Economy

Exhibit: Flood 2022, affected areas

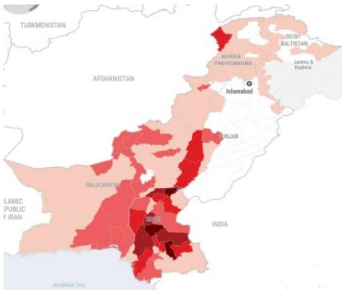

Exhibit: Quantifying the damage

Deaths	1,162
Population (in mn)	33.05
Livestock (mn nos.)	0.73
Roads (kms)	5,063
Bridges (nos.)	243
Shops (units)	173
Houses (mn units)	1.06

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2022 Pakistan Floods

Pakistan Floods 2022: 'This Too Shall Pass'

- Much of Pakistan's agricultural and rural areas have been severely damaged by flooding and monsoon rains since Jul-22. The magnitude of animal, crop, infrastructure, property damage, and population impacted, according to some media estimates, might easily exceed 1.5–2.0 times that of the flooding from July–August 2010
- The immediate financial burden of relief efforts and eventual restoration efforts will undoubtedly strain the already fragile economy.
- Estimated economic loss will trim off growth rate. We expect growth could fall under ~2.0% for FY23, from 6.0% achieved in Fy22.
- Taking a clue form 2010 flooding, once the flood water recedes rehabilitation and reconstruction causes a spike in business activity. Hence we expect a marginal impact on industrial sectors outlook.

Much of Pakistan's agricultural and rural areas have been severely damaged by flooding and monsoon rains since Jul-22. From July 22 through August 22, the nation experienced roughly a 3-fold increase in rainfall, averaging 368mm versus 119mm (historic monsoon average rainfall). The magnitude of animal, crop, infrastructure, property damage, and population impacted, according to some media estimates, might easily exceed 1.5–2.0 times that of the flooding from July–August 2010. However, it's still too early to say for sure. The immediate financial burden of relief efforts and eventual restoration efforts will undoubtedly strain the already fragile economy.

Nevertheless, we analyse the likely economic reaction to the flood situation.

The damage so far

Sindh and Balochistan, which received 6 times as much rain on average (501 mm vs. 83 mm), were the hardest hit provinces. Of the total 33mn people affected by the floods, 15mn are from Sindh province, which makes up around 29% of the population of the province. Similarly, Balochistan too had a significant population affected, with an estimated 9.2 million people, or 72% of the province's entire population.

Exhibit: Rainfall average region wise. (01/Jul -to- 30/Aug)

in mm	Normal	Actual	Dev.
Pakistan	**119**	**368**	**210%**
AJK	322	307	-4%
Balochistan	52	314	505%
GB	30	73	147%
KPK	208	299	44%
Punjab	196	365	86%
Sind	113	688	508%

Source: Pakistan Meteorological Department (PMD), UNOCHA

Then is the livestock, houses and infrastructure damages the flood has caused. As per NDMA data available, nearly 1.0mn houses (fully & partial) have been damaged due to floods, of which Sindh alone accounts for 85% or 0.9mn houses. Likewise situation is for roads, bridges and shops etc.

Exhibit: Flood 2022 socio and property damages									
	Deaths no.	**Population (mn)** Total	Affected	% age of	**Livestock** no.	**Roads** in kms	**Bridges** no.	**Shops** units	**Houses** Full & Partial units
Pakistan	**1,162**	**220.9**	**33.0**	**15%**	**730,483**	**5,063**	**243**	**173**	**1,057,388**
AJK	41	4.2	0.1	1%	772	0	0	20	475
Balochistan	249	12.8	9.2	72%	500,000	1,000	18	0	61,718
GB	22	1.3	0.1	4%	0	16	65	8	935
KPK	257	36.8	4.4	12%	9,172	1,589	84	0	51,856
Punjab	188	116.2	4.8	4%	205,104	130	16	100	46,320
Sindh	405	49.6	14.6	29%	15,435	2,328	60	45	896,084

Source: NDMA, IGI Research

Quantifying the Preliminary damage

As per media reports and UN the immediate relief effort would require roughly US$ 160mn targeting 5.2mn individuals, the bulk of which will be for Food, Nutrition and health (~65%). Post immediate relief, the rehabilitation process as per various media reports is estimated to range between US$ 5.5-12.0bn, that's roughly 1.4-1.8% of gdp size, US$ 5.0bn or ~3.0% of the gdp back in 2010.

Exhibit: Estimated Economic Loss		
	US$ bn	PKRtn
GDP	371.4	80.6
--Structure Damage	5.8	1.3
--Crop Damage	0.5	0.1
--Livestock Damage	0.3	0.1
Total Economic Loss	**6.5**	**1.4**
%age of GDP	1.8%	1.8%

Source: UNOCHA, Media Reports, IGI Research

Challenging Economic Times

Exhibit: Summary points of potential economic route ahead

	Comments	Potential impact
Growth	Economic growth will undoubtedly be negatively affected: Although the agricultural sector is direct affected, slowdown in industrial production amid input loss, will eventually affect overall economic activity, dragging down the services sector as well.	Est. economic loss will trim off growth rate. We expect growth could fall under ~2.0% for FY23, from 6.0% achieved in Fy22.
Inflation	Things might go from bad to worse: Recent Aug-22 readings of 27%y growth in inflation is telltale of sign of rising inflationary burden.	Govt. has shown intention to reduce inflationary burden by providing relief on utility bills. But under IMF program this seems high likely.
Fiscal Account	Budgetary position is anticipated to deteriorate: As per the news report, estimated cost of rehab and infrastructure restoration could easily surpass US$ 10bn (US$ 10.3bn in 2010).	International donor organisations and other countries will eventually shoulder the majority of the financial burden. Domestically, PSDP funds are most likely be routed to fund the rehab/recons damages over the stretch of 3-4 years.
External Accounts	Balance of payments may also come under pressure: Production losses will act as export damper, while a greater food item, medical supplies and later reconstruction/ rehabilitation costs will push import bill. Remittances will eventually increase to accommodate private household consumption.	
Monetary Policy	Tricky: Government borrowing from SBP will eventually resume again causing a faster increase in the Net Domestic Assets (NDA). Combine this elevated intl. commodity prices and domestic prices, rate tightening is probable way around.	SBP will likely follow a wait-and-see approach, with rate increases if any, based on the severity of the damages and the amount of foreign help received.

Growth: Economic growth will undoubtedly be negatively affected

Given the scale of the aforementioned damages and the country's ongoing struggle to reestablish economic stability since the beginning of 2022, it seems unlikely that the floods would have little to no effect on the economy. In FY23, growth is probably going to be noticeably slower.

The agricultural sector by far will be the most affected. Important crops include cotton, wheat, and rice has as per media reports taken an extensive hit. Moreover, even if the industrial sector was not significantly impacted by the floods, it would nevertheless experience a major slowdown as a result of the input losses that the textile and food industries are projected to experience. Despite the beneficial effects, the slowdown in the sectors that produce commodities, the interruption of economic activity, and the severe damage to infrastructure would cause some slowing in the services sectors.

Exhibit: Potential Gdp loss amid Floods

	Year	**2022**	**2023**	Economic Loss			
		Actual	Base	**US$ 5.5bn**	**US$ 6.5bn**	**US$ 7.5bn**	**US$ 8.5bn**
GDP (market)	PKRtrn	66.9	80.6	1.2	1.4	1.6	1.8
GDP (market)	US$bn	375	371	366	365	364	363
Growth Rate		6.0%	3.6%	2.0%	1.7%	1.5%	1.2%

Source: IGI Research, SBP

Inflation: Things might go from bad to worse

The effect on pricing is also already apparent, with monthly inflation seeing the largest increase in more than a decade. Since the beginning of July 22, headline inflation has on average increased by ~5%m/m, with latest Aug-22 reading registering 27%y growth (link).

Potential Response: According to recent media reports, the government has signaled that it may reduce the rise in administrative costs to help combat inflation burden. Given the on-going IMF programme, this situation seems improbable. For instance, the government has increased the petroleum development levy by PKR 17.5/ltr, raising the retail price by PKR 2/ltr to PKR 236/ltr despite a decrease in Motor Sprit (MS) ex-refinery prices from PKR 197/ltr in August 22 to PKR 183/ltr in September 22.

Fiscal Account: The government's budgetary position is anticipated to deteriorate as it bears a substantial amount of the expense of relief, rehabilitation, and reconstruction.

Exhibit: Snapshot of Budget FY23		
PKRbn	FY22A	FY23B
Tax Rev.	6.0	7.0
Non-tax Rev.	1.3	2.0
Total Rev.	7.3	9.0
Current Exp.	8.5	8.7
Dev. Exp.	0.1	0.8
Total Exp.	8.6	9.5
Prov. Share	3.5	4.1
Fed. Budget Bal.	**-4.8**	**-4.6**
%age of Gdp	-7.1%	-5.7%

While reconstruction and rehabilitation of damaged infrastructure would be spread over 3-4 years, relief activities and restoration of even the basic public infrastructure and services will require substantial outlays. As per the news report, estimated cost of rehab and infrastructure restoration could easily surpass US$ 10bn (US$ 10.3bn in 2010).

Potential Response: International donor organisations and other countries will eventually shoulder the majority of the financial burden. The government has so far requested roughly US$ 160mn for emergency assistance only.

Exhibit: Estimated Required emergency funding for 5.2mn people		
	US$ mn	PKRbn
--Food & Nutrition	57.0	12.4
--Education	10.2	2.2
--Health	47.8	10.4
--Protection & Shelter	44.2	9.6
--Logistics	1.1	0.2
Fund Required	**160.3**	**34.8**

Source: UNOCHA, Media Reports, IGI Research

On domestic front, government has earmarked a roughly PKR 37.5bn (link) or US$ 170mn under the Benazir Income Support Program (BISP), which will provide PKR 50,000 to the 0.75mn flood victims. In order to pave way for rehab and recons activity, we think, government is likely to reprioritize existing development budget (PKR 2.26trn including federal) which will barely be a squeeze, given already high budget deficit of FY23 (projected federal deficit of 4.6trn, or 5.7% of GDP). This implies more debt load, which would again hurt country's long-term growth trajectory.

External accounts: Balance of payments may also come under pressure

As per media reports, in Sindh Kharif crop particularly vegetables have taken a hardest hit. Although the full scale of damage is uncertain at this point, key standing, harvested and stored crop including cotton, wheat and rice have took significant hit in Sindh (~35% of agricultural produce).

The resulting disruption in productive activity could act as a dampener if the damage to the crops turns out to be extensive. Hence, import of food items is most likely to go up and local textile industry will likely be affected by the need to source damaged cotton.

Moreover, other construction material that saw a higher export during 2021 will now have to be diverted to domestic consumption, which will likely result in weaker export performance. On the contrary, reconstruction and rehabilitation will require a significant increase in imports.

Workers' remittances are likely to continue to play an important role in financing household consumption. However, maintaining foreign exchange reserves (26-Aug, US$ 13.4bn, 2.5 months of import coverage) will require some external financing boost.

Monetary Policy: Tricky

Government borrowing from SBP will eventually resume again, given the need for flood related expenditures. Later, this debt will be converted to commercial bank debt leading to a faster increase in the Net Domestic Assets (NDA). This, together with already elevated international commodity prices and disruptive supply led rising domestic prices, does not augur well for the inflation prospects.

Potential Response: Financial tightening is probably the way forward in light of the two aforementioned factors. Despite this, we think that SBP will likely follow a wait-and-see approach, with rate increases if any, based on the severity of the damages and the amount of foreign help received. The government has hinted that it will start a new IMF programme to pay for the flood damage and lighten the country's economic burden.

Sector Outlook: Expecting a Marginal Impact

While the full extent of flood devastation is still unclear, but what is clear is that it will certainly hamper economic activity in the near-term. Taking a clue form 2010 flooding, once the flood water recedes rehabilitation and reconstruction causes a spike in business activity. This comes after a period of 1-2 months.

Construction sector—the negative effects of floods will be less pronounced in construction sector. Cement, steel and other allied industries will see an immediate demand jacking up. This is also true when looking back in 2010, whereby post flooding resumption of economic activity domestic sales of cement sector jumped by +9% in FY12 and continue to grow by another 9% annually over the next 4years.

Fertiliser—similarly, fertiliser sales will eventually catch up once the new crop harvesting begins.

Tractors—farmer income loss will restrict tractors sales. Important is government facilitating sales of tractors via reduced sales tax or interest free loans, which can alter the projections.

Autos—for discretionary items such as autos, demand lag will be relatively extend.

Banks—key risks for the banks includes NPL formation, debt servicing cost forgiveness (much like during the times of covid19) and reduced rate loan to farmers. Other than that, digital payment platforms are likely to see excessive usage.

Textile—damages to standing and storage cotton, will be detrimental for textile. Not only the raw material costs, but also the availability of labour can become an issue.

Petroleum products— road & brides damages will cause supply issue which entails reduce petroleum products sales. The magnitude of drop in sales depends on how quickly the water recedes and roads become accessible.

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