high risk of climate disasters, the adaptation funding requirements may be enormous over the next several years. It is primarily the private sector which will have to be the major contributor in this area.

Pakistani banks may take lead and proactively partner with international players, develop blended finance products/ structures and update their business models to make this a priority area. This would have major impacts towards making the country more resilient to climate risks while also opening up a significant new revenue source for banks.



Pakistan contributes less than 1% of global emissions



Cost of adaptation in developing countries is expected to reach USD 300 billion per year by 2030.



Only **1.6%** of adaption funding comes from the private sector



Pakistan managed to obtain pledges for more than **USD 9 billion**

12.

Harnessing culture and talent to deliver results





Harnessing culture and talent to deliver results

Culture - rising on leadership agenda

An institution's identity — the capabilities and practices which distinguish and sustain it, is grounded in the way people think and behave. Deeply embedded cultural influences can change slower than marketplace factors but coherence across an institution's culture, strategy and operating model can make it more attractive to employees and customers, which in turn drives business value.

Organisations that determine which behaviours embedded in culture can be applied to accelerate the changes they want, find ways to counterbalance elements of culture which hinder them. The fact that many institutions believe their culture was a source of strength during the pandemic suggests that as leaders navigate a series of future challenges, amplifying right parts of culture can provide a competitive advantage. But deficiencies within, such as short-term vision and thinking, not sustainably sticking to the cause and inadequate KPI monitoring, can also undermine ability to meet strategic objectives.

In view of these strategic implications, culture has risen sharply up the leadership agenda in recent years. Of the C-suite and board members who participated in PwC Global Culture Survey 2021, 66% were of the view that culture is more important to performance than the institution's strategy or operating model. Issues of strategy, operations and culture—along with purpose—are actually intertwined and it is culture that can bring these other aspects of business to life.

Culture rises up the leadership agenda





PwC Global Culture Survey 2021 also reveals that talking about culture and thinking 'culture is important' does not always translate to employees feeling a cultural impact. For instance, there was an average 20-percentage-point gap between perceptions of 'Board/ senior management' and 'other than senior management' in questions related to how well their institution supports Diversity, Equity and Inclusion efforts.

	Board/ Senior Management	Other than Senior Management
'I feel a personal connection to our institution's purpose'	83%	54%
'Our leadership team walks the talk on purpose, values and culture'	73%	46%
'My team inspires me to do my best work'	81%	54%
'Our institution embraces flexibility and accommodates people with differing needs'	71%	54%
'Our institution encourages open discussions around sensitive topics'	64%	51%

This gap creates a huge barrier to realising the benefits of investing in culture. At the heart of this mismatch is the issue of authenticity; business leaders believe they are a walking embodiment of the institution's culture, values and purpose, but their employees disagree. Closing these gaps in perception and authenticity is essential, because authenticity is correlated with not just good feelings but also measurable business outcomes.



Leadership is going through a transformational phase itself with the leader moving from isolation to becoming one of the team. Therefore, any cultural change will have to be leadership driven too. Leaders will have to personify the vision, mission, and walk the talk for the team to imbibe values and work with the new ethos."

Mr. Yousaf Hussain, President & CEO, Faysal Bank Limited

Consistency matters, not just in senior leaderships' talk and actions, but in the behaviours of people across the institution. As per PwC Global Culture Survey 2021, institutions where culture is coherent, meaning that the way people act every day is consistent with what they say about culture, are more likely than those who do not say their culture is coherent, to see an increase in:







We have seen that an institution's culture is deeply rooted and slow to evolve. But 2020 showed that, when necessary, institutions can achieve rapid changes with a targeted focus on few critical behaviours. Going forward, as leaders take on a long list of business imperatives, such as transformation or digitisation and adapting to changing working practices, institutional culture can be a powerful ally.

Talent – Upskilling the workforce of the future to create competitive advantage

PwC Global Culture Survey 2021 highlights that recruitment, retention and upskilling of talent tops the list of future challenges leaders are most worried about. Further, PwC recent Annual Global CEO Survey indicates that leadership, succession planning and talent development are key priorities; being among the top 5 areas leaders plan to invest in over the next 3 years. All these key imperatives are also and must remain priority areas for banks in Pakistan.

Our institutions not only face talent scarcity (which has become more critical with the increasing brain drain from the country), particularly in the areas of technology, digital, data sciences, financial engineering, Islamic banking, risk management, financial crime etc. but also grapple with the need to recruit, retain and upskill the workforce on a continuous basis.

Man and Machine working together

The ask for a digital workforce has rapidly emerged. New possibilities that man and machine in collaboration bring are endless and are transforming the role of people at work.

Automation, data analysis, AI and other emerging technologies can deliver productivity. But technology is only as good as the leaders who identify its opportunities, technologists who deliver and people who work with it every day.

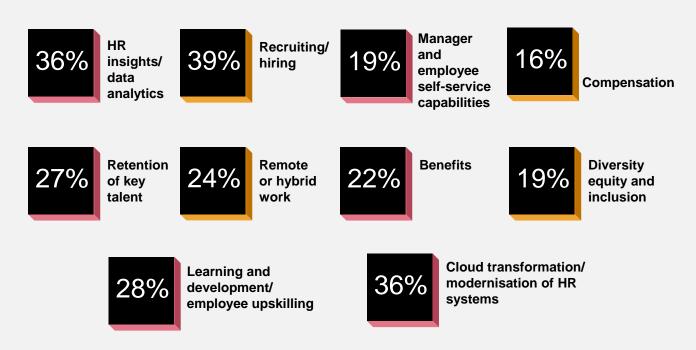
That is where banks globally as well as in Pakistan may be feeling challenged: (1) the right mix of skilled and adaptable people, (2) aligned to the right culture, (3) with the right mindset and behaviours, that can help power their business. For this purpose, some banks in Pakistan have initiated or are planning to collaborate with academia to design and deliver targeted upskilling programmes for the youth. Another important initiative that may be considered is establishing indigenous Centres of Excellence for trainings in requisite disciplines.



There is a dearth of adequate Islamic banking related courses being offered at various academic institutions, especially undergraduate programmes in Islamic banking and finance. The syllabus needs to be reviewed, and more practical scenarios and case studies should be added to the curriculum. Possible partnership between academia and the Islamic banking industry to develop a comprehensive curriculum in Islamic Finance may result in a win-win solution."

Mr. Irfan Siddiqui, President & CEO, Meezan Bank Limited

Top 10 HR challenges as per PwC HR Tech Survey conducted in 2022





As the industry transforms, it will be critical for us to have a workforce with skills that are relevant to the changing times. As banks digitise, we will require more resources who are technology savvy with the ability to apply those skills for enterprise benefit. Greater focus should be on not just the number of technology-savvy graduates, but the quality of education that they receive. Areas like technology, information security, data management and analytics will continue to become more and more important. With a large youth population ready to enter the workforce, we will not be short of resources, however, it will be critical for them to focus and specialise in areas where there will be greater demand."

Mr. Muhammad Aurangzeb, President & CEO, Habib Bank Limited

Institutions may be finding existing upskilling efforts not fit for purpose: programmes may not be delivering the intended/target ROI or the change they need. Skills gap is the most critical pain point, impeding innovation and pushing further people costs. There are no quick fixes when it comes to closing the skills gap that many leaders are concerned about.

As per a recent PwC survey, when asked about the impact of 'availability of key skills' on institution's growth prospects, respondents affirmed that this does affect their growth prospects.

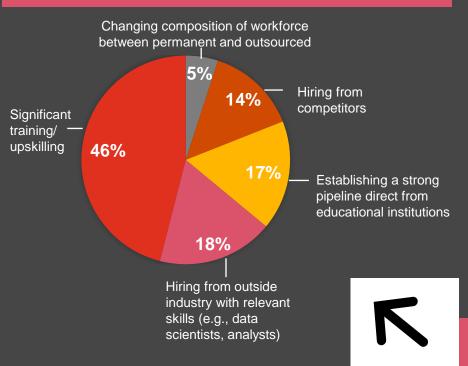
Further, top-most impact noted by 55% of respondents was the 'inability to innovate effectively', followed closely by 'higher than expected people costs.

People are the cornerstone of success and transformation of institutions, as also acknowledged by Mr. Sohail Aziz, Former Chief Digital Banking, Allied Bank Limited. Many institutions are investing in digital skill building today to prepare their workforce for the future. Soft skills may also have to be cultivated such as creativity, problem solving and empathy in corporate cultures.

Skills gap greatly impacts an institution's innovation and growth agenda...

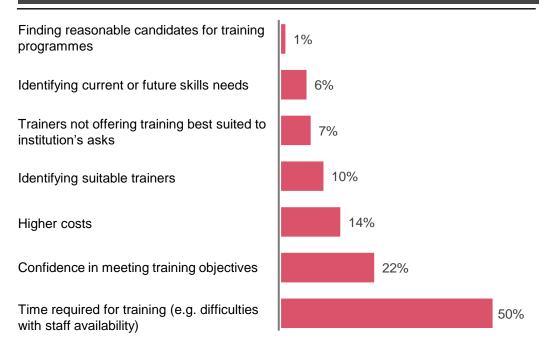


Most critical initiatives to address skill gaps...



Upskilling is also not without challenges and barriers of its own. Institutions may need to identify and effectively mitigate such hurdles and devise annual training plans that addresses those. Some of these bottlenecks as per a PwC sponsored financial services survey include:

Upskilling/ reskilling – key barriers to delivering institution's training needs





Banks will have to invest heavily in workforce development to ensure availability of skills in line with their strategy. Strong linkages are required with academia and learning institutes offering programmes in relevant areas, to ensure graduates are readily and easily employable by the banking sector. With global competition and access to information, our workforce may have to compete at the international level.

As banking evolves, another challenge will be to re-train staff with skills that are more in demand. As we look into the near future, fewer operational roles may be required with the advent of digitalisation and robotic process automation. Employees with operational roles may have to be reskilled in areas like client relationship management, technology, data analytics etc."

Mr. Muhammad Aurangzeb, President & CEO, Habib Bank Limited

Banks may have to put in place an effective workforce strategy with following critical pillars:

- **1. Operating model** HR operating model may be assessed and aligned with institutional talent and transformation requirements. This mainly involves:
- Governance including roles and responsibilities
- Institutional structure including accountabilities, decision rights etc.
- Performance management including aligning institutional goals to individual performance objectives, more effectively implementing risk-adjusted balanced scorecards for Material Risk Takers and Material Risk Controllers, and cascading practical; measurable KPIs down the line



- **2. Talent planning** Banks may have to anticipate and plan for the future which is becoming increasingly difficult in the face of changing dynamics. Objective should be to have the right people, with the right skills, in the right places, at the right time and at the right cost. This mainly entails:
- Talent acquisition including use of data analytics to better understand and predict recruitment/ talent needs
- Leadership and succession planning Attracting and retaining high performers and future leaders through a thoughtful and proactive approach, offering rewarding development opportunities and clear progression paths
- Diversity, equality and inclusion a key element to improved working environment for employees, driving innovation, and enhanced business performance
- **3. Learning and upskilling** Leadership and workforce development through upskilling and reskilling programmes, enabled by a dedicated team of L&D experts with a wealth of experience in developing both the approach and content for learning curricula and in the selection of training providers.

Collaborations within industry and with academia as well as more effective utilisation of key learning institutes may also be considered.



We have started a credit college with the objective to explore where credit problems are likely to emerge in the near future, by shortlisting and analysing 2-3 critical credit drivers.

We developed courses around those drivers internally and are also engaged with academia for developing some case studies. External stakeholders from the industry were engaged, including certain senior bankers, keen to impart knowledge and experience."

Mr. Tariq Masaud, Chief Risk Officer, Habib Bank Limited



4. Employee and workplace experience – Getting the employee value proposition right by generating a purpose aligned with business ideas and goals, delivering value through optimising employee productivity and performance, promoting diversity of learning opportunities, fostering personal and professional growth, and motivating employees through benefits and rewards.

Designing experiences for employees including cultural adaptability for the next-gen workforce may be at the heart of transformation to ensure employee productivity, commitment and engagement.



13.

Key developments in tax regime



Key developments in tax regime

Taxation under the Seventh Schedule

Banks in Pakistan are taxed under a separate regime i.e. Seventh Schedule to Income Tax Ordinance 2001 (ITO). Under this regime, incomes from all sources, as disclosed in the annual accounts, are taxable under single basket after allowing certain adjustments specified in Seventh Schedule..

Tax rate

While normal corporations are taxed at 29%, banking companies are taxed at 35% for tax year 2022 and 39% thereafter.

Additionally, banks were subject to super tax under section 4B at 4% since tax year 2015 up to tax year 2022. Through Finance Act 2022, a new super tax under section 4C was imposed on banks at 10% for tax year 2023 and 4% thereafter (where income exceeds Rs.300 million per annum). Through the recent Finance Bill 2023, rate of super tax has again been enhanced to 10% for all taxpayers having income exceeding Rs 500 million for tax year 2023 and onwards.

Consequent to these windfall taxes, effective tax rate for banks has risen to 49% in tax year 2023 and onwards. On top of these, income earned by banks from investment in federal government securities is taxable at higher tax rates of up to 55%, depending on gross ADR. Operation of these rules has, however, been suspended for tax year 2024 through an SRO 226 (1)/2023 dated February 27, 2023. At present, there is no clarity as to whether such suspension would continue for subsequent tax years.

Topical considerations

Retrospective application of new super tax provisions

Generally, amendments introduced in tax laws that have the effect of increasing taxpayers' liability are applied prospectively, unless expressly provided otherwise. It has been held in various judicial pronouncements that if the enactment itself provides for a particular tax charge to have effect from a particular point in time, express command of the legislature is to be abided, interpreted and applied accordingly. Using this principle embedded in judicature, newly imposed super tax and enhanced tax rates on income from federal government securities have been made applicable from tax year 2022 rather than going forward from tax year 2023.

Further, for tax year 2022, there were conflicting provisions of charging section 4C and Rule 7CA of Seventh Schedule Finance Bill 2023 has proposed to remove this ambiguity by making a corrective amendment in rule 7CA to make the new super tax under section 4C applicable on banking companies from tax year 2023 onwards.

Issue of retroactive application of super tax for tax year 2022 was taken before various high courts in Pakistan by certain non-banking companies. Sindh High Court (SHC), through its judgment dated January 13, 2023, has declared levy of super tax under section 4C as ultra vires and unconstitutional for tax year 2022 for these entities.

Enhanced taxation for taxable income from the Federal Government securities

For tax year 2022, banking companies have filed a petition against retroactive enhancement of tax rates on income from federal government securities. SHC has allowed filing of return for tax year 2022 without admitting the differential tax liability. Similarly, for tax year 2023, there is a view that rates prevailing before Finance Act 2022 may be applicable on those investments in federal government securities that were planned and made by June 2022 or before.

Additional tax on income, profits or gains arising due to economic factors that resulted in unexpected income, profits or gains

Finance Bill 2023 has also proposed a new provision to empower the Federal Government to impose additional tax on persons or classes of persons who have any income, profits or gains arisen due to any economic factors that resulted in unexpected income, profits or gains, whether or not disclosed in the financial statements. These provisions are made applicable on banking companies as well and may attract potential taxes on foreign exchange income. However, a legal challenge to implementation of these provisions may arise on certain constitutional grounds and principles laid down by Superior Courts including with regard to past and closed transactions.

Imposition of tax on payments for international financial transactions:

Through Finance Act 2022, tax at the rate of 10% has been levied on non-resident persons, deriving income in form of fees for money transfer operations, card network services, payment gateway services and interbank financial telecommunication services. Accordingly, responsibility of withholding said tax from payments has directly been imposed on banks.

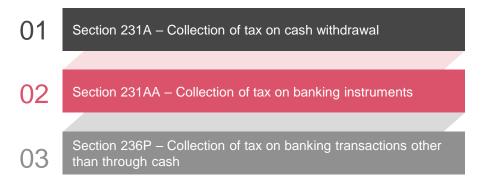
Since these non-resident persons have little presence in Pakistan, having potentially high negotiating powers, they may not want to engage in any tax compliance matters. Hence, effect of this tax incidence may effectively fall on banking companies responsible for making payments on behalf of non-resident persons.

Recently, tax authorities have started obtaining information of business dealings with money transfer operators and gateways from different banking companies.

Restoration of withholding tax on remittances through debit / credit / prepaid cards:

Through Finance Act 2018, section 236Y was introduced requiring banks to collect advance tax, at the time of transfer of any sum remitted outside Pakistan, on behalf of bank's customers conducting a credit card or debit card or prepaid card transaction with a person outside Pakistan. Such adjustable advance tax was levied at 1% of amount remitted abroad. This provision was withdrawn in Finance Act 2021 but same was restored through Finance Act 2022.

Along with 236Y, multiple other advance tax provisions were also withdrawn in Finance Act 2021. Since 236Y has now been restored, there is potential risk that the Government may consider restoring other advance tax provisions as well involving financial activity and transactions through the banking channel. These provisions include:



Adjustable advance tax on cash withdrawals of non-filers has been proposed to be reintroduced by the Finance Bill 2023.

Tax challenges attributed to banking sector

One of the major challenges for banking sector is ensuring compliance with vast and frequently changing requirements under the direct and indirect tax laws, foreign exchange regulations and SBP directives. These stringent, rigorous and dynamic set of requirements merit strict attention and may lead to high compliance cost for banking sector.

At times there are even potentially conflicting provisions among various laws, causing some ambiguity in application and possible increase in legal costs.

Further, in addition to federal authorities, banks are also answerable to and thus incur additional compliance cost towards 4 different provincial authorities. Responding to frequent inquiries, notices and audits raised by them take up sufficient time, effort and resources of banks.

For operations in Azad Jammu & Kashmir and Gilgit Baltistan, tax compliance in relation to AJK and Gilgit Baltistan councils also need to be taken care of.

WWF and WPPF are also imposed by various provinces through provincial statutes and banking companies are required to discharge this liability. Banks being trans-provincial entities (having presence in multiple provinces) are subject to levy of WWF and WPPF in these parts of the country. Retailed provincial statutes have varying rules and implications, resulting in some risk of dual levy for banks.

Major wins and issues decided in favour of and against banks by Appellate Tribunal

Karachi Bench of the Appellate Tribunal Inland Revenue (ATIR) authorities has decided on multiple issues in relation to banking companies.

These matters were initially decided against banks by Commissioner Inland Revenue (Appeals) and therefore were pleaded before ATIR by many banking companies.

Most of the issues were decided in favour of banks whereas some were decided against. A summary is as under:









Matters decided in favor of banks



Provision for bad debts on gross advances



Allowability of provisions against other assets



Allowability of unrealised loss on foreign exchange contract



Allocation of expense to capital gains and dividend income



Levy of WWF



Allowability of reversal of post Seventh Schedule provisions



Allowability of provisions against diminution in value of investment



Allowability of bad debts directly written off



Disallowance under section 21(c) of ITO on account of accrued mark-up

Issues decided against banks

Only legal grounds challenging the proceedings initiated under section 122(5A) of ITO for being erroneous in law and prejudicial to revenue were decided against banks.

These grounds related to legally challenging the power of taxing functionaries to amend tax assessments.

14. Acronyms





Acronyms

Acronyms	
ADC	Alternate Delivery Channel
ADR	Advances to Deposits Ratio
Agri	Agriculture
Al	Artificial Intelligence
AML	Anti Money Laundering
APAC	Asia Pacific
APIs	Application Programming Interfaces
ATIR	Appellate Tribunal Inland Revenue
ATM	Automated Teller Machine
B2B	Business to Business
B2C	Business to Customer
BaaS	Banking-as-a-Service
BB	Branchless Banking
BNPL	Buy Now Pay Later
BPR	Business Process Reengineering
CAR	Capital Adequacy Ratio

Acronyms	
CASA	Current and Savings Accounts
CBDC	Central Bank Digital Currency
CDD	Customer Due Diligence
CFT	Countering Terrorist Financing
CNIC	Computer National Identity Card
COP 27	Sharm el-Sheikh Climate Change Conference
COSO	Committee of Sponsoring Organisations
CSS	Customer Satisfaction Score
СХ	Customer Experience
DFS	Digital Financial Services
e-CIB	Electronic Credit Information Bureau
EMI	Electronic Money Institutions
ERM	Enterprise Risk Management
ESG	Environment, Social & Governance
ESRM	Environmental and Social Risk Management
ETB	Existing to Bank

Acronyms	
FATF	Financial Action Task Force
FS	Financial Services
FTE	Full Time Equivalent
FY	Fiscal Year
GAFA	Google, Apple, Facebook and Amazon
GBGs	Green Banking Guidelines
GDP	Gross Domestic Product
GRC	Governance, Risk and Compliance
HR	Human Resource
IA	Intelligent Automation
IBBs	Islamic Banking Branches
IBI	Islamic Banking Industry
IBs	Islamic Banks
ICAAP	Institutional Capital Adequacy Assessment Programme
IDR	Investments to Deposits Ratio
IFRS	International Financial Reporting Standards



Acronyms

Acronyms	
IT	Information Technology
ITO	Income Tax Ordinance 2001
KPI	Key Performance Indicator
KRI	Key Risk Indicator
KYC	Know Your Customer
L&D	Learning and Development
LoD	Line of Defence
MDR	Merchant Discount Rate
ML	Machine Learning
mPOS	Mobile Point of Sale
MSME	Micro, Small & Medium Enterprises
NADRA	National Database and Registration Authority
NBFC	Non-Banking Finance Company
NFI	Non-Funded Income
NPL	Non-Performing Loans
NPS	Net Promoter Score

Acronyms	
NTB	New to Bank
OTC	Over-the-Counter
P&L	Profit and Loss
P2M	Person-to-Merchant
P2P	Person-to-Person
PLS	Profit and Loss Sharing
PoS	Point of Sale
PSE	Public Sector Enterprise
PSO/ PSP	Payment System Operator/ Payment Service Provider
QR	Quick Response
RoA	Return on Assets
RoE	Return on Equity
Rol	Return on Investment
RPA	Robotics Process Automation
RTOB	Real Time Online Banking
RWA	Risk-Weighted Assets

Acronyms	
SBP	State Bank of Pakistan
SCP	Supreme Court of Pakistan
SECP	Securities and Exchange Commission of Pakistan
SFDR	Sustainable Finance Disclosure Regulation
SHC	Sindh High Court
SIM	Subscriber Identity Module
SME	Small & Medium Enterprises
STR	Suspicious Transaction Reporting
TAT	Turnaround Time
TBML	Trade-Based Money Laundering
UI	User Interface
UNEP	United National Environment Programme
USSD	Unstructured Supplementary Service Data
UX	User Experience
WPPF	Workers' Profit Participation Fund
WWF	Workers' Welfare Fund
YoY	Year on Year



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