3.1 Performance and Risk Analysis of the Banking Sector

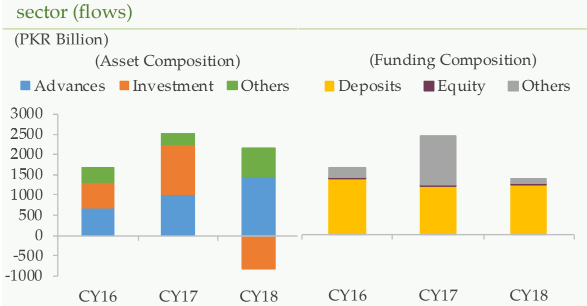
The banking sector has remained resilient during 2018 despite challenging macrofinancial conditions. The solvency has further improved, the fund-based liquidity has remained at a comfortable level and the interconnectedness within the banking sector has stayed unchanged. The financing growth has surged and the Non-Performing Loan ratios has touched its lowest level since CY08, though quantum of Non-Performing Loans has increased. Deposits, despite some deceleration, have remained the mainstay on the funding side. The pace of decline in profitability has receded and the reliance on interest income has increased. Going forward, credit, market and other emerging risks (such as AML/CFT and Cybersecurity) may pose significant challenges for the banking sector, though. The banks may also encounter funding constraints if the deceleration in deposit growth prolongs.

Banking sector responds well to the tighter macrofinancial conditions…

During CY18, the banking sector has weathered the macrofinancial headwinds with limited impact on performance and soundness.

The asset growth of the banking sector has decelerated mainly due to net-maturity of long-term government bonds. The liquidity thus generated, in addition to support from growth in deposits, has not only enabled banks to meet higher cost-push financing demand but also lowered their borrowings **(Chart 3.1.1)**. Encouragingly, advances disbursements have been broad-based to multiple economic sectors leading to uptick in "advances to deposit" ratio. The asset quality has observed a mixed trend with Non-Performing Loans (NPLs) ratio continuing to decline, albeit, with increase in quantum of NPLs.

Chart 3.1.1: Asset and liability composition of the banking sector (flows)



Source: SBP

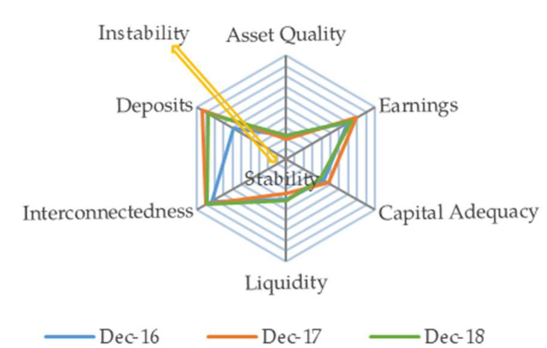
The profitability of the banking sector has continued to moderate during the year. However, the pace of decline has receded due to rising volume of interest income coming from healthy growth in advances and increase in interest rates.

The level of interconnectedness remains similar to last year with decline in volume of unsecured borrowing and lending. The solvency has further strengthened with CAR inching up to 16.2 percent, which is well above both the global and local minimum benchmarks. However, few small banks are facing challenges on liquidity and solvency fronts.

The consolidated picture of key risk dimensions of the banking sector has improved which is evident from the Banking Sector Stability Map (BSSM) and Banking Sector Vulnerability Index (BSVI) **(Chart 3.1.2 and 3.1.3)**.

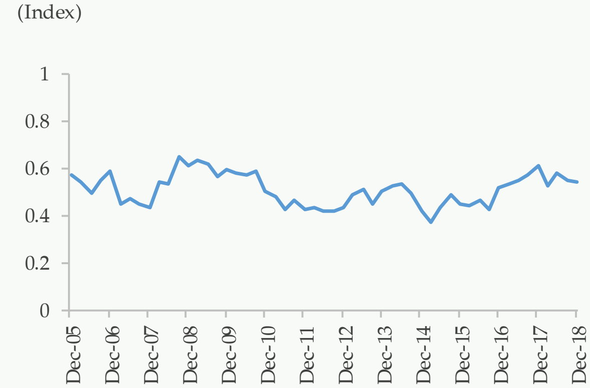
Chart 3.1.2: Banking Sector Stability Map

(Percentile Ranking)



Source: SBP

Chart 3.1.3: Banking sector vulnerability index



Source: SBP

1. Asset Quality

Credit risk of the banking sector in Pakistan mostly emerges from loans, as the banks have limited exposure in private sector debt instruments (e.g. Term Finance Certificates, Sukuk, debentures etc.). In addition, the significant holding of domestic government securities carries only market risk, as it attracts zero credit risk weight under Basel III capital adequacy rules.

The NPLs of banking sector advances rises…

NPLs, which had been hovering around PKR 600 billion during CY11-17, have escalated by 14.7 percent to reach PKR 680 billion by end of CY18, both, due to addition of fresh NPLs and lower cash recoveries.

Most of the fresh domestic NPLs have emerged in sugar, agriculture, and production and transmission of energy sectors along with individuals. The low market price of sugar and ongoing legal proceedings against one of the corporate groups, with large exposure in sugar, has resulted in classification of loans in this sector. Also, the delayed purchase and crushing of sugarcane by the sugar mills restrained farmers from fulfilling their financing obligations to banks on time. The rise in agriculture sector NPLs results from low yields owing to water shortage and drought conditions, late procurement of wheat by public procurement agencies, default in government declared "calamity affected area", and rise in input prices (such as seed, fertilizers, pesticides, electricity and POL) due to PKR depreciation.

Besides domestic defaults, foreign operations of banking sector have contributed 39.02 percent in the flow of NPLs during CY18. This mostly relates to few banks' exposure in GCC countries. These bad loans, mostly, pertain to electronics appliances and automobiles sectors as well as individuals. In addition, PKR amount of foreign operations' NPLs has, partially, escalated due to depreciation of domestic currency.

…but, the advances growth accelerates…

The growth momentum in advances has accelerated in CY18. The gross advances have risen by 21.27 percent in CY18 compared to 16.90 percent in CY17. The key thrust has come from domestic advances (both private and public). Resultantly, advances to deposit ratio has inched up to 55.81 percent; the highest level since Q4CY11.

The domestic private sector has observed an active buildup of financing flows of 20.0 percent across the corporates, SMEs, consumers and commodity operations. There has been strong growth in working capital financing followed by trade finance **(Chart 3.1.4)**. Sector-wise, the major private borrowing pertains to textile, food and beverages, cement, production and transmission of energy, chemicals, real estate sectors etc.

The public sector advances, up by 28.47 percent, has major contribution from fixed investment loans due to settlement of circular debt through state owned Power Holding Private Limited (PHPL), project expansion and Balancing, Modernization, and Replacement (**BMR**) **(Chart 3.1.4)**.

Chart 3.1.4: Private and public sector financing (flows)

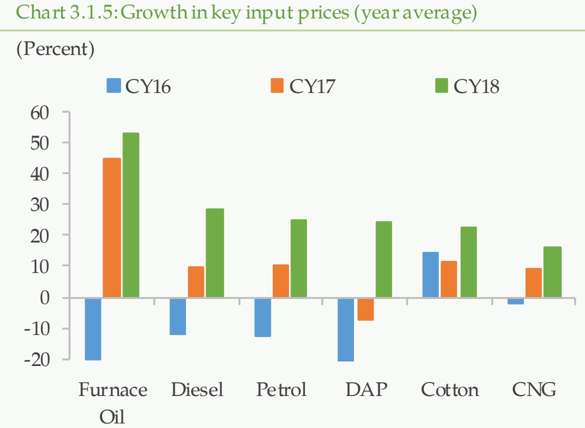
Source: SBP

However, rise in financing urges caution…

The following factors suggest that advances growth may be viewed with caution:

(a) The rise in working capital flows is mainly due to higher input/raw material prices owing to PKR depreciation **(Chart 3.1.5)**. This is evident from the slow real economic activity in the manufacturing sector. The large-scale manufacturing (LSM) index has observed a growth of only 1.40 percent in CY18.

Chart 3.1.5: Growth in key input prices (year average)



Source: PBS

(b) After growing persistently during the last few years, the private sector fixed investment financing growth has decelerated to 8.25 percent, in CY18 compared to 14.97 percent in CY17. A broad based deceleration has occurred in various sectors including textile, construction, transport, storage and communication, chemicals and chemical products. This contraction in demand is likely due to (i) tightening of macro-financial conditions (ii) completion of ancillary projects (mostly infrastructure and power) related to CPEC and (iii) downbeat investor sentiments.[115]

(c) The liquidity glut has induced banks to not only offer loans at lower margins but increase the average loan size also. [116,117] Due to high competition in extending loans, banks have offered financing even at KIBOR, which means that banks have assumed credit risk on their corporate clients at par with their interbank exposures (underpricing of risk).[118] Moreover, though the number of private business loan applications have reduced from 1.33 million in CY17 to 0.76 million in CY18, the average loan size has more than doubled (from PKR 3,389 in CY17 to PKR 6,887 in CY18).

(d) The reviewed year has witnessed higher financing demand in production and transmission of energy sector. However, a significant portion of public sector financing has been utilized for the settlement of circular debt

[115] The 16th and 17th waves of Business Confidence Index Survey (BSI) conducted by Overseas Investor Chamber of Commerce (OCCI) in May and December 2018, respectively, showed a significant decline in the overall business confidence Score (BCS) in both waves of the surveys. Similarly, SBP Business Confidence Survey also indicates the deterioration in business confidence during Aug-18 (i.e. first published survey) and April-19.

[116 116] Due to excess liquidity, (a) the average deviation between ONR and SBP policy rate has been only 0.003 bps in CY18 compared to 6.36 bps in CY17, (b) weekly data shows higher average (1.22 trillion) outstanding stock of cash and banks' balance with other banks (including treasury bank) in CY18 compared to CY17 (1.09 trillion).

[117] The average monthly spread between weighted average lending rates (excluding zero markup and interbank) on fresh advances and weighted average deposit rates (including zero markup and excluding interbank) on fresh deposit has reduced from 4.13 percent in CY17 to 4.08 percent in CY18 (http://www.sbp.org.pk/ecodata/Lendingdepositrates.pdf).

[118] Source: The State of the Pakistan's Economy: First Quarterly Report FY19 (http://www.sbp.org.pk/reports/quarterly/fy19/First/Chap-3.pdf)

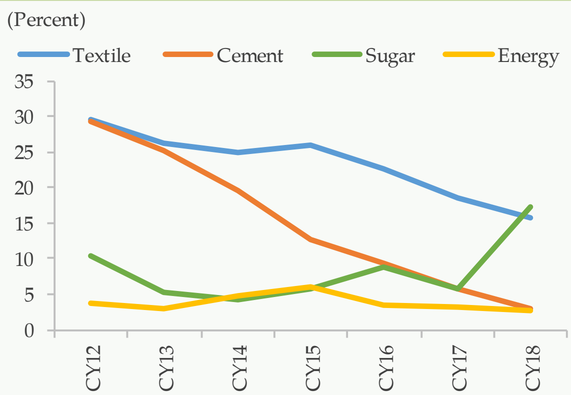
and hydel payments by federal government to the provincial government using one of the PSEs as a vehicle for routing funds.

(e) Consumer financing has increased by 19.74 percent, primarily, due to pick-up in personal loans category. The growth in auto loan, a key contributor in consumer financing since the last few years, has decelerated due to bar placed on non-filers from purchasing/ registering vehicles.

As the financing growth outpaces NPLs buildup, the infection ratio slides…

Due to higher proportionate growth in advances than NPLs, the overall NPLs ratio has reduced to 7.97 percent by end CY18 compared to 8.43 percent in CY17. The fall is obvious in most of the key sectors, except sugar **(Figure 3.1.6)**. Textile sector, which is the largest borrower of the banking sector, has witnessed a dip in the infection ratio as well as in absolute value of NPLs.

Chart 3.1.6: Sector-wise infection ratio



Source: SBP

…though net credit risk rises for specialized and local private banks…

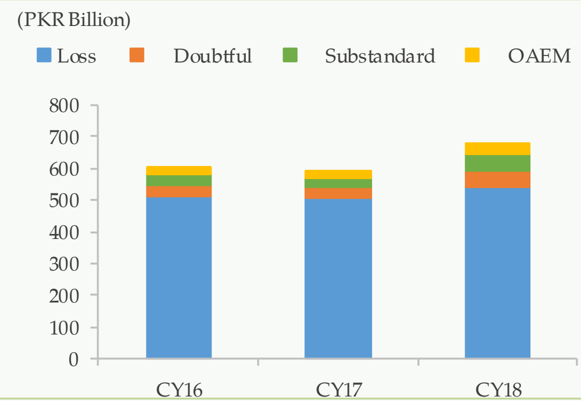
The provision coverage ratio has come down from 87.24 percent in CY17 to 83.80 percent in CY18. This decline has largely resulted from increase in NPLs in Agriculture and sugar sector especially in case of Specialized and local private banks **(Table 3.1.1)**. Consequently, the net-NPLs to net-loans ratio has risen to 1.38 percent as of end CY18 compared to 1.16 percent as of end CY17. Though the coverage still seems adequate, 20.40 percent of outstanding NPLs are still held in Other Asset Especially Mentioned (OAEM), subordinate and doubtful categories. Any further downgrading, going forward, may lead banks to bear additional provisioning expense **(Figure 3.1.7)**.

Table 3.1.1: Asset quality by bank-wise category (percent)

	CY16		CY17		CY18	
	Infection Ratio	Provision Coverage Ratio	Infection Ratio	Provision Coverage Ratio	Infection Ratio	Provision Coverage Ratio
	Percent					
PSCBs	15.90	81.43	13.40	87.03	12.75	88.21
LPBs	8.14	90.11	6.77	90.99	6.17	87.44
FBs	8.33	100.25	6.65	103.14	3.84	108.40
CBs	**9.72**	**87.28**	**8.09**	**89.75**	**7.47**	**87.80**
SBs	21.82	50.09	22.00	50.66	32.89	38.87
All Banks	**10.06**	**85.05**	**8.43**	**87.24**	**7.97**	**83.80**

Source: SBP

Chart 3.1.7: Composition of Non-Performing Loans (NPLs)



Source: SBP

While some small sized banks have become more vulnerable to credit risk…

During CY18, small sized banks (asset share: 8.04 percent) and very small size banks (asset share: 1.68 percent) have become more prone to credit risk with the rise in infection ratio as well as decline in the provisioning coverage ratio **(Table 3.1.2)**. These are the banks, which contain major share in the flows of NPLs during the reviewed year. On the other hand, large and medium size banks have improved both in terms of infection ratio as well as provisioning coverage.

Table 3.1.2: Size-wise asset quality of the banking sector

	CY16		CY17		CY18	
	Infection Ratio	Provision Coverage Ratio	Infection Ratio	Provision Coverage Ratio	Infection Ratio	Provision Coverage Ratio
	Percent					
Large	8.16	92.66	7.46	94.77	6.76	95.77
Medium	13.81	79.19	9.78	83.68	7.63	90.42
Small	11.53	67.06	10.10	62.10	12.19	43.10
Very Small	18.68	92.05	14.07	93.96	26.73	64.11
All Banks	**10.06**	**85.05**	**8.43**	**87.24**	**7.97**	**83.80**

Source: SBP

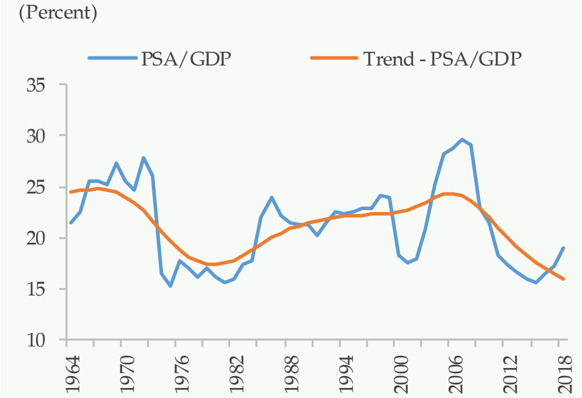
…and the lag impact of monetary tightening may impact asset quality…

Though banks' fresh loans are disbursed at a higher rate in response to monetary tightening, there still exists a significant portion of outstanding loans, which may be repriced with some lag due to contractual bindings. The fact that major rise in policy rate has occurred towards the end of CY18 and beyond, the borrowers may face further hike in interest expense later on. This coupled with the lower corporate profitability may deteriorate the repayment capacity of borrowers and increase NPLs. Generally, a lag of four to six quarters exists between the rise in interest rates and the subsequent buildup of NPLs.[119]

Pro-cyclical systemic risk remains subdued, despite continuous growth in advances…

The growth momentum in advances since last few years and recent economic slowdown warrants an assessment of pro-cyclical systemic risk in the banking sector of Pakistan.[120,121] The Advances to GDP ratio against its long-term trend, one of the commonly used indicators to assess pro-cyclical systemic risk, reveals that the gap has turned positive and is on the rise (**Chart 3.1.8**).

Chart 3.1.8: Private Sector Advances (PSA) to GDP ratio

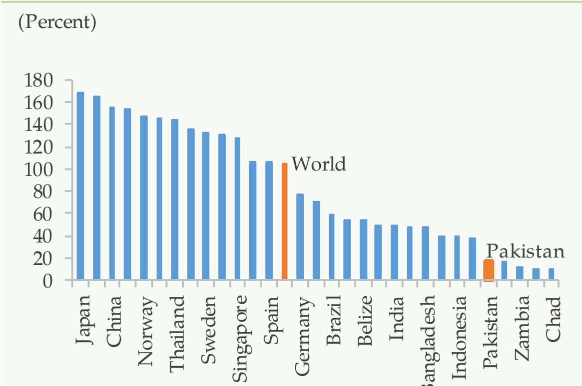


Source: SBP

However, credit-overheating possibilities are remote because:

(a) The magnitude of advances to GDP ratio in Pakistan is, in itself, not that high compared to even the peer counterparts (**Chart 3.1.9**). The ratio in Pakistan has been hovering around 15-20 percent historically and peaked at 29.66 percent in 2007. It currently stands at 17.24 percent only.

Chart 3.1.9: Country-wise credit to GDP ratio



Source: World Bank

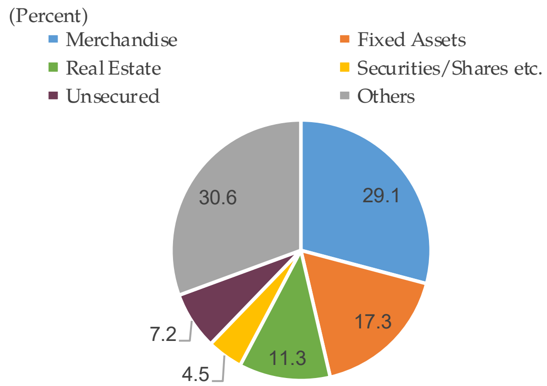
[119] SBP estimates based on Vector Autoregressive (VAR) models.

[120] Systemic risk refers to a widespread disruption to the provision of financial services due to partial or full impairment of the system that might have serious negative implications for the real economy. It has two major component; (a) pro-cyclical systemic risk: the vulnerabilities built up over time and (b) structural systemic risk: vulnerabilities arising from interconnectedness and distribution of risk within the financial system at a point in time.

[121] As per IMF-BIS-FSB, if banks are significant providers of credit to the economy, systemic risk typically surround the banking system. https://www.imf.org/external/np/pp/eng/2014/110614b.pdf

(b) The dominant channel of systemic risk where real estate collateral prices and credit expansion reinforces each other (e.g. Global Financial Crisis 2006-7) is weaker in Pakistan. The mortgage financing stands only at 0.25 percent of GDP and has a meager share of 1.07 percent in domestic lending portfolio. Further, residential real estate collateral secures only 11.35 percent of the banking exposure **(Chart 3.1.10)**.[122]

Chart 3.1.10: Classfication of advances by securities pledged



Source: SBP

(c) The limited cross-border exposure (both lending and borrowing) prevent the domestic financial system from external spillover effects of abrupt capital flows. .

(d) The regulatory structure is quite extensive. SBP, in its regulatory domain, has implemented the international best practices for enhancing the soundness of the banking sector, in particular, and financial system, in general[123]. Moreover, SBP as part of its strategic goal "Strengthening of the Financial Stability Regime" is working on putting in place an effective Macro Prudential Policy Framework. **(See Box 1.1 on "SBP initiatives to strengthen financial stability").**

2. Deposits

The structural risk also remains muted as deposits continue to be the mainstay of funds leading …

The steady growth in deposits is pivotal for the banks as it is the major source of funding. Deposits constitute 77.99 percent of total liabilities and 72.42 percent of total assets, as of end CY18. The deposits have contributed 92.68 percent in the asset expansion during CY18.

During CY18, deposits have risen by 9.55 percent (Y-o-Y) versus 10.29 percent in CY17; the lowest since CY08 **(Chart 3.1.11).** This slowdown may be attributed to a mix of factors including (a) cost cutting strategy of some banks to limit the growth of domestic remunerative deposits, (b) scaling back of operations by few banks in overseas market, (c) probable dampening effect of withholding tax on banking transactions, (d) depositors concern regarding enhanced KYC requirements to contain AML/CFT risks, and (e) additional liquidity available as a result of net-maturity of investment.

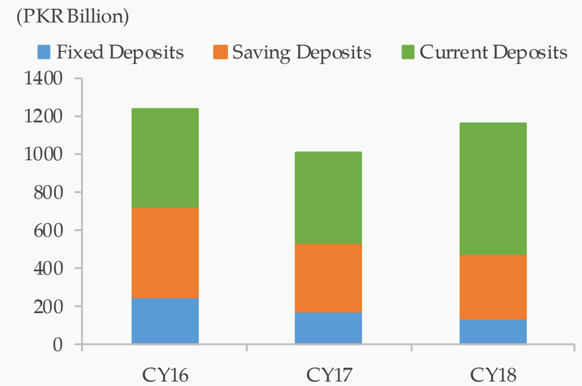
In terms of category, deceleration in saving and fixed deposits have overshadowed the rise in current deposits **(Chart 3.1.11)**. The saving deposits have become costly due to Minimum Saving Rate (MSR) policy in vogue.[124] Moreover, the fixed deposits could not attract the attention of banks due to maturity re-profiling of their assets, both, in investments (from PIBs to MTBs) and advances (from fixed term loans to short-term working capital financing).

[122] Table 3.11, "Classification of Scheduled Banks' Advances by Securities Pledged", SBP Statistical Bulletin, February 2019 (http://www.sbp.org.pk/reports/stat_reviews/Bulletin/2019/Feb/BankingSystem.pdf)

[123] For example, Basel III capital and liquidity standards.

[124] The minimum rate on saving deposits is directly linked to SBP repo rate (i.e. floor of the SBP interest rate corridor). As the monetary policy tightens, the MSR rises.

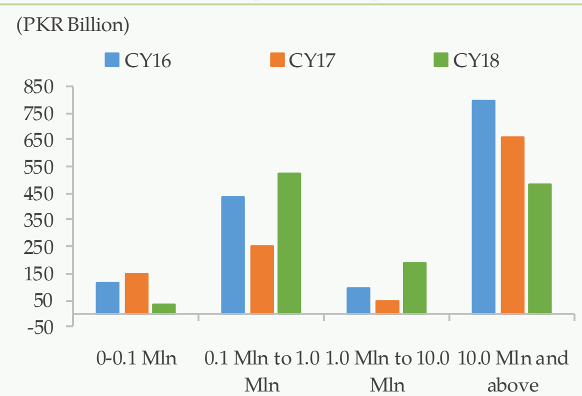
Chart 3.1.11: Composition of deposit flows during CY18



Source: SBP

The size-wise distribution of deposits is also important from the stability perspective. Generally, retail (small) deposits are more stable and have longer retention periods than the large size institutional deposits. Encouragingly, the reviewed year has witnessed growth in small sized retail deposits up to PKR 1.0 million. On the other hand, growth in deposits over PKR 10.0 million have been trending downwards **(Chart 3.1.12)**.[125] This is due to declining flows of institutional deposits (NBFIs, PSEs etc.) as well as private business deposits, particularly, the manufacturing sector.

Chart 3.1.12: Size-wise composition of deposits



Source: SBP

3. Interconnectedness[126]

The level of overall integration in the banking sector has almost stayed at the level as seen a year earlier. However, there is a compositional shift. While volume of call (unsecured) lending and borrowings during CY18 has reduced, the other interbank liability and assets have increased.

The lack of complexity in the financial sector, within itself, provides an inbuilt stabilizer against the cross-sectional systemic risk. The interbank exposure has low share in assets of the banking sector, as deposits are the key source of funding. Further, the interbank repo borrowings are, mostly, collateralized against highly liquid and credit risk free government securities. In addition, absence of exotic instruments and shallow capital market with limited debt instruments, keep the cross institutional exposure and, resultantly, the likelihood of cross-sectional systemic risk low.

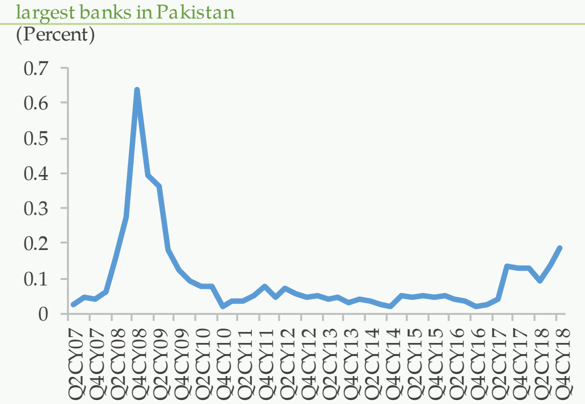
The presence of large sized institutions may enhance the likelihood and impact of systemic risk, though. Within the context of cross-institutional exposure, the weighted average probability of defaults (based on Merton model) of 5 largest banks has increased recently from 0.129 percent by end of CY17 to 0.188 percent by end of CY18 **(Chart 3.1.13)**.[127] However, this narrowing distance to default seems to have emerged due to higher volatility in the equity market during CY18, instead of weakness in the fundamentals of these financial institutions as suggested by the BSSM **(see Chapter 2)**.

[125] About 41.6 percent of the deposits are of very large size (PKR 10 million and above).

[126] The interconnectedness is measured by two major indicators i.e. (1) interbank call borrowing plus call lending and (2) Other interbank financial liabilities plus assets: total borrowings and interbank lending plus total deposits (financial institution) minus call borrowings minus repo borrowings from SBP minus call lending.

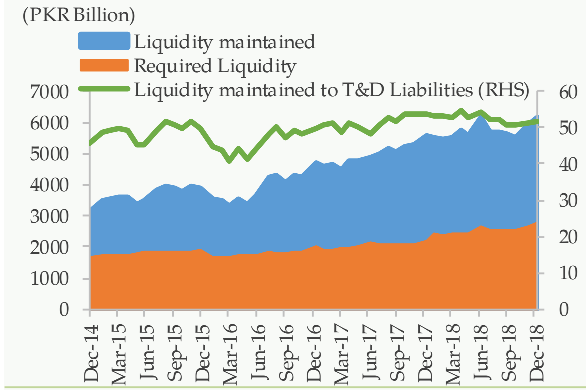
[127] Source: Bloomberg

Chart 3.1.13: Weighted average 1-year probability of default of 5 largest banks in Pakistan



Source: Bloomberg and SBP

Chart 3.1.14: Liquidity position of the banking sector



Source: SBP

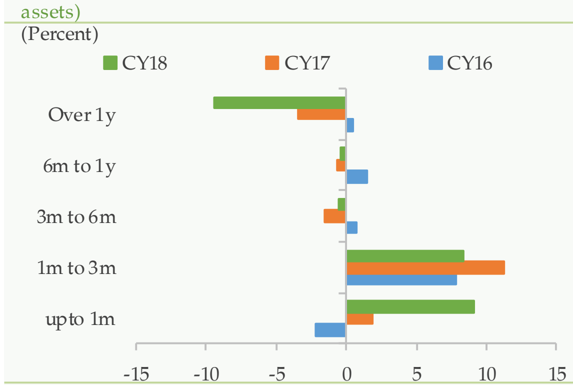
4. Liquidity

The fund-based liquidity of the banking sector is mostly contributed by holding of government papers. During CY18, the liquidity has slid down slightly due to net-maturity in banks' holding of long-term PIBs. However, the overall liquidity, with liquid assets maintained at 48.69 percent of total assets and 94.85 percent of short-term liabilities, is still adequate to meet any contingent need of banks.[128] Similarly, eligible liquid assets against demand and time liabilities stand at 51.82 percent; well above the required level of 24 percent for CRR and SLR purpose **(Chart 3.1.14)**. In terms of Basel III liquidity standards, banks have maintained liquidity coverage ratio (LCR) at 182.72 percent and net stable funding ratio (NSFR) at 156.13 percent (both, well above the minimum required ratios of 100 percent).

…as the banks' ability, to meet short-term obligations improve…

The banks renewed interest in MTBs has reshaped the asset-liability maturity profile of the banking sector in CY18 **(Chart 3.1.15)**. The asset-liability gaps reveal that banks' ability to meet short-term commitments has improved. On the other hand, the negative gap for maturity over one year has further widened in CY18 due to net-maturity of PIBs. However, once the interest rates stabilize, banks' interest in PIBs may restore leading to a reduction in this gap.

Chart 3.1.15: Maturity-wise asset and liabilities gap (as percent of assets)



Source: SBP

[128] Liquid assets are consist of (a) cash and due from treasury banks, (b) balance with other banks, (c) call money lending, (d) reverse repos lending and (e) all government securities.

However, smaller banks ability to meet obligations has receded…

The liquidity profile of the bottom two quartiles of banks (smaller banks) has been weakening during the last few years (Table 3.1.3). There has been quite a steep fall in liquidity ratio of both small and very-small banks in CY18. This is because some of these banks have utilized their liquid assets to fund their operations.

Table 3.1.3: Liquid assets to total assets by bank size (percent)

	CY14	CY15	CY16	CY17	CY18
			Percent		
Large	51.47	55.38	54.22	54.93	50.17
Medium	42.55	51.82	55.87	56.06	50.60
Small	45.86	45.74	42.70	40.06	33.49
Very Small	48.55	54.10	63.90	60.09	36.14
All Banks	**49.15**	**53.81**	**53.73**	**53.97**	**48.69**

Source: SBP

5. Profitability

The profitability of the banking sector has moderated for yet another year. Profit (after tax) at PKR 149 billion is down by 5.36 percent in CY18. This decline has resulted from (a) higher provisioning expense on bad debts and diminution in the value of investments; (b) decline in net gain on sale of securities; (c) reduced dividend income; and (d) rise in administrative cost including some extra ordinary expense borne by a couple of large banks (e.g. higher legal and professional charges and expense on defined benefit pension plan etc.).[129]

Accordingly, all profitability indicators have shown slight deterioration. The after-tax ROA and ROE have dropped to 0.81 percent and 10.71 percent in CY18, respectively, from 0.92 percent and 11.53 percent, respectively, in CY17 (Chart 3.1.16). The cost to income ratio has slightly inched up to 60.21 percent in CY18 compared to 57.14 percent in CY17. In addition, the bank-wise distribution of after tax profit shows that the number of loss making banks has increased to 7 in CY18 from 5 in CY17. However, on aggregate, these banks have 3.70 percent share in the asset base of the banking sector and most of these are under the restructuring process.

Chart 3.1.16: The drivers behind change in ROE during CY18

Note: Green bar indicates the increase while Red bar indicates decrease
Source: SBP

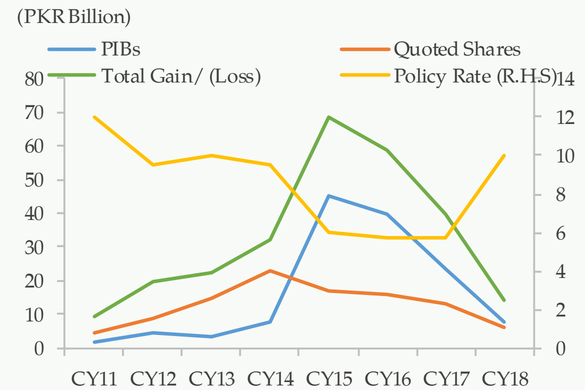
…but earnings flow seems to have stabilized…

Despite moderation in profitability the Net Interest Margin (NIM), has improved from 3.34 percent in CY17 to 3.40 percent in CY18. In addition to healthy growth in advances, the policy rate hikes from second quarter of CY18 onwards, has increased the lending rates. This has bolstered the interest earnings of the banks as Net Interest Income (NII) has increased by 9.27 percent during CY18 from 2.90 percent in CY17. Moreover, lagged impact of increase in rates on repricing of existing outstanding loans is expected to further push the NIM upwards.

Further, with the sizeable maturity of long-term government bonds, the expected volume of losses on the sale of lower valued remaining securities, in the current rising interest rate scenario, may be limited. (Chart 3.1.17).

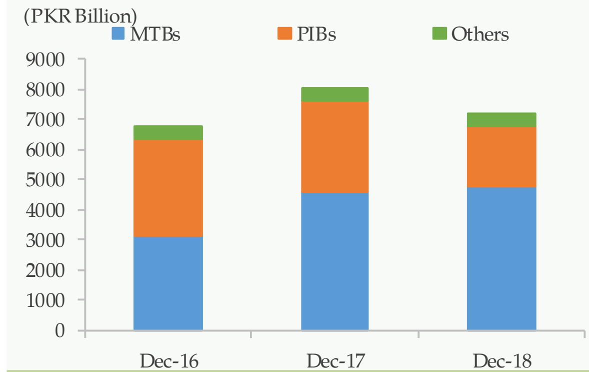
[129] Though, extra ordinary items expenses in CY18 (PKR 9.0 billion) are less than CY17 (PKR 23.7 billion), they are still significantly higher than their historical trend.

Chart 3.1.17: Gain on sale of securities



Source: SBP

Chart 3.1.19: Classification of banks' investment in government securities (outstanding)

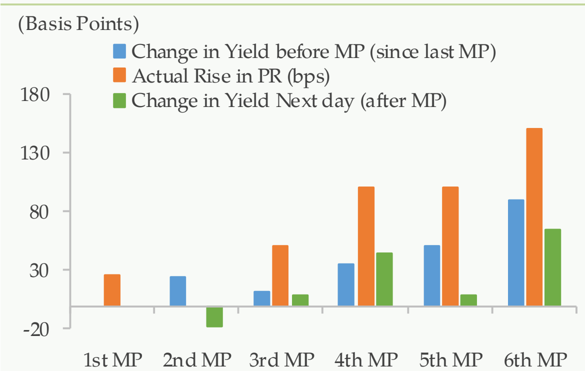


Source: SBP

With the monetary tightening, banks adopted profit optimization strategies…

The mark-to-market yields on government papers rose significantly before five out of six SBP monetary policy announcements during CY18 **(Chart 3.1.18)**. This advocates that banks had a strong rate rise expectation before the announcement of each monetary policy.

Chart 3.1.18: Yield to maturity on 3-Months MTBs and policy rate in each Monetary Policy (MP) during CY18



Source: SBP

In this scenario, banks have mostly preferred to invest in short-term instruments (3 month MTBs) and divest long-term instruments (PIBs) to limit deficit on revaluations **(Chart 3.1.19)**. This behavior has also exhibited in primary auctions, where banks demanded higher average yields on PIBs (than offered coupon rates) to compensate for the expected revaluation of PIBs.

However, the realization of credit risk remains a key concern for profitability…

A sizable amount of provisioning charges has squeezed the bottom line of the banks. After accounting for the provisioning charges against NPLs and diminution in the value of investments, the growth in NII slides to 2.8 percent, which is lower than 3.3 percent in CY17.

…along with rising operational cost…

In addition to provisions charge, surge in administrative expenses has also affected the overall profitability. The administrative expense of the banking sector has exhibited a growth of 10.96 percent against 3-years (CY15-17) average of 8.40 percent **(Table 3.1.4)**. Besides costs associated with normal operations such as branch expansion costs, the one-off costs (e.g. legal charges, postretirement benefit expenses) have also increased. As a result, both the fixed and variable components of administrative expenses have witnessed a surge.

Table 3.1.4: Break up of administrative cost (fixed Vs. variable)

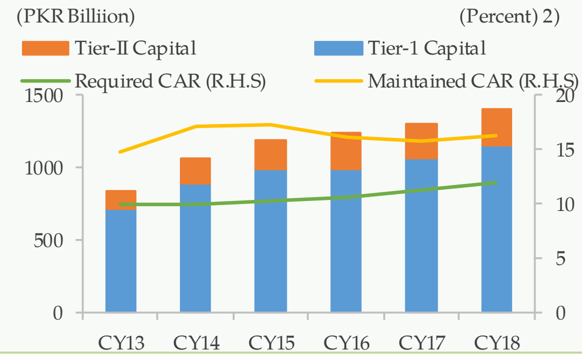
	CY16	CY17	CY18	Growth CY18	Average Growth (CY15-17)
	PKR Billion			Percent	
A. Fixed Administrative Expense	**103**	**114**	**132**	**15.17**	**8.80**
Rent, taxes, insurance, electricity, etc	45	48	56	16.18	6.82
Depreciation	24	27	28	2.74	11.52
Repairs and maintenance	17	19	23	21.71	12.39
Charge for defined benefit plan	8	11	15	37.23	8.96
Others	8	9	10	7.42	6.62
B. Variable Administrative Expense	**253**	**274**	**299**	**9.20**	**8.24**
Salaries, allowances, etc	164	177	189	6.51	7.62
Legal and professional charges	7	9	18	97.72	25.51
Communications	11	12	12	-0.19	10.91
Others	71	75	80	6.04	7.83
Total Adminstrative Expense (A+B)	**356**	**388**	**430**	**10.96**	**8.40**

Source:SBP

6. Solvency

Despite emerging risks during CY18, the banking sector has remained resilient. The Capital Adequacy Ratio (CAR) of the banks has inched up to 16.19 percent as of end CY18 from 15.76 percent in CY17; well above the minimum local requirement of 11.9 percent and international benchmark of 10.50 percent. The tier 1 CAR has stood at 13.24 percent by end CY18 **(Chart 3.1.20)**. The leverage ratio (LR) of the banking sector at 4.80 percent as of end CY18 is well above the minimum required level of 3.0 percent.

Chart 3.1.20: Eligible capital and Capital Adequacy Ratio (CAR) of the banking sector



Source: SBP

…as banks continue to take measures to enhance capital

As per phased implementation of Basel III, banks were required to raise their CAR to the minimum level of 11.9 percent (including capital conservation buffer of 1.9 percent) by end of CY18. [130] To comply with this requirement, several banks have enhanced additional Tier I capital through issuance of Basel III qualifying instruments (such as TFCs, Sukuk etc.) to the tune of PKR 37 billion in CY18 (PKR 8 billion in CY17). The tier II capital has slightly moved up due to revaluation of fixed assets and foreign exchange revaluation reserves.[131] The rise in retained earnings have also contributed to the overall increase in eligible capital of the banking sector, which has by 7.69 percent against 4.82 percent increase in total risk weighted assets leading to a higher CAR.

The bank-wise distribution of CAR reveals a strong solvency position as most of the banks have maintained CAR above 15 percent **(Table 3.1.5)**. Further, the banks with higher CAR are mostly large and medium sized banks maintaining the bulk of the banking assets.

[130] Banks are required to raise their CAR at 12.5 percent by end CY19. BPRD Circular No.6 of 2013 (http://www.sbp.org.pk/bprd/2013/C6.htm)

[131] However, yearly flows of overall revaluation reserves turned into negative due to revelation deficit on AFS securities.

Table 3.1.5: Distribution of banks by CAR

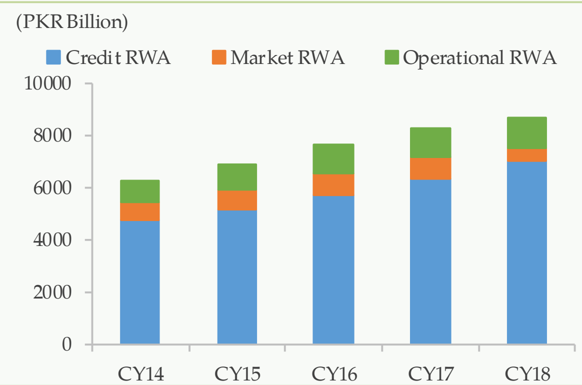
	CY14	CY15	CY16	CY17	CY18
	Number of Banks				
> 15 percent	22	19	17	18	18
Required<CAR<15percent	12	13	13	11	10
CAR<Required	3	3	4	4	6
Total	**37**	**35**	**34**	**34**	**34**

Source: SBP

Also, bank's respond to tighter macrofinancial conditions by limiting the growth of Risk Weighted Assets (RWAs)…

Despite robust growth in lending activity (21.27 percent), the credit risk weighted assets have expanded at a slower pace of 10.67 percent **(Chart 3.1.21)**.

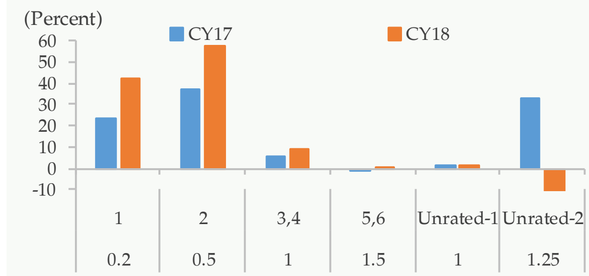
Chart 3.1.21: Composition of Risk Weighted Assets (RWA)



Source: SBP

This is because, banks have shifted lending portfolio from unrated exposures (attracting 100 percent or 125 percent risk weight) to rated categories with lower risk weights (20 percent and 50 percent) **(Chart 3.1.22)**. Shifting exposures towards better rating categories is a welcome development from the risk management perspective as it indicates lower probability of default of corporate clients of the banks.

Chart 3.1.22: Share of outstanding banks' lendng to corporate sector against SBP's mapped supervisory rating grades*

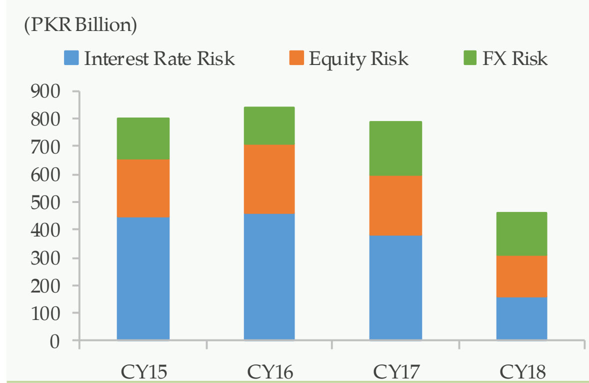


*Banks are required to map the assigned rating of exposures with SBP supervisory rating grades ranging from 1 to 6 (e.g AAA maps with SBP rating grade 1)

Source: SBP

A considerable reduction in market risk weighted assets has further subdued the overall growth in RWA. The larger reduction in market risk weighted exposure has taken place against interest rate risk due to maturity of PIBs during the year.[132] Some erosion of banks' exposure on equity investment has also reduced the market risk under this specific segment **(Chart 3.1.23)**.

Chart 3.1.23: Market risk weighted assets of the banking sector



Source: SBP

The operational risk weighted assets (ORWA) have shown steady growth, however. Since most of the banks are using Basic Indicator Approach (BIA), the annualized audited average gross income (of last three years) forms the basis for estimation of ORWAs. As such, this segment has remained the least volatile over time.

[132] The instrument of longer maturity attract higher market risk weight under Basel instructions for capital adequacy calculation.

SBP has designated three large banks as D-SIBs…

To address the risks emerging from the cross sectional dimension of the systemic risk, SBP has issued a framework for Domestic Systemically Important Banks (D-SIBs) in April 2018.[133] Accordingly, SBP has designated three large banks as D-SIBs. These banks are required to meet enhanced supervisory and regulatory requirements, including the Higher Loss Absorbency Capital surcharge in the form of additional common equity tier-1 capital (CET1). Besides the designated D-SIBs, the branches of Global-Systemically Important Banks (G-SIBs) operating in Pakistan will hold additional CET1 capital against their risk-weighted assets in Pakistan at par with what is applicable on their respective G-SIBs.[134]

The banking sector of Pakistan has reasonable global standing in terms of financial soundness …

The cross-country data of financial soundness indicators reveals that Pakistan stands at a comfortable level in terms of solvency, liquidity and earnings (Table 3.1.6). However, despite consistently declining over time, its NPL ratio remains high compared to some of the AEs and EMDEs. However, new laws have been introduced in the last few years, which are expected to improve the debt recovery regime. [135] Further, net-NPLs to net-advances ratio stands at only 1.4 percent, indicating, low probability further equity erosion on account of credit risk.

Table 3.1.6: Country-wise financial soundness indicators (percent)

Countries	CAR	Infection Ratio	ROA - after tax	ROE - after tax	Liquid Asset Ratio
Pakistan	**16.10**	**7.99**	**0.82**	**10.69**	**48.70**
Bangladesh	10.93	9.95	0.84	12.32	15.76
Brazil	17.66	3.19	1.68	15.44	14.75
China	13.60	1.86	1.03	13.70	22.69
India	15.90	10.34	(0.12)	(1.60)	7.93
Indonesia	22.89	2.29	2.51	16.73	21.86
Malaysia	17.37	1.46	1.42	12.59	23.41
Singapore	16.53	1.33	1.38	15.55	68.26
Turkey	18.09	3.05	1.87	17.97	50.63
Canada	15.25	0.41	1.15	22.10	10.61
Denmark	21.28	4.11	0.73	12.44	11.68
France	18.44	2.94	0.43	6.84	13.49
Germany	18.90	1.50	0.37	6.31	12.69
Japan	17.00	1.07	0.30	7.30	29.27
Norway	22.33	0.75	1.35	11.95	8.21
UK	20.38	1.18	0.52	8.07	23.95
United States	14.74	0.95	0.43	3.72	12.87

Source: IMF

Banking infrastructure is steadily expanding…

The banking infrastructure and its growth pattern is a useful indication of the current as well as future growth prospects of the banks. The reviewed year has witnessed a broad-based and steady growth in the banking infrastructure i.e. brick and mortar based banks' branches, ATMs, and electronic cards (Table 3.1.7). The increasing share of online branches overtime is also a welcome development, as it will improve banking efficiency.

[133] The framework follows two steps approach; in first step, a sample of banks based on quantitative and qualitative criteria is identified. In the second step, among these sample banks, D-SIBs are designated based on Size, Interconnectedness, Substitutability and Complexity.

[134] http://www.sbp.org.pk/press/2018/Pr-14-Jun-18.pdf

[135] For example, Financial Institutions (Recovery of Finances) (Amendment) Act 2016, Corporate Restructuring Companies Act 2016, Financial Institutions Secured Transaction Act 2016 and Corporate Rehabilitation Act 2018.

Table 3.1.7: Banking sector infrastructure

	Dec-16	Dec-17	Dec-18	Growth CY17 Percent	Growth CY18 Percent
Total Bank Branches	13,384	13,837	14,322	3.38	3.51
Online Branch Networl	13,107	13,716	14,174	4.65	3.34
ATMs	12,253	13,262	14,143	8.23	6.64
POS Machines	50,839	51,886	49,082	2.06	-5.40
ATM Cards	3,685,228	4,038,377	4,453,766	9.58	10.29
Credit Cards	1,208,763	1,374,073	1,522,366	13.68	10.79
Debit Card	17,239,545	19,205,793	22,254,919	11.41	15.88
Social Welfare Cards	7,846,220	8,494,698	7,231,142	8.26	-14.87
Employees	189,360	202,015	203,952	6.68	0.96

Source: SBP

Future outlook

The banking outlook depends a lot on the future economic prospects and the corresponding policy responses. The monetary tightening towards the end of CY18 and first half of CY19 may lead to repricing of loans. This may improve the net interest income and, thus, profitability and solvency of the banking sector. On the other hand, it may dent the repayment capacity of the borrowers, thus, escalating the credit risk. Further, considering the contraction in LSM during July-March FY19 reflecting the dwindling performance of non-financial corporate sector, suggest that the odds of defaults are increasing. Further, any downgrade of a sizeable portion of NPLs parked under "doubtful" and "substandard" categories could raise the provisioning expense for the banks. Thus, the credit risk remains paramount, going forward.

Besides implications arising from the realization of credit risk, the profitability of the banking sector depends upon the costs associated with mitigating the emerging operational risks and the interest rate dynamics. The mitigating measures against various risks such as compliance with AML/CFT related laws and regulations, fortifying systems against cyber-attacks, enhanced due diligence to ward-off fake/benami accounts, seeking legal remedies to manage challenges in overseas operations, etc. are all costly. The banks investment behavior in government securities and the interest earned there against are largely dependent on interest rate dynamics. Moreover, fiscal measures (such as super tax) has implications for the bank's after-tax returns and solvency.

In order to meet the growing financing demand of public and private sector, banks need to renew their focus on deposit mobilization. The sizeable rise in MSR may help in restoring the deposit growth, though.

Like CY18, the enhanced CAR requirement (from current 11.9 percent to 12.5 percent) by the end of CY19, given slowdown in profitability, may compel banks may have to focus on raising capital through issuance of Basel III qualifying instruments. Banks, particularly small sized ones, will need to formulate concrete and time bound capital enhancement plans to meet their capital requirements. The strong NSFR and LCR of banks suggest that they will remain compliant with the Basel III liquidity requirements.

SBP, in cognizance of various emerging risks, has taken a number of regulatory and supervisory measures to mitigate their impact (See Box 2).