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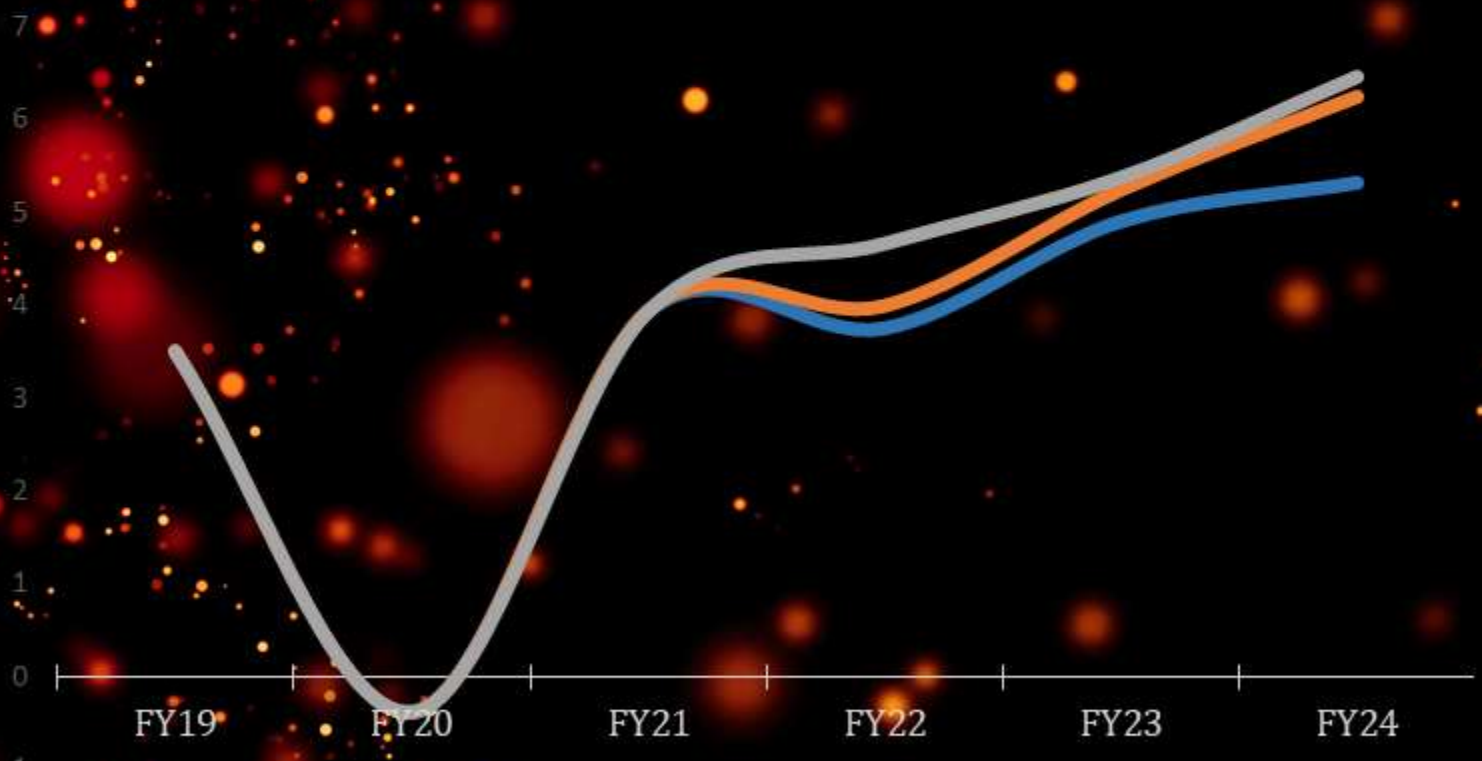
The State of Pakistan's Economy: During the Pandemic and Beyond | 2021-22



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The state of Pakistan's Economy:

During the Pandemic and Beyond

2021-22

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Design and Layout: Rizwanullah Khan

First published in 2021 by

IBA Press is a constituent unit of Institute of Business Administration Karachi. If furthers Institute's objectives of excellence in research, scholarship, education, and dissemination of indigenous knowledge.

ISBN: 978-969-9759-13-0

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FOREWORD

Despite the government's claim about a V-shaped recovery in GDP growth during the fiscal year 2020-21, the economy of Pakistan continues to be confronted with a challenging environment where key economic indicators do not reflect a move toward sustainable growth. Setting aside the much-debated controversy over a 3.94 per cent GDP growth achieved in the current fiscal year, the performance of other key macroeconomic indicators is not promising either. For instance, the tax-to-GDP ratio remained less than 10 percent during the last two fiscal years, Gross Fixed Investment is on a persistent decline — 15.7pc of GDP in 2017-18 to 13.6pc in 2020-21 — and exports continue to stagnate at levels seen in 2013-14. On top of that, persistently high inflation and mounting debt obligations pose significant risks for even stabilization objectives, leave alone the ambitious goal of sustainable growth. More importantly, the medium-term economic goals have been set without any fundamental change in the pace of structural and institutional reforms. Following its tradition of the last two years, the Faculty of IBA's School of Economics and the Social Sciences (SESS) is pleased to present the analysis of the state of Pakistan's economy in the backdrop of the federal budget 2021-22.

The analyses presented in this report cover a broad range of aspects of Pakistan's macroeconomic policy. Chapter 1 presents the future landscape of the economy by considering different policy scenarios to make econometric projections of key macroeconomic indicators, including GDP, private investment, inflation, etc., for the upcoming three fiscal years. Chapter 2 provides an assessment of the budget performance in 2020-21 and analyzes the outlook of fiscal policy for 2021-22. The analysis contains a review of resource mobilization, priorities in current and development spending, and implications of fiscal balance on debt sustainability. Focusing on the need for an accommodative monetary policy, Chapter 3 discusses the SBP's response to various demand and supply-side shocks during the last two decades – the Covid-19 shock is particularly discussed due to its effects on both the demand and supply side of the economy. Chapter 4 focuses on the prospects of regaining the trade competitiveness in the post-Covid-19 scenario, while Chapter 5 discusses growth and trade prospects in view of the Business Confidence Index. Chapters 6, 7 and 8 analyze the sectoral issues related to construction, energy, and agriculture, respectively. An analysis of the effects of the Covid-19 on the labor market is presented in Chapter 9. Chapter 10 covers the state of education during the pandemic, whereas the youth bulge and opportunities are discussed in Chapter 11. The last chapter provides a snapshot of social protection in Pakistan in the wake of the pandemic.

We hope that the in-depth analyses presented in this report will be of interest and use for all the stakeholders including, but not limited to, policymakers, development practitioners, researchers, and the business community.

S. Akbar Zaidi
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ACRONYMS

ABDP	Association of Builders and Developers Pakistan
AJ&K	Azad Jammu and Kashmir
APL	Attock Petroleum Limited
BCI	Business Confidence Index
BISP	Benazir Income Support Programme
CBCI	Current Business Confidence Index
CBER	Center for Business and Economic Research
CDM	Circular Debt Management
CGT	Capital Gains Tax
CIDB	Construction Industry Development Board
CPEC	China-Pakistan Economic Corridor
CWR	Crop Water Requirement
DFCs	Development Finance Companies
DFIs	Development Financing Institutions
DHA	Defence Housing Authority
EBCI	Expected Business Confidence Index
EYS	Expected Years of Schooling
FBR	Federal Board of Revenue
FBR	Federal Board of Revenue
GDP	Gross Domestic Product
GoP	Government of Pakistan
GVI	Global Value Chain
GW	Gigawatts
HCI	Human Capital Index
HDI	Human Development Index
HHs	Households
HLO	Harmonized Learning Outcome
IBA	Institute of Business Administration
ILO	International Labor Organization
IMF	International Monetary Fund
IPI	Industrial Production Index
IPP	Independent Power Plants
IRSA	Indus River System Authority
KDA	Karachi Development Authority
KE	Karachi Electric
KPK	Khyber Pakhtunkhwa
LAYS	Learning Adjusted Years of Schooling
LMI	Large-Scale Manufacturing Index
LNG	Liquefied natural gas
LTFF	Long Term Financing Facility
MFBs	Microfinance Banks

MMR	Money Market Rate
MPC	Monetary Policy Committee
MPS	Monetary Policy Statement
MW	Megawatts
NAVTTC	National Vocational and Technical Training Commission
NCHCD	National Committee on Housing Construction and Development
NEET	Not in Employment, Education or Training
NFC	National Finance Commission
NGOs	Non-governmental Organizations
NHA	National Highway Authority
NPHA	Naya Pakistan Housing Authority
NRI	Network Readiness Index
NTDC	National Transmission & Dispatch Company
O&M	Operation and Maintenance
PBS	Pakistan Bureau of Statistics
PEC	Pakistan Engineering Council
PEPCO	Pakistan Electric Power Company
PHPL	Power Holding Private Limited
PSDP	Public Sector Development Programme
PSO	Pakistan State Oil
PTI	Pakistan Tehreek-e-Insaf
RCA	Revealed Comparative Advantages
RFCC	Refinance Facility for Combating Covid-19
SBP	State Bank of Pakistan
SBP	State Bank of Pakistan
SDG	Sustainable Development Goal
SECP	Securities and Exchange Commission of Pakistan
SECP	Security Exchange Commission Pakistan
TERF	Temporary Economic Refinance Facility
TVETAs	Technical and Vocational Education and Training Authorities
UNDP	United Nations Development Programme
WAPDA	Water & Power Development Authority
YDI	Youth Development Index
YES	Youth Entrepreneurship Scheme
YoY	Year-on-year

Future Landscape of the Economy

Wali Ullah[1]

INTRODUCTION

Pakistan's economy showed positive and vibrant signs of recovery during the last quarter of the fiscal year 2020-21 as the government started easing lockdown and took steps aimed at stabilization as well as growth. Major factors that contributed to the V-shape economic recovery during 2020-21 are the stimulus package of Rs1,240 billion, one of the largest ever government investment spending, a current account surplus, a positive growth in consumption due to the resumption of economic activity, and gradual restoration of the disrupted supply chains. All these factors put Pakistan's economic growth forecasts for 2021-22 and beyond on a positive trajectory.

The government took several measures during 2020-21 to restore the business sector confidence and stimulate private spending. Starting in April 2020, the Government of Pakistan (GoP) announced a special incentive package for the construction industry. On March 30, 2020, GoP approved the fiscal stimulus package of Rs1.2 trillion and Supplementary Grant of Rs100 billion for the "Residual/Emergency Relief Fund" concerning the provision of funds for mitigating the effect of Covid-19 on the impacted population. As per the World Bank's report entitled "Social Protection and Jobs Responses to Covid-19: A Real-Time Review of Country Measures", published on May 14, 2021, Pakistan ranked 4th in terms of the coverage of its social protection program. Moreover, the government's decision to keep the policy rate at 7% and easing credit accessibility led to a modest, though positive, growth in the private capital investment in 2020-21 (see Figure 1.3).

However, the forecast of the economic recovery in 2020-21 is still far from certain due to the challenges faced by Pakistan on the revenue and external fronts. The fiscal deficit remained high, 3.5% of GDP, despite concerted government efforts to raise revenues. Similarly, the widening trade deficit, primarily due to the narrow export base and rising imports in the post-lockdown period, may well turn the current account surplus into a deficit. Private capital investment has not picked up despite the government's fiscal stimulus package of Rs1.24 trillion and cuts in the policy rate by the state bank, two key measures aimed at stabilizing financial markets and small and medium-sized enterprises (SMEs). To overcome these challenges so that the growth momentum is sustained in the long run, different policy

[1] Ayesha Khatoon and Sumera provided assistance in model simulation and data collection.

scenarios have been considered and based on the econometric projections of macro-indicators, key components of an optimal policy are discussed below.

ASSUMPTIONS AND BASELINE PROJECTIONS SCENARIOS

The following analysis focuses on projecting the growth and trends of three major macroeconomic variables, i.e., the real GDP, prices and external sector for the fiscal years 2021-22, 2022-23, and 2023-24.

The common assumptions are:

- US GDP will grow for the years 2020-2024 as has been forecasted by the IMF.
- Forecasts for the global oil prices are taken from Environmental International Agency's report 2020.
- The analysis is based upon Pakistan's Economic Survey and the State Bank of Pakistan's forecast data for all domestic variables.

Based on these assumptions and data sources, the following three possible scenarios for Pakistan's economy are compared.

Baseline Scenario

Under this scenario, it is assumed that:

- There will be no more lockdowns during the upcoming fiscal year. Public mobility and transport will resume completely. Lockdown will ultimately be over by the end of June 2021, thereby ending the economic disruptions experienced during the last eight months.
- The world economy will be on the path of recovery and the Covid–19 pandemic will be completely under control by the end first quarter of 2021-22.
- The growth rate of the US economy will be as projected by the IMF. Oil prices will grow from around $69 per barrel to around $71 per barrel, as forecasted by the Economist Intelligent Unit.

Scenario 1: The Budget 2021-22 – Scenario based on the proposed government spending plans and State Bank's policy rate cuts

For 2021-22, the Government of Pakistan has set a GDP growth target of 4.8%, revenue target of Rs5.8 trillion and expenditure of Rs8.5 trillion. The public investment is also set to increase by 40%.

Using data for key macroeconomic indicators presented in the Federal Budget 2021-22 and Pakistan Economic Survey 2020-21, it is assumed that:

- The most likely scenario to prevail during 2021-22 is the baseline (optimistic) scenario.

- Policy variables – for instance, government expenditure, credit to the private sector and State Bank policy rate – considered exogenous in the model will be as reported in the Budget 2021-22 and Pakistan Economic Survey 2020-21.

Scenario 2: The Optimal Spending and Current Policy Rate Based Scenario

This scenario assumes that the GDP growth and revenue targets are difficult to achieve given the resources allocated in the federal budget 2021-22. The government, therefore, needs fiscal and monetary mix policy measures to achieve the targeted growth. The optimal policy mix requires that:

- The Baseline (optimistic) Scenario prevails during 2021-22.
- Public sector investment expenditures (with no new taxes levied), access to credit (especially to the SMEs), and a low policy rate should be the key elements of this policy mix (Table 1.1).

Table 1.1: Scenario-3 Optimal Policy Interventions *(%)*

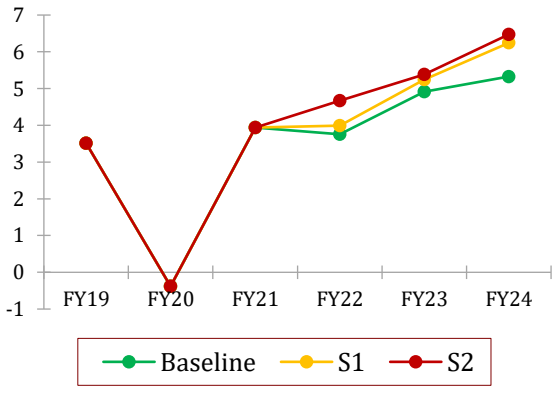
Fiscal Year	Government investment	Credit to private sector	Policy rate
2021-22	44.25	9.00	7.00
2022-23	42.25	9.50	7.00
2023-24	40.25	9.00	8.00

The projections for 2021-22, under the Baseline (optimistic) Scenario, closely reflect the projections of GoP and other institutions. Therefore, the projections for 2021-22, 2022-23 and 2023-24, are based on scenarios 1 and 2, along with the proposed optimal policy mix to achieve the targeted growth rate.

MACROECONOMIC GROWTH PROJECTIONS

Using macro-econometric model simulations, based on time-series data for the period 1973–2021, we present projections for the key macroeconomic variables for the years 2021-2024.

Figure 1.1: Projected GDP Growth Rate (%)

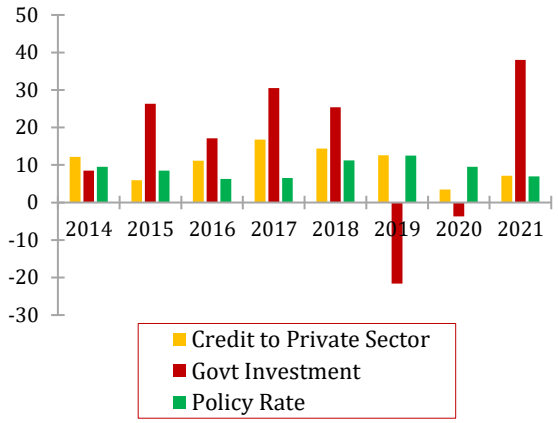


Growth Projections of GDP and its Components

The real GDP growth recovered during 2020-21 in a V-shaped manner – the recovery started roughly during the second quarter of 2019-20. The real GDP growth rate of 3.94 percent in 2020-21, as compared to a negative growth rate in 2019-20, shows a sharp recovery of economic activity after the gradual easing of containment measures. The growth rate of 3.94% seems possible because of the following interventions by the government:

- A substantial increase of 38% in government investment in 2020-21 as compared to negative growth rates in the last two years; by far the largest increase in public investment during the past eight years.
- A clear surge in credit to the private sector by 7.1% during 2020-21 as compared to 3.4% in 2019-20.
- A low policy rate, which was helpful to stimulate the credit channel to achieve the targeted growth rate.

Figure 1.2: Growth in Policy Rate, Government Investment and Credit to the Private Sector (%)



The rationale behind these measures seems to be that:

- Private sector spending is stimulated through mitigating business risks associated with the pandemic.
- Since firms are delaying investment due to their concern that the economy will remain weak during 2020-21, the recovery would be slow.
- Given the risk and negative expectations regarding investment by the private sector, the government must invest to promote investor's confidence in the economic recovery.

As shown in Figure 1.1, in all three scenarios, the growth rate remains positive for 2021-22 and is in the range of 3.76% – 4.67%, provided that the above-stated assumptions hold true. It seems that the growth target for 2021-22 is hard to achieve with the given budgetary allocations. The proposed growth path can, however, be accomplished by enhancing public sector developmental expenditures and easing the private sector's access to credit along with the curtailment of the policy rate mentioned in Table 1.1. This will lead to higher private capital investment, thereby leading to more job creations, more revenue generation and a higher impact upon output growth owing to the multiplier effect.

Public investment needs to be enhanced from currently 44% to around 48%, along with an improvement in credit provision by about 10 to 12% by easing credit restrictions for the private sector, especially the SMEs.

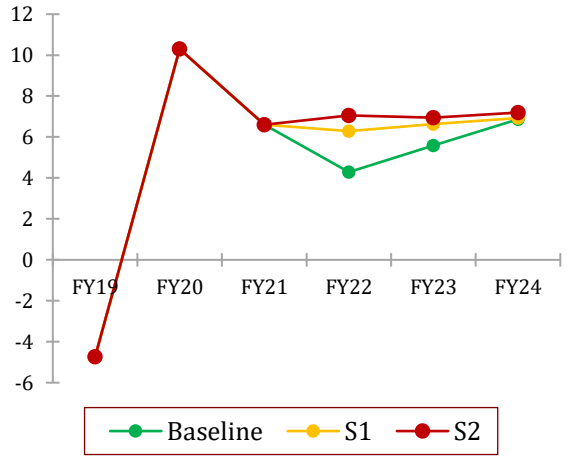
Private Investment

The private investment shows a growth rate of 6.6% during the current 2020-21, while a lower growth rate of about 4.3% is estimated for 2021-22 under the Baseline Scenario. However, keeping the current policy rate at 7% during 2021-22 may stimulate the growth

of private investment to about 7%. The fall in private investment during 2020-21 could have been due to the following:

- The Covid-19 induced uncertainty regarding the path and speed of economic recovery.
- The risk associated with negative economic impacts of the Covid-19 slows down private investment: the private sector is considered to be the engine of growth and development. It is seen that in uncertainty induced by such global events like a pandemic, the private sector does not respond to usual monetary and fiscal tools and the role of government investment and spending become more crucial to stimulate economic recovery.

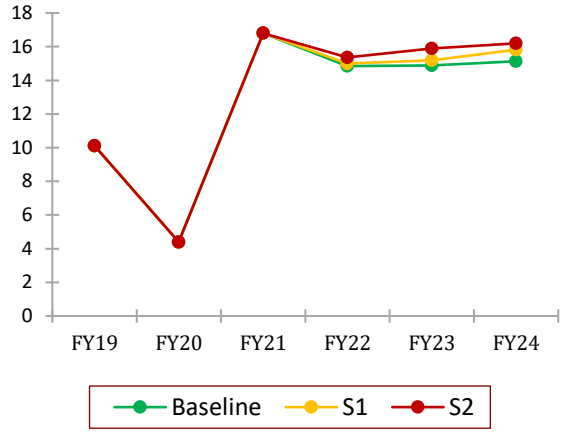
Figure 1.3: Growth Projections of Private Investment (%)



Private Consumption

All over the world, the major impact of easing the lockdown restrictions and opening up of the economies has been seen on private consumption, which has increased considerably. This hike in private consumption has led to higher demand for consumption goods, especially food items, thereby pushing up the prices of food and non-food items leading to inflationary trends. A sharp rise in private consumption growth from 5% in 2019-20 to around 16% in 2020-21 was possible due to the gradual opening up of nearly all sectors of the economy. The projections show that under all the three scenarios, growth in private consumption in 2021-22 and beyond will remain around 15% which is the usual consumption growth for Pakistan. One of the reasons why private consumption may not increase as rapidly as seen in other countries may be the accompanying high food and non-food (oil price impact) inflation. However, an increase in government spending and credit availability to low and middle-income consumers will keep the consumption growth path positive and slightly higher in Scenario 2.

Figure 1.4: Projected Consumption Growth (%)

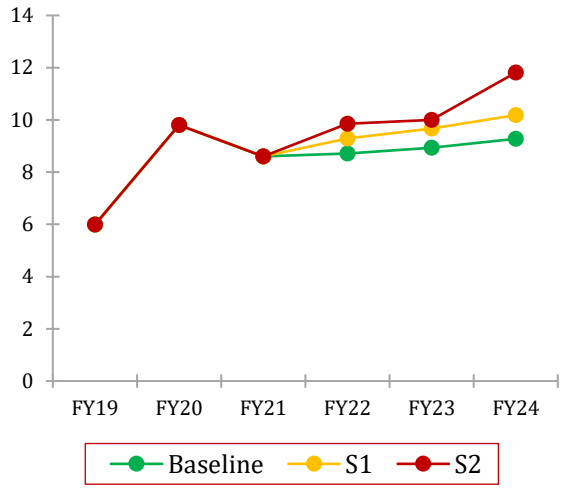


Growth in Prices

As the Covid-disrupted supply chains are still not able to fully meet the demand for food and non-food items, prices are showing an upward trend. Moreover, the impact of the oil price hike is also seen on the prices of all consumer items, thereby leading to clear inflationary trends, as shown in Figure 1.5. Projections of inflation rates under the three scenarios are summarized below.

- During 2020-21, the economy witnessed a lower inflation rate of 8.6% as compared to the 9.8% during 2019-20. However, food inflation remained at about 16% in 2020-21 – the highest level during the last eight years.
- It is expected that inflation may rise to about 10% as a consequence of the planned growth rate of 4.8% through monetary easing and keeping the policy rate at the current level during 2021-22. These numbers, however, may change if there are any revisions in the energy prices.

Figure 1.5: Projected Inflation Rate (%)



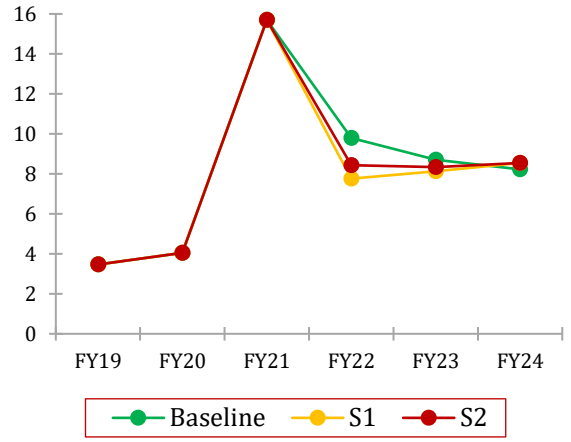
- Under Scenario 2, inflation is expected to reach 12%, much higher than what is projected for the baseline case, possibly due to the following reasons:
  - i) An increase in money supply due to expansionary monetary policy.
  - ii) Higher oil and energy prices due to rising demand.
  - iii) Upward revision in gas and electricity tariffs, thus pushing up the cost of production.
  - iv) The demand and supply gap for food commodities increases due to rising demand and a slow opening up supply chains, thereby leading to food inflation.

Food inflation

Besides the impact of higher oil prices, one of the major drivers of high inflation during 2019-21 and 2020-21 was high food prices. During the first two quarters of 2020-21, prices of sugar, pulses, and tea – the most commonly consumed food items – rose by 56%, 32% and 6.6%, respectively. There is, however, a dip in food inflation after reaching its highest (i.e., 16%) in the third quarter of 2020-21 (Figure 1.6). The possible reasons for the decline in food inflation are:

- Opening up of food supply chains and increased mobility.
- Government's crackdown on hoarder and profiteers, especially in the sugar, wheat, and flour industry.
- Improvement in the supply of subsidized flour through the provincial food departments.
- Government's decision to import wheat and sugar in order to overcome shortage in local markets.
- Decline in prices of soyabean oil, one of the main ingredients of poultry feed, thereby reducing the poultry meat prices.

Figure 1.6: Projected Food Inflation



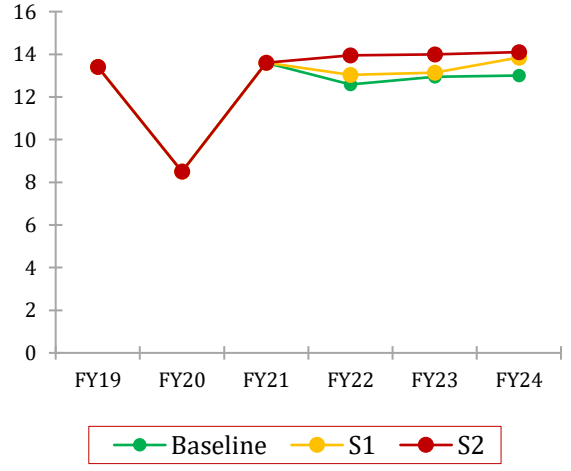
The estimates of food inflation indicate that:

- Food inflation would remain up to 8% for the coming years under all three scenarios.
- If there is an increase in oil prices and wheat production targets are not achieved, food inflation is projected to increase to up to 10%.

EXTERNAL SECTOR GROWTH PROJECTIONS

As the government focused on reviving demand in the aftermath of the pandemic-related economic slowdown, the focus of policies shifted from stabilization to growth. As a result, industrial production picked up with an increase in demand for raw materials and a positive external pressure due to imports. The major positive gains on the external front are:

Figure 1.7: Projected Growth Rate of Exports



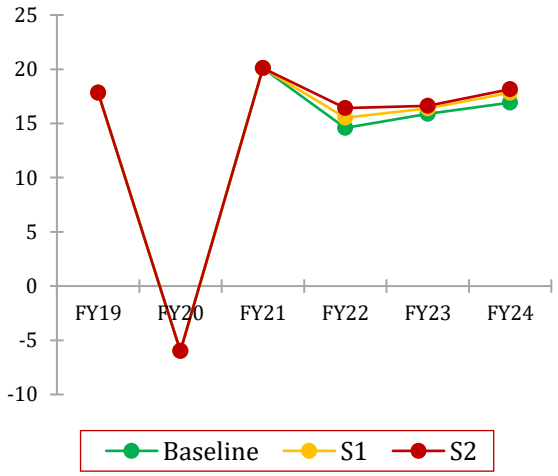
- The V-shape recovery of global trade boosted exports and imports in Pakistan, which improved in intensive margins.
- The resurgence of economic activity led to a rise in demand for raw materials and industrial inputs, leading to a steep rise in imports by 20.1%.

- Pakistan received record remittances during 2020 coupled with moderate growth in exports that resulted in the current account surplus.
- Exports registered a modest yet significant growth of 13.6% during 2020-2021.

Growth projections of export and import are summarized as follows:

- After a quick recovery in 2020-21, the export sector is projected to grow by around 14% in the case of Scenario 3: the export sector growth will, however, be slower in the case of Baseline and Scenario 2.
- The major sectors contributing to growth in exports are textile, cotton and cotton yarn, rice, and fish products.
- Imports in 2021-22 are projected to grow by 17% as large-scale manufacturing revives and consumption rises sharply.
- The projections of growth in imports seem to follow an almost identical pattern in all scenarios.
- Higher anticipated oil prices and rising demand for food items may lead to a large trade deficit, which needs to be addressed through a prudent mix of fiscal and monetary policies.
- Currently, the widening trade imbalance is offset by high dependence upon remittances and CPEC related foreign portfolio's investment. However, sustainable external sector growth in the long term would require export diversification and import substitution through raising agricultural productivity.

Figure 1.8: Projected Growth Rate of Imports



CONCLUSION

The growth forecast of the major economic indicators shows that the growth targets set for 2020-21 are difficult to achieve with the current set of policies and budgetary allocations. The optimal policy solution requires a mix of fiscal and monetary measures to raise demand and boost private-sector spending that will uphold the momentum of the economic recovery. However, serious challenges remain to this fragile recovery in the shape of widening trade deficit, the uncertainty of remittance inflow, and rising inflation. Further, the threat of another wave of infection will put this nascent economic recovery in jeopardy. The government of Pakistan, therefore, needs to increase exports and limit imports and resort to fiscal consolidation efforts along with revenue enhancement. Public sector spending needs

to be continued to stimulate demand, and the private sector should be cushioned against the negative impacts of the pandemic by improving their accessibility to cheap credit and restoring their confidence. The proposed housing finance program and micro-credit schemes in the current budget (2021-22) are, therefore, steps in the right direction.

Finally, structural reforms like expansion of export base and raising agricultural productivity will ensure that government is not run into another current account deficit once the momentum of remittances declines and trade deficit widens. Sustainability of the external sector, therefore, requires long term policy actions rather than reliance on the windfall gains from remittances inflow and CPEC-related portfolio investment.

Analysis of the Federal Budget 2021-22

Muhammad Sabir

INTRODUCTION

The Federal Government's estimates of macroeconomic indicators for the fiscal year 2020-21 generated a heated debate on the magnitude of economic growth. While there is almost a consensus that after experiencing a contraction in 2019-20, Pakistan's economy is in a recovery mode, the estimated GDP growth rate of 3.94 percent was more than anticipated, even by the government itself. However, this economic recovery appears to have asymmetric growth patterns. For instance, the growth rates in large-scale and small-scale manufacturing, construction, finance and insurance, and wholesale and retail trade remained above the average in 2020-21. These reflect higher income for those engaged in formal sectors, sellers of essential goods, and having financial assets. On the other hand, negative growth was observed in some sectors such as cotton ginning, mining and quarrying, electricity and gas, and transport, storage & communication. Apart from the overall growth of 3.94 percent in real GDP, the nominal GDP showed a growth of more than 14 percent compared to the target of 9 percent.

These macroeconomic indicators have at least three profound implications for fiscal policy. First, they have a positive effect on resource mobilization through direct and indirect taxes. An above-the-average growth in the formal sectors is expected to generate additional revenues on account of direct taxes. Also, higher growth in nominal GDP is likely to result in higher revenues from indirect taxes. Second, almost double-digit growth in the consumer price index, higher food prices, contraction in electricity and gas distribution, and transport sectors are likely to further increase inequality during 2020-21 in Pakistan. This may put more pressure on the government for enhanced public spending on social protection and subsidies. Third, certain fiscal policy interventions will be needed to maintain the growth momentum, such as tax cuts, investment in infrastructure to crowding in private investment, and less borrowing from the commercial banking sector to avoid crowding-out of private-sector borrowings.

In this context, this chapter aims to present an assessment of the budget performance in 2020-21 and analyze the outlook of fiscal policy for 2021-22. The analysis contains a review of resource mobilization, priorities in current and development spending, and implications of fiscal balance on debt sustainability.

RESOURCE MOBILIZATION PERFORMANCE IN 2020-21

Gross revenue receipts of the federal government contain tax and non-tax revenues. The Federal Board of Revenue (FBR) collects around three-fourth of the gross revenue receipts through direct and indirect taxes, while the rest is non-tax revenue, which includes profits, fees, user charges, and levies.

A comparison of targeted and actual collection of gross revenue receipts during the last five years (2016-17 to 2020-21) indicates the government was never able to achieve the revenue targets, as shown in Table 2.1. However, the gap between targeted and actual receipts was the highest (Rs1,226 billion) in 2018-19, which has reduced to Rs178 billion in 2020-21 – mainly due to higher receipts under the State Bank of Pakistan's (SBP) profit and petroleum levy. Despite the higher growth in international prices of petroleum products in 2020-21, the petroleum levy is estimated to surpass the target by Rs50 billion.

Table 2.1: Comparison of Targeted and Actual Federal Receipts, *Rs. Billion*

		2016-17	2017-18	2018-19	2019-20	2020-21*
Gross Revenue Receipts	Target	4,916	5,310	5,661	6,717	6,573
	Actual	4,556	4,698	4,435	5,782	6,395
	Surplus (+)/Shortfall (-)	**-360**	**-613**	**-1,226**	**-935**	**-178**
FBR Tax Revenues	Target	3,621	4,013	4,435	5,555	4,963
	Actual	3,368	3,844	3,829	3,997	4,691
	Surplus (+)/Shortfall (-)	**-253**	**-169**	**-607**	**-1,558**	**-272**
FBR Direct Taxes	Target	1,558	1,595	1,735	2,082	2,043
	Actual	1,344	1,537	1,446	1,523	1,789
	Surplus (+)/Shortfall (-)	**-214**	**-58**	**-290**	**-559**	**-254**
FBR Indirect Taxes	Target	2,063	2,418	2,700	3,473	2,920
	Actual	2,024	2,307	2,383	2,474	2,902
	Surplus (+)/Shortfall (-)	**-39**	**-111**	**-317**	**-999**	**-18**
Non-Tax Revenues	Target	1,295	1,297	1,226	1,162	1,610
	Actual	1,188	854	606	1,784	1,704
	Surplus (+)/Shortfall (-)	**-107**	**-443**	**-619**	**623**	**94**
Petroleum Development Levy	*Target*	*150*	*160*	*300*	*216*	*450*
	Actual	*167*	*179*	*206*	*294*	*500*
	Surplus (+)/Shortfall (-)	*17*	*19*	*-94*	*78*	*50*
SBP Profits	*Target*	*280*	*260*	*280*	*406*	*620*
	Actual	*228*	*233*	*13*	*936*	*700*
	Surplus (+)/Shortfall (-)	*-52*	*-27*	*-268*	*529*	*80*
Other Non-Tax Revenues	*Target*	*865*	*877*	*646*	*540*	*540*
	Actual	*794*	*442*	*387*	*555*	*504*
	Surplus (+)/Shortfall (-)	*-71*	*-435*	*-258*	*16*	*-36*

* Revised estimates for 2019-20 instead of actuals.

Source: Targets from Federal Budget in Brief various Issues, Actual Taxes from FBR Yearbook 2019-20, Actual Other Taxes and Non-Taxes from Fiscal Accounts (Various), Ministry of Finance, GoP

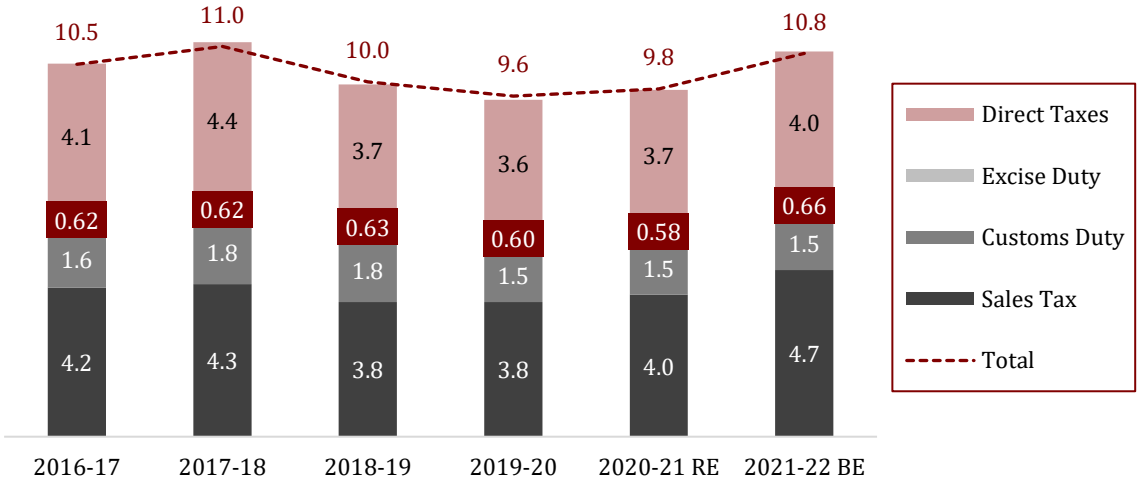
Contrary to the government's claims about the achievements in tax collection, the FBR revenue target for 2020-21 is likely to be missed by Rs272 billion despite a more-than-anticipated growth in nominal GDP and higher imports of dutiable goods. The shortfall is largely due to revenue underperformance in the direct taxes (a gap of Rs254 billion). Therefore, there appears to be a mismatch between economic growth and the collection of direct taxes. Economic theory indicates that a more-than-anticipated growth in GDP would result in higher growth in the direct taxes as people move into higher tax brackets. That is why direct taxes are considered "automatic stabilizers."

While revenues from customs and sales tax are more than the budgeted amount, collection from excise duty has not increased accordingly. Overall, the target of revenue collection in indirect taxes is almost achieved as the shortfall is less than one percent (Rs18 billion). The heavy reliance on indirect taxes further indicates a compromise on the progressivity of fiscal policy.

FBR Tax Collection Performance and Target in Relation to GDP

The trend in tax collection during the last five years indicates that the tax-to-GDP ratio was the highest (11 percent) in 2017-18, which declined to 9.6 percent in 2019-20 and then increased marginally in 2020-21 to 9.8 percent (Figure 2.1). Given that 2019-20 was a Covid-affected year in which the economy contracted due to lockdown, it was expected that tax collection would improve in 2020-21. However, the revised estimates show a marginal increase of only 0.2 percentage points in the tax-to-GDP ratio, implying that the recovery in economic growth is not fully translated into higher tax collection.

Figure 2.1: FBR Tax Collection *(as percent of GDP)*



RE = Revised Estimates *BE = Budget Estimates (Targets)*

Source: FBR Yearbook 2019-20 & Pakistan Economic Survey 2020-21 & Federal Budget in Brief 2021-22

The federal government has set a challenging target of raising tax-to-GDP ratio to 10.8 percent in 2021-22. The tax-wise targets (as percent of GDP) indicate that collection of sales tax and direct taxes would increase by 0.7 and 0.3 percentage points, respectively. The feasibility of these targets is discussed in the next section.

Feasibility of Tax Targets for 2021-22

For tax collection in 2021-22, the federal government has set a target of Rs5.8 trillion against the collection of Rs4.6 trillion in 2020-21, implying an increase of more than 24 percent (Table 2.2). In 2020-21, a growth of 17.4 percent was achieved in tax revenue against the target of 27 percent. As compared to this, the average growth in tax revenues during the last five years remained less than 10 percent; particularly, it was -0.4 percent and 4.4 percent during 2018-19 and 2019-20, respectively. Therefore, the government seems to be substantially enhancing its efforts for additional resource mobilization.

Table 2.2: Analysis of Growth in FBR Tax Collection, *Rs in Billion*

	2016-17 Actual	2017-18 Actual	2018-19 Actual	2019-20 Actual	2020-21 Revised	2021-22 Target
FBR TAX REVENUES	**3,368**	**3,844**	**3,828**	**3,997**	**4,691**	**5,829**
Growth (%)	*8.2*	*14.1*	*-0.4*	*4.4*	*17.4*	*24.3*
Direct Taxes	**1,344**	**1,537**	**1,446**	**1,523**	**1,789**	**2,182**
Growth (%)	*10.4*	*14.3*	*-5.9*	*5.4*	*17.4*	*22.0*
% Share in Taxes	*39.9*	*40.0*	*37.8*	*38.1*	*38.1*	*37.4*
Indirect Taxes	**2,024**	**2,307**	**2,383**	**2,474**	**2,902**	**3,647**
Growth (%)	*6.8*	*14.0*	*3.3*	*3.8*	*17.3*	*25.7*
% Share in Taxes	*60.1*	*60.0*	*62.2*	*61.9*	*61.9*	*62.6*
Customs	**497**	**608**	**686**	**627**	**700**	**785**
Growth (%)	*22.8*	*22.5*	*12.7*	*-8.6*	*11.7*	*12.1*
Federal Excise	**198**	**213**	**238**	**250**	**275**	**356**
Growth (%)	*5.2*	*7.9*	*11.6*	*5.2*	*9.8*	*29.5*
Sales Tax	**1,329**	**1,485**	**1,459**	**1,597**	**1,927**	**2,506**
Growth (%)	*2.0*	*11.8*	*-1.8*	*9.4*	*20.7*	*30.0*

Source: Budget and Revised Estimates from Federal Budget in Brief 2021-22, Actual Taxes from FBR Yearbook 2019-20

The revenue targets in terms of growth in tax collection for 2021-22 indicate a relatively higher focus on indirect taxes. This approach is regressive as the burden of indirect taxes is largely borne by the poor and middle-income groups. The 30 percent growth in sales tax is also an ambitious target, particularly if the value of dutiable imports remains stable during 2021-22. The international petroleum prices are also likely to increase. Therefore, passing the burden of price increase on the masses would be an unpopular move. The Finance Act 2021 does not reflect any significant changes in tax rates or other measures for mobilizing additional revenues. The 22 percent growth in direct taxes is also an ambitious target given that the income tax rates have not increased and withholding taxes have been rationalized.

Moreover, Finance Act 2021 offers various concessions to small and medium enterprises and overseas Pakistanis. As compared to this, targeted revenue increase in customs duty is likely to be achieved. However, more than 29 percent growth in federal excise is not feasible due to the rationalization of excise tax rates. The revenue forecast, based on the buoyancy of taxes, indicates a 14 percent growth in 2021-22.

Implications of FBR Tax Collection for Fiscal Transfers to the Provinces

The 7th National Finance Commission (NFC) Award includes three resources to be transferred to the provinces: divisible pool transfers, straight transfers, and grants and subventions. *The divisible pool transfers consist of 57.5 percent of five major FBR taxes:* taxes on income, capital value tax, sales tax excluding sales tax on services, customs duties, and federal excise excluding excise duty on natural gas after deduction of one-percent collection charges. While the 7th NFC award completed its constitutional tenure in 2014-15, it is still continued under the name of the 9th NFC Award.

Table 2.3: Divisible Pool Transfers to the Provinces, *Rs in Billion*

	2017-18 Actual	2018-19 Actual	2019-20 Actual	2020-21 Budget	2020-21 Revised	2021-22 Budget
Punjab	1,072	1,161	1,185	1,432	1,316	1,683
Sindh	509	551	563	680	623	799
Khyber Pakhtunkhwa	339	367	375	453	416	533
Balochistan	203	224	281	252	246	296
Total	**2,123**	**2,303**	**2,404**	**2,817**	**2,600**	**3,310**
Growth Rates (%)						
Punjab		8.2	2.2	20.8	-8.2	27.9
Sindh		8.2	2.2	20.8	-8.4	28.3
Khyber Pakhtunkhwa		8.2	2.2	20.8	-8.3	28.1
Balochistan		10.6	25.5	-10.5	-2.3	20.3
Total		**8.5**	**4.4**	**17.2**	**-7.7**	**27.3**

Source: The Second Bi-Annual Monitoring and Implementation of NFC Award Report (various issues), Explanatory Memorandum on Federal Receipts 2021-22

Table 2.3 presents the province-wise magnitude of divisible pool transfers from 2017-18 to 2021-22. The annual growth in divisible pool transfers to three provinces (except Balochistan) was 8.2 percent and 2.2 percent in 2018-19 and 2019-20, respectively. The only exception is Balochistan that receives revenue based on the FBR tax target due to a clause in the 7th NFC award, which guarantees a minimum level of transfers to Balochistan from the divisible pool.[2] In 2020-21, the three provinces experienced a shortfall of almost 8.2 percent compared to budget estimates – the shortfall in absolute terms was Rs217 billion.

[2] Clause 4(3) of the Presidential Order of 7th NFC states: "The Federal Government shall guarantee that Balochistan province shall receive the projected sum of eighty-three billion rupees from the provincial share in the net proceeds of divisible pool taxes in the first year of the Award. Any shortfall in this amount shall be made up by the Federal Government from

The budget estimates for 2021-22 show a 27 percent growth in divisible pool transfers to provinces. This massive growth depends upon the achievement of targeted growth in tax collection, which is less likely to achieve. Any shortfall in federal tax collection will negatively affect the financial health of the provinces.

Priorities in Federal Expenditures

Economists categorize expenditures into two broad categories current: (non-development) and development expenditures. Non-development expenditures are recurring operational costs involved in the provision and maintenance of a range of government services.

Developmental expenditures represent outlays to develop new physical and social infrastructure like new buildings, road networks, and new facilities, or even new administrative functions. In a broader sense, this distinction of non-development and development expenditures is similar to consumption and investment. Consequently, if any government aims for higher public investment, it generally implies higher development expenditures. The higher share of development expenditure may generate higher employment opportunities and thus may provide greater scope for economic growth and poverty reduction. Often, it crowds in [3] private investment as building the necessary infrastructure to attract private investment.

In this context, Table 2.4 presents the priorities in federal government outlays from 2016-17 to 2020-21 and allocation for 2021-22. It shows that the level of current expenditure increased from Rs4,039 billion in 2016-17 to Rs7,403 billion in 2020-21. In contrast, development spending declined from Rs867 billion to Rs662 billion during the same period. As percent of total expenditure, the share of development expenditures declined from 17.7 percent to 8.2 percent. A look into the key components of current expenditures indicates faster growth in debt servicing reduces the fiscal space for development spending. In 2016-17, debt servicing was Rs1,348 billion, which more than doubled in 2020-21. For 2021-22, the federal government has allocated Rs900 billion for public sector development progarmme while more than Rs3 trillion are budgeted for debt servicing.

The composition of budget allocations and outlays (actual expenditures/revised estimates) for the last five years is presented in Figure 2.2. Two important messages emerge from the trend. First, the share of development spending in total expenditure has declined over time. For, instance, the share of development allocation in 2017-18 was 25% which reduced to

its own resources. This arrangement for Balochistan shall remain protected throughout the remaining four years of the Award based on annual budgetary projections."

[3] Crowding in occurs when higher government spending leads to an increase in private sector investment. The crowding in effects occurs because higher government spending leads to an increase in economic growth and therefore encourages firms to invest because there are now more profitable investment opportunities.

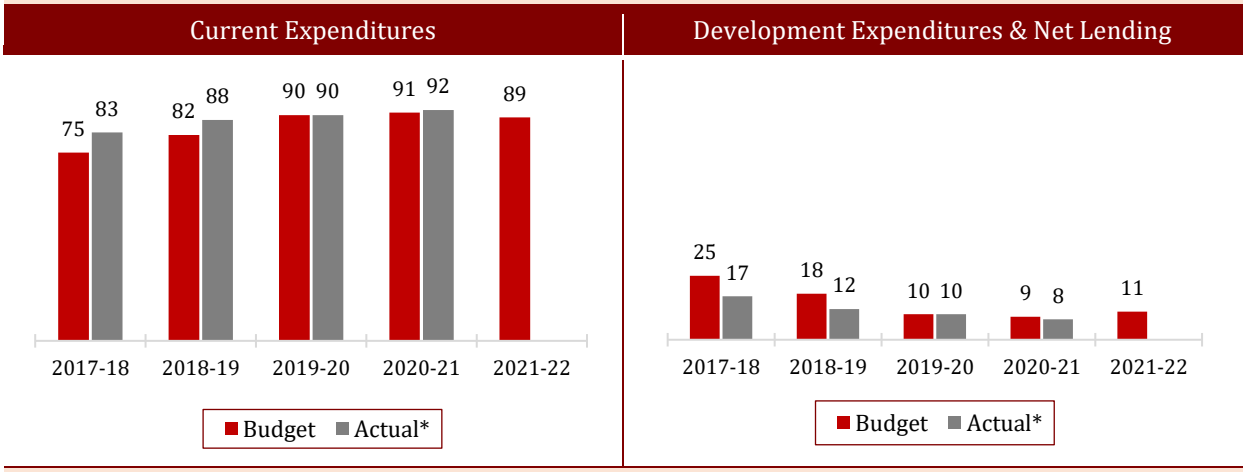
11% in 2021-22. Second, the share of development spending has consistently been less than the share of development allocations. This is because development expenditures are generally slashed to meet the target of fiscal deficit. This strategy has a negative implication for the growth and economic well-being of the country.

Table 2.4: Expenditures Priorities, *Rs in Billion*

	2016-17 Actual	2017-18 Actual	2018-19 Actual	2019-20 Actual	2020-21 Revised	2021-22 Budget
CURRENT EXPENDITURES						
Debt Servicing	1,348	1,500	2,091	2,620	2,851	3,060
Defence	888	1,030	1,147	1,213	1,299	1,373
Other Current Expenditures	1,802	1,734	2,540	2,694	3,253	3,090
Total Current Expenditures	**4,039**	**4,265**	**5,778**	**6,527**	**7,403**	**7,523**
DEVELOPMENT EXPENDITURE						
Public Sector Development Program	733	661	562	622	630	900
Other Development Expenditure and Net Lending	134	229	234	65	32	64
Total Development Expenditures	**867**	**890**	**795**	**688**	**662**	**964**
Total Federal Expenditures	**4,906**	**5,154**	**6,573**	**7,214**	**8,065**	**8,487**
As a percentage of GDP	***15.4***	***14.9***	***17.3***	***17.4***	***16.9***	***15.8***
SHARE IN FEDERAL EXPENDITURES (%)						
Debt Servicing	27.5	29.1	31.8	36.3	35.3	36.0
Defence	18.1	20.0	17.4	16.8	16.1	16.2
Other Current Expenditures	36.7	33.6	38.6	37.3	40.3	36.4
Total Current Expenditures	**82.3**	**82.7**	**87.9**	**90.5**	**91.8**	**88.6**
Public Sector Development Program	14.9	12.8	8.5	8.6	7.8	10.6
Other Development Expenditure and Net Lending	2.7	4.4	3.6	0.9	0.4	0.8
Total Development Expenditures	**17.7**	**17.3**	**12.1**	**9.5**	**8.2**	**11.4**

Source: Budget and Revised Estimates from Federal Budget in Brief 2021-22 and actuals from Pakistan Economic Survey 2020-21

Figure 2.2: Composition of Federal Allocations and Outlays *(%)*



* Revised estimates in the case of 2020-21

Composition of Current Expenditures

Table 2.5 presents the composition of current expenditures in terms of budget and revised estimates for 2020-21 and budget estimates for 2021-22. It shows that the overall current expenditure is likely to overrun by more than Rs200 billion in 2020-21. This is consistent with the historical trend as current expenditure is generally underestimated at the time of preparing budget estimates. In 2020-21, the government underestimated the expenditures on subsidies, economic services, health, education, social protection, and culture and religion. The most glaring under-estimation was found in subsidies with a gap of more than Rs200 billion between budget and revised estimates. Similarly, the Covid-19 response was underestimated by Rs33 billion. In contrast, despite allocations of Rs31 billion for housing development, spending was only Rs5.4 billion.

Table 2.5: Federal Current Expenditures, *Rs in Billion*

	2020-21			2021-22	
	Budget	Revised	Growth (%)	Budget	Growth (%)
General Public Service	**4,429.0**	**4,491.0**	***1.4***	**5,435.2**	***21.0***
• *Pensions*	*470.0*	*470.0*	*0.0*	*480.0*	*2.1*
• *Servicing of Domestic Debt*	*2,631.0*	*2,611.1*	*-0.8*	*2,757.2*	*5.6*
• *Servicing of Foreign Debt*	*315.1*	*239.6*	*-6.8*	*302.5*	*-6.0*
• *Subsidies*	*209.0*	*430.0*	*105.7*	*682.0*	*58.6*
• *Others including Transfers & Grants*	*803.8*	*740.3*	*-7.9*	*1,213.5*	*63.9*
Defence Affairs and Services	**1,292.9**	**1,299.2**	***0.5***	**1,373.3**	***5.7***
Public Order and Safety Affairs	**170.0**	**169.0**	***-0.6***	**178.5**	***5.7***
Economic Affairs	**71.8**	**192.5**	***168.2***	**115.2**	***-40.1***
Environment Protection	**0.43**	**0.40**	***-7.4***	**0.44**	***9.3***
Housing and Community Amenities	**35.7**	**10.0**	***-72.0***	**34.6**	***246.1***
• Housing Development	31.0	5.4	***-82.7***	30.7	*474*
• Community Development	4.7	4.6	*-0.8*	3.9	*-16.5*
Health Affairs & Services of which:	**25.5**	**52.3**	***105.2***	**28.4**	***-45.8***
• Hospital Services	22.8	16.3	*-28.4*	24.0	*47.0*
• *Others*	2.7	36.0	*1223.9*	4.4	*-87.9*
Recreation, Culture and Religion	**9.8**	**12.2**	***23.8***	**10.4**	***-14.7***
Education Affairs and Services	**83.4**	**88.1**	***5.7***	**92.0**	***4.4***
Social Protection	**230.9**	**246.4**	***6.7***	**255.3**	***3.6***
Current Expenditure Total	**6,349.3**	**6,561.0**	***3.3***	**7,523.2**	**14.7**

Source: Federal Budget in Brief 2021-22

Current Expenditures Outlook for 2021-22

As shown in Table 2.5, more than 70 percent of the current expenditure is categorized as general public service, and it reflects a growth of 21 percent in 2021-22 compared to revised estimates of 2020-21. An increase of more than Rs900 billion in general public services is largely caused by transfers and grants, subsidies, domestic debt servicing, and pensions. A look into growth rates indicates that pensions are likely to be underestimated as the federal government has announced an increase of 10 percent in pension.

Allocations for public order and safety affairs, and defence show a growth of almost 6 percent, compared to revised estimates of 2020-21, which looks reasonable given the security situation and challenges of law and order. Budget allocation to housing development has been retained almost at the same budgeted level of 2020-21, i.e. Rs31 billion that was revised to Rs5.4 billion. With regard to 'other' health services, the government allocated Rs2.7 billion in 2020-21 while spent Rs36 billion. This sharp increase was an outcome of the spending related to Covid-19, including the purchase of vaccines. However, for 2021-22, an amount of Rs4.4 billion has been allocated. Given that the majority of the population is yet to be vaccinated and the fourth wave of Covid-19 has hit the country, expenditures under this head are likely to be revised upward.

Unpacking Federal Subsidies

Table 2.6 shows the magnitude of subsidies for 2020-21 and 2021-22. The subsidies are heavily skewed towards WAPDA and KE, as the combined share of both is more than 87 percent of the total subsidies for 2021-22. Apart from regular subsidies, some new heads of subsidies emerged in 2021-22 to address the circular debt in the energy sector. For instance, allocations for Independent Power Plants (IPP) and Power Holding Private Limited (PHPL) are part of the circular debt management plan (CDM) aiming to reduce the circular debt and corresponding liabilities of interest payments. Several times in the past, the government has tried to fix the problem by injecting a bulk of subsidies. However, the problem of circular debt arises from time to time despite the involvement of the World Bank and IMF. This time again, the allocations seem to be insufficient to address the chronic issue of circular debt. The solution lies in the structural reforms to fixed the problem.

Apart from subsidies for the energy sector, another interesting allocation is to the Naya Pakistan Housing Authority (NPHA). In 2020-21, an allocation of Rs30 billion was made for NPHA while spending was only Rs5 billion. For 2021-22 again, the government has allocated Rs30 billion. Given the quantum of the underestimation of the various head of current expenditures and past experience for NPHA subsidies, the allocated amount is likely to be drastically underspent.

Table 2.6: Federal Subsidies, *Rs in Billion*

	2020-21			2020-21	
	Budget	Revised	Growth (%)	Budget	Growth (%)
Major Subsidies	**176.0**	**376.4**	**113.8**	**627.0**	**66.6**
• *Inter-Disco Tariff Differential*	*110.0*	*191.8*	*74.4*	*184.0*	*-4.1*
• *IPP*				*136.0*	
• *PHPL CDM*		*46.0*		*118.0*	*156.5*
• *KE's Tariff Differential*	*10.0*	*16.0*	*60.0*	*56.0*	*250.0*
• *Subsidy to Naya Pakistan Housing Authority*	*30.0*	*5.0*	*-83.3*	*30.0*	*500.0*
• *Zero rated Industrial Subsidy*		*27.0*		*26.0*	*-3.6*
• *To KE for Industrial Support Package*	*5.0*	*0.0*	*-100.0*	*22.0*	
• *WAPDA/PEPCO receivables from merged districts of Khyber Pakhtunkhwa*	*10.0*	*15.0*	*50.0*	*18.0*	*20.0*
• *Industrial Support Package*				*15.0*	
• *Subsidy to LNG sector for providing Gas on lower rates to industry*	*10.0*	*10.0*	*0.0*	*10.0*	*0.0*
• *Petroleum Subsidy (PSO & APL & Other)*	*0.0*	*2.0*		*10.0*	*400.0*
• *Subsidy to WAPDA on account of Tariff Differential for AJ&K*	*1.0*	*27.0*	*2600.0*	*0.0*	*-100.0*
• *For Tariff Differential AJ&K*		*36.5*		*2.0*	*-94.5*
Other Subsidies	**33.0**	**53.7**	*62.6*	**55.0**	*2.5*

Source: Federal Budget in Brief 2021-22

Development Expenditure Priorities

The size of the Public Sector Development Programme (PSDP) is budgeted to be Rs900 billion in 2021-22, reflecting a sizable increase of 43 percent over last year's revised estimates of Rs630 billion. The PSDP 2021-22 shows a shift in the development allocations from the Covid-19 response and other natural calamities program to the finance division. In fact, the allocations for the finance division surpass all other heads of development spending, including road and highways. This is quite unusual because the responsibility of the finance division largely entails the provision of resources to the line ministries instead of the implementation of development schemes.

The roads & highways and water are the other two important sectors of PSDP. Interestingly, the revised estimates indicate that the government did not cut any amount on these sectors. For 2021-22, allocations to NHA have slightly declined while a substantial increase is made for the water sector. In addition, a large budget increase is visible in the power sector, with an allocation of Rs70 billion for NTDC/PEPCO compared to Rs40 billion in 2020-21. On the

contrary, SDGs and Community Development Programme appears to be an area of concern since no money was spent against the allocation of Rs24 billion in 2020-21.

Table 2.7: Priorities in PSDP, *Rs in Billion*

		2020-21			2020-21	
		Budget	Revised	Growth (%)	Budget	Growth (%)
1.	Finance Division	18.7	66.7	257.1	123.1	84.7
2.	National Highway Authority (NHA)	118.7	118.7	0.0	113.8	-4.1
3.	Water Resources Division	81.3	81.3	0.0	103.5	27.4
4.	Kashmir Affairs & Gilgit Baltistan Div.	100.4	52.4	-47.8	70.0	33.4
5.	COVID Responsive and Other Natural Calamities Program	70.0	50.0	-28.6	5.0	-90.0
6.	NTDC / PEPCO	39.7	39.7	0.0	69.5	75.2
7.	VGF for PPP Projects	0.0	0.0		61.5	
8.	Cabinet Division	23.8	47.8	100.8	46.2	-3.4
9.	Higher Education Commission	29.5	29.5	0.0	42.5	44.0
10.	Railways Division	24.0	24.0	0.0	30.0	25.1
11.	Pakistan Atomic Energy Commission	23.3	23.3	0.0	27.0	15.9
12.	Housing & Works Division	8.7	8.7	0.0	24.2	177.1
13.	Pak SDGs & Community Development programme	24.0	0.0		22.0	
14.	National Health Services, Regulations & Coordination Division	14.5	14.5	0.0	21.7	49.7
15.	Interior Division	14.8	14.8	0.0	21.0	42.6
16.	Planning, Development & Special Initiatives Division	3.5	3.5	0.0	19.2	442.9
17.	Climate Change Division	5.0	5.0	0.0	14.3	186.5
18.	National Food Security & Research Division	12.0	12.0	0.0	12.0	0.1
Others		**38.2**	**38.2**	**0.0**	**73.5**	**92.3**
Total Federal PSDP		**650.0**	**630.0**	**-3.1**	**900.0**	**42.9**

Source: Federal Budget in Brief 2021-22

Fiscal Sustainability and Budget Deficit

Despite differences in defining and interpreting fiscal sustainability, there is a consensus among economists that rising public debt in relation to GDP is not sustainable. A higher budget deficit is a catalyst for growing debt, which may turn into a vicious cycle of deficits and debt accumulation. Accordingly, a higher budget deficit is linked to higher borrowing, which translates into higher interest payments, and finally, higher interest payments result in higher budget deficits. A country needs to have a primary surplus – budget deficit excluding interest payments or debt servicing obligations – to break this vicious cycle.

In this context, Table 2.8 shows the absolute and relative (as percent of GDP) magnitudes of three sets of fiscal deficits, including federal and overall budget deficits along with the overall primary deficit. The main idea is to understand whether Pakistan is trapped in the vicious cycle of higher deficits and rising debt or not.

The budget deficit for 2020-21 was estimated slightly more than Rs3.4 trillion, while the revised estimates indicate a budget deficit of Rs3.6 trillion – indicating a further increase of around Rs177 billion. This deficit is almost equal to federal net revenue receipts, around Rs765 billion more than the debt servicing payments and 7.6 percent of the GDP.

Table 2.8: Computation of Overall Budget Deficit, *Rs in Billion*

	2020-21		2021-22	Growth (%)	
	Budget	Revised	Budget		
	A	B	C	B/A	C/B
Federal Budget Surplus (+)/Deficit (-) | (I-II)	*-3,438*	*-3,615*	*-3,990*	5.1	10.4
Overall Budget Surplus (+)/Deficit (-) | (I-II+III)	*-3,196*	*-3,373*	*-3,420*	5.5	1.4
Overall Primary Surplus (+)/Deficit (-)	*-250*	*-522*	*-361*	109.0	-30.9
As % of GDP					
Federal Budget Deficit	-7.5	-7.6	-7.4		
Overall Budget Deficit	*-7.0*	*-7.1*	*-6.3*		
Overall Primary Deficit	-0.5	-1.1	-0.7		
Revenue Receipts					
GROSS REVENUE RECEIPTS	6,573	6,395	7,909	-2.7	23.7
(Minus) Transfer to Provinces	2,874	2,704	3,412	-5.9	26.2
I Net Revenue Receipts	***3,700***	***3,691***	***4,497***	***-0.2***	***21.8***
Federal Expenditure & Net Lending					
Debt Servicing	2,946	2,851	3,060	-3.2	7.3
Other Current Expenditures	3,403	3,710	4,464	9.0	20.3
Public Sector Development Program	650	630	900	-3.1	42.9
Other Development Expenditure	70	32	0	-53.6	-100.0
Net Lending	69	83	64	21.1	-22.9
II Federal Expenditure & Net Lending	***7,138***	***7,307***	***8,487***	***2.4***	***16.2***
III Provincial Budget Surplus/Deficit	**242**	**242**	**570**	**0.0**	**135.1**
GDP (MP)	***45,567***	***47,709***	***53,876***	**4.7**	**12.9**

Source: Federal Budget in Brief 2021-22 & Annual Budget Statement 2021-22

This implies that in 2020-21, the federal government borrowed to finance the debt servicing obligations, entire PSDP, and other expenditures of Rs135 billion. The provincial cash surplus computed by the federal government reduced the budget deficit to Rs3.37 trillion but was unable to convert the primary deficit into a surplus. The overall primary deficit is a sign of unsustainable fiscal policy.

The indicators for 2021-22 portray a similar picture indicating a higher federal fiscal deficit of Rs3.99 trillion, a much higher provincial surplus of Rs570 billion, an overall budget deficit of Rs3.42 trillion, and an overall primary deficit of Rs361 billion. These indicators imply that the country is trapped in the vicious cycle of higher deficits and debt, which will continue in 2021-22 as well.

CONCLUSION

The fiscal performance of the federal government remained sub-optimal during 2012-21, particularly when reviewed in relation to other macroeconomic indicators. For instance, despite more than anticipated growth in nominal GDP, the tax collection target was missed by Rs272 billion. While non-tax revenues surpassed the target, it was driven mainly by the SBP profits and petroleum levy. The source of SBP profit is the collection of interest payments from the government and is not linked to the macroeconomic performance or resource mobilization efforts of the government. On the expenditure side, the current expenditure was overrun by Rs200 billion while a decline of Rs20 billion was observed in the development expenditure. These deviations resulted in an overall fiscal deficit of more than 7 percent of the GDP.

The fiscal outlook for 2021-22 shows a mixed pattern. The federal government aims to collect more than Rs5.8 trillion from taxes, which are Rs1.1 trillion more than the revised collection estimates for 2020-21. The resource mobilization strategy overwhelming relies on indirect taxes. Given the rationalization of excise duty and withholding taxes introduced in the Finance Act 2021-22, a growth of over 24 percent seems to be an ambitious target. The allocations for current expenditure in 2021-22 surpass Rs7.5 trillion, with an increase of almost Rs1 trillion compared to the last fiscal year. In contrast, despite a hefty increase of 42 percent in development allocations budgeted for 2021-22, the size of PSDP remains under Rs1 trillion. Given that the government seems to have underestimated the expenditures related to salary, pensions, Covid-19, and subsidies to the energy sector, current expenditure is expected to overrun. It is likely that the federal fiscal deficit would be more than the target of 7.4 percent of the GDP.

The Need for Accommodative Monetary Policy

Faiz Ur Rehman & Muhammad Nasir

INTRODUCTION

An optimal monetary policy not only minimizes inflation variability but also contributes to reducing output loss. To minimize the welfare loss due to the trade-off between expected inflation and output, traditional macro models work through the demand-side of the transmission mechanism. However, during the first decade of the 21st century, monetary literature established the importance of supply-side effects of monetary transmission. It works when a firm's marginal cost depends on the nominal rate of interest. In the supply-side transmission mechanism, welfare loss may increase further (high inflation and low output) if a central bank responds by only considering the traditional demand channel of monetary policy.

In the last two decades, Pakistan's economy has been repeatedly hit by both demand and supply-side shocks (see Table 3.1). These include, but are not limited to, domestic and global demand for goods and services, international food and fuel prices, tariffs on basic utilities like electricity and gas, natural disasters such as floods and earthquakes, and pandemics. To mitigate the effects of such shocks, the State Bank of Pakistan (SBP) adopted a mix of contractionary and expansionary policies. However, the Covid-19 is the worst kind of shock confronted by any central bank. It inflicted not only demand-side effects on the economy but also generated significant supply-side losses.

This chapter aims to discuss the SBP's response to various demand and supply-side shocks during the last two decades – the Covid-19 shock is particularly discussed due to its effects on both the demand and supply side of the economy. Furthermore, a way forward is presented for an optimal monetary policy as the country expects to confront supply-side disturbances to the economy in the near future.

SBP'S RESPONSE TO ECONOMIC SHOCKS: A HISTORICAL ANALYSIS

How does the SBP respond to economic shocks? As shown in Table 3.1 and Figure, the SBP actively responded to the economic conditions/shocks with a combination of easy and tight monetary policies during the last two decades. These include global food shocks, commodity and fuel price shocks, domestic food price shocks, natural disasters like floods and earthquakes, and price changes in utilities like gas and electricity. The effects of these shocks are ultimately felt in domestic prices. The monetary policy responds to these shocks since keeping inflation low and stable is one of the main objectives of the SBP. The online

preamble of the SBP states that "the best way to achieve these objectives (utilization of economy's productive resources and financial market stability) on a sustainable basis is to keep inflation low and stable."

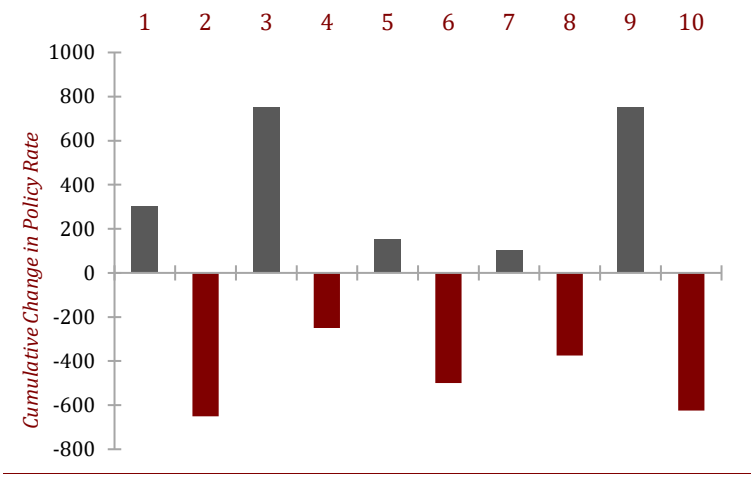
For instance, depressed international market prices and improved supply position kept domestic prices slow from 2001 to 2003. The inflation rate was around 3.1 percent which was the lowest in the three decades (Haq et al., 2008). Thus, the SBP had responded to low inflation with a cumulative reduction of 650 basis points in the policy rate. On the other hand, a tight monetary policy followed international fuel and commodity price shocks with a cumulative increase of 750 basis points in policy rate between 2005 and 2008.

Table 3.1: Monetary Easing Cycle in the Historical Context

Period	Policy Stance	Timespan (months)	Cumulative Change in Policy Rate	Nature of Shock to Domestic Prices and Output
5 Jan 2000 – 7 Jun 2001	Tightening	17	300	
19 Jul 2001 – 18 Nov 2002	Easing	16	-650	↓International prices & ↑supply position → domestic prices↓
11 April 2005 – 13 Nov 2008	Tightening	44	750	↑Fuel prices, ↑ global commodity prices, ↑ support price of wheat, & earthquake → domestic prices↑
21 Apr 2009 – 25 Nov 2009	Easing	7	-250	
2 Aug 2010 – 30 Nov 2010	Tightening	4	150	Floods of 2010 → crops production↓→ domestic prices↑
1 Aug 2011 – 24 Jun 2013	Easing	23	-500	↑Supply of consumable items & ↓world commodities prices→ domestic prices↓
16 Sep 2013 – 18 Nov 2013	Tightening	2	100	
17 Nov 2014 – 23 May 2016	Easing	18	-375	
28 Jan 2018 – 17 Jul 2019	Tightening	18	750	↑global commodity prices, ↑increase in gas prices→ domestic prices↑
18 Mar 2020 – 25 Jun 2020	Easing	To date	-625	Covid-19

Sources: The State Bank of Pakistan (https://www.sbp.org.pk/COVID/Monetary.html) & Pakistan Economic Survey, various issues (http://www.finance.gov.pk/index.html)

Figure 3.1: Policy Response of State Bank of Pakistan Across Time



1. 5th January 2000 – 7th June 2001
2. 19th July 2001 – 18th November 2002
3. 11th April 2005 – 13th November 2008
4. 21th April 2009 – 25th November 2009
5. 2nd August 2010 – 30th November 2010
6. 1st August 2011 – 24th June 2013
7. 16th September 2013 – 18th November 2013
8. 17th November 2014 – 23rd May 2016
9. 28th January 2018 – 17th July 2019
10. 18th March 2020 – 25th June 2020

Source: The State Bank of Pakistan (https://www.sbp.org.pk/COVID/Monetary.html)

Policy Rate and Inflation[4]

Figure 3.2 documents the trends in SBP policy rate[5] and inflation (year-on-year) since 2005.[6] It shows that the SBP actively responds to inflation irrespective of regime change through tight and expansionary monetary policy shifts. For example, the SBP had adopted a tight monetary policy for 44 months in response to the rising prices between 2005 and 2008. However, the policy rate may not affect that part of inflation coming through supply-side shocks such as the global commodity and fuel prices, natural disasters, and pandemics.[7] Monetary policy literature on Pakistan reveals that domestic and foreign supply-side shocks explain around 70 percent variation in inflation (Nasir & Malik, 2011).

Policy Rate, Food Inflation, and Non-Food Inflation

Interestingly, Figure 3.3 reveals that the monetary policy responds to demand-side inflation and supply-side shocks. For instance, the SBP raised the policy rate by 750 basis points between April 2005 and November 2008 when domestic inflation was hit by domestic (earthquake and security) and foreign (fuel prices and global commodity prices) supply-side shocks. The trends in the policy rate, food inflation, and non-food inflation depict positive correlations among them. In other words, there exists a high correlation between the policy rate and food inflation (0.71) and policy rate and non-food inflation (0.78).

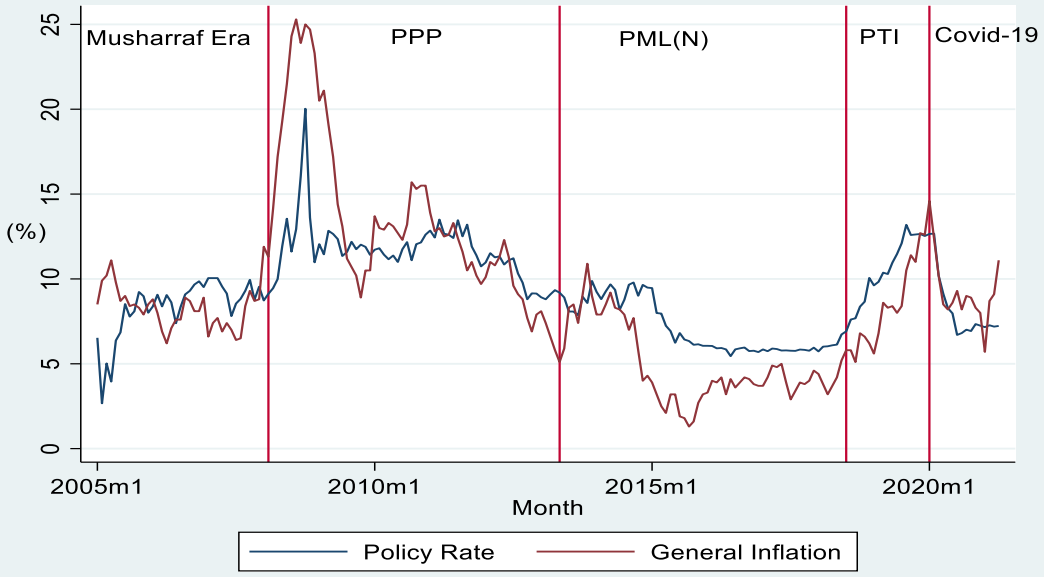
[4] Inflation is measured on year-on-year (YoY) basis.

[5] Money market rate (MMR) is used as a proxy for policy rate (target for overnight money market Repo Rate).

[6] The data for this section are complied from IMF database. https://data.imf.org/?sk=85b51b5a-b74f-473a-be16-49f1786949b3

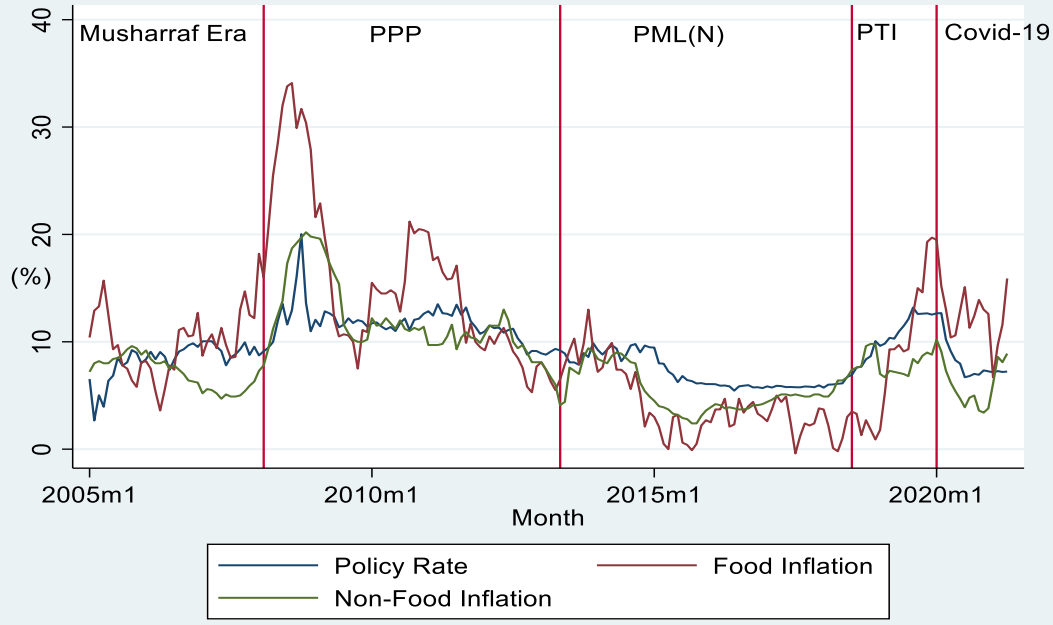
[7] The correlation between policy rate and inflation is 0.53, which, may reveal that policy rate only affects demand-pull inflation.

Figure 3.2: Historical Trend in Policy Rate and General Inflation



Source: SBP Inflation Monitors [www.sbp.org.pk/publications/Inflation_Monitor/index2.htm]

Figure 3.3: Historical Trend in Policy Rate, Food Inflation, and Non-Food Inflation



Source: SBP Inflation Monitors [www.sbp.org.pk/publications/Inflation_Monitor/index2.htm]

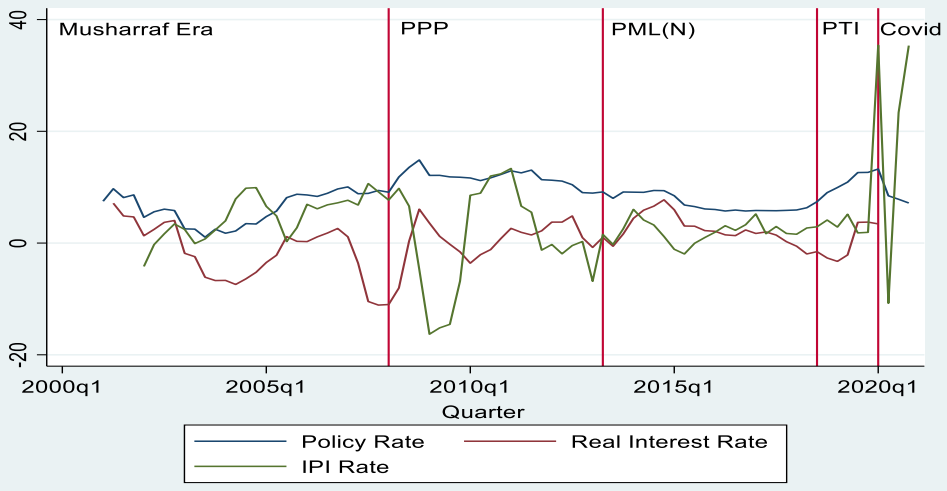
However, the monetary economics literature shows that a high policy rate may positively affect inflation by increasing the cost of working capital; this is known as the "cost channel of monetary policy" (Barth & Ramey, 2001; Chowdhury, 2006; Tillmann, 2009). Firms are dependent on short-term borrowing to finance working capital (liquidity requirements) in the production process. Positive shocks to nominal interest rates reduce the short-run capacity of firms to borrow, which may affect their production processes and supply of goods to the economy. This transmission mechanism of monetary policy has also been confirmed by Rehman & Malik (2011) for the manufacturing sector of Pakistan.

Nominal Interest Rate, Real Interest Rate, and Industrial Production Index

Does a firm's marginal cost depend on the nominal rate of interest? To explore this, Figure 3.4 provides trend analysis for the policy rate, real interest rate, and Industrial Production Index (IPI). It shows that there exists some evidence on the cost channel of monetary policy. Although there is no strong relationship between the policy rate and IPI rate, the rate of IPI responds to the real interest rate. Whenever the real interest rate decreases, the rate of IPI starts picking up, which reinforces the argument on the cost channel of monetary policy because the real interest rate decreases either due to the reduction in the nominal interest rate or an increase in the inflation rate.

The historical analysis shows that monetary policy responds to headline inflation without decomposing the variation in inflation into demand and supply shocks. The use of demand management policies to reduce inflation – which may have been caused by supply-side shocks – will lead to a further fall in output. Moreover, this may also result in higher inflation through the cost channel of monetary policy, as explained above.

Figure 3.4: Historical Trend in Policy Rate, Real Interest Rate, and Industrial Production Index



Source: SBP Inflation Monitors [www.sbp.org.pk/publications/Inflation_Monitor/index2.htm]

SBP'S RESPONSE TO COVID-19[8]

The first case of Covid-19 in Pakistan was confirmed on February 26, 2020. In the subsequent weeks, during rising cases of the coronavirus across the country, the provinces imposed lockdown with different intensities. The lockdown, along with a nosedive in global economic growth, disrupted the national and international supply chain resulting in severe economic contraction in the last quarter of 2019-20 as the GDP growth rate turned negative. Supply disruptions, reduced demand, and liquidity constrain forced businesses to lay off workers. The pessimistic projections for GDP growth and the expected increase in unemployment and poverty necessitated proactive response in the form of fiscal stimulus dually supported by accommodative monetary policy. The government took several measures to mitigate the effects of Covid-19, including a comprehensive relief package of Rs1.2 trillion, an amnesty scheme for the construction sector, and several budgetary measures to help stimulate the economy. Contrary to the historical trend, the monetary policy was accommodative to the government's efforts for economic revival. The SBP took several measures to counter the adverse socio-economic effects of the pandemic. The measures include:

MEASURE-I	MEASURE-II	MEASURE-III	MEASURE-IV	MEASURE-V
Reduction of policy rate	Facilitating new investment	Debt relief scheme	Refinance scheme for wage to prevent layoffs	Supporting the health sector

Reduction of Policy Rate

The first important measure taken by the SBP was to aggressively reduce the policy rate. Within a span of four months – from mid-March to June 2020 – the policy rate was reduced by a cumulative 625 basis points from 13.25 percent to 7 percent in five different announcements. This was the highest and fastest reduction in policy rate among the emerging economies. Since then, the policy has remained unchanged due to spare economic capacity, subdued wage growth, and reasonably anchored inflation expectations. The reduced policy rate helped contain debt financing and debt servicing cost for firms and households. Consequently, the private sector credit grew by 43% in the first ten months of 2020-21, which is also manifested by the higher economic growth. The liquidity impact of the policy rate cut is around Rs470 billion.

Facilitating New Investment

The SBP facilitated new investment by reducing the end-user markup rates on Temporary Economic Refinance Facility (TERF) from 7 percent to 5 percent. This helped businesses to make new investments along with expanding the old ones. The maximum limit allowed per

[8] The information for this section is collected from the SBP website. https://www.sbp.org.pk/covid/index.html

project was Rs5 billion. A total of 674 requests were received for this facility, while 628 requests with a cumulative worth of Rs436 billion were approved till April 01, 2021 – the end date of this facility. It is worth mentioning that the rate on Long Term Financing Facility (LTFF) for the non-textile sector was also reduced to 5% from 6%.

Debt Relief Scheme

This scheme was announced to help borrowers to deal with temporary economic disruptions by restructuring and deferring their loans. The scheme ensured that the principal amount of the loan could be deferred by twelve months without affecting the credit history of the borrowers. In the case of restructuring, the principal could be deferred by more than twelve months along with relaxation in the markup amount of repayment terms. Around 1.83 million applications (out of 1.88 million) were approved by the banks, DFIs, and MFBs. Of the total approved amount of Rs910 billion, the deferment amount of the loan was Rs657 billion, and the rest was rescheduled. This scheme was favorably received across all loan categories.

Refinance Scheme for Wage to Prevent Layoffs

One of the major concerns was the projected layoffs of workers as businesses were finding it difficult to retain them due to liquidity constraints that resulted from the closure of economic activity. The SBP Rozgar Scheme attempted to prevent layoffs by financing salaries and wages of all kinds of workers in all kinds of businesses, except the government/autonomous bodies and deposit-taking financial institutions. The financing period was from April 2020 to September 2020. It was SBP's most popular refinancing program, which safeguarded the employment of around 1.85 million workers. Approximately 3,300 enterprises benefited from this facility. The monetary value of this support is Rs238 billion.

Supporting the Health Sector

The SBP took a major initiative by directly providing support to the health sector. The intention was to expand the health sector capacity through the time-bound Refinance Facility for Combating Covid-19 (RFCC). The RFCC provided financial support for the supplies of masks, protective dresses, testing kits, hospital beds, ventilators, and other items to combat Covid-19. A maximum of Rs500 million per hospital was the limit for this facility. A total of 43 hospitals (out of 48 requests) benefited through a total grant of Rs12.3 billion.

The overall liquidity impact of the SBP measures to counter Covid-19 is above Rs2,100 billion, or around 5 percent of GDP. In addition to the above-mentioned measures, the SBP also took other measures to help ease the economic recovery, including export finance scheme, exports related soft loans, advance payments against the letter of credits, payback

of advance payment, reduction in the performance requirement for export financing, support for additional loans, and refinancing the banks.

These measures show that the SBP went beyond the conventional role of executing monetary policy through policy rates to counter and mitigate the adverse economic effects of Covid-19 and played an important role in the V-shaped recovery of GDP growth, not only through the direct launching of these schemes but also by facilitating the measures taken by the government. This is evident from its support for growth in the construction sector. Using its regulatory role, the SBP mandated the banks to increase their housing and construction loans to five percent of their overall private sector credit.

CONCLUSION AND THE WAY FORWARD

The Monetary Policy Committee (MPC), in its statement on May 28, 2021, decided to leave the policy rate unchanged at 7 percent, despite the fact the inflation rose to 11.1 percent (year-on-year) in April 2021. Interestingly, the MPC attributed three-fourths of the rise in inflation to supply-side factors such as the increase in electricity tariffs and the Ramzan-driven (seasonal) increase in food prices. The MPC also noted the presence of spare capacity in the economy, evident from the contained demand-side inflationary pressures. These observations helped MPC arriving at the decision, and the right one, of going with an accommodative monetary policy by keeping the policy rate unchanged at 7 percent. All this was possible because the SBP – probably for the first time – decomposed the variation in inflation into supply and demand-side factors and acknowledged the proportion of variations in inflation to both shocks. Moreover, the SBP has also been transparent about sharing this information through the Monetary Policy Statement (MPS).

It is, however, important to note that inflation in Pakistan has historically been more of a supply-side phenomenon. Nasir and Malik (2011), in their study on sources of inflation and output variability, conclude that demand-side shocks explain only around 30 percent of the variability in inflation. This is in line with what the SBP also observed in the latest MPS. Hence, moving forward, the SBP should continue to decompose inflation variability and respond to inflation caused only by demand-side inflation. Targeting headline inflation, when it is caused by a supply-side factor, could bring into play the cost channel of monetary policy, as suggested by Rehman and Malik (2011). This is important because oil prices are on the rise and are expected to increase further in the future. This, in addition to the rising real effective exchange rate and global food prices, could lead to an increase in the price level in the coming months.

The monetary policy needs to remain accommodative for sustainable economic recovery. The MPC intends to respond through gradual adjustment in the policy rate if inflationary

pressures arise from the demand side. However, care should be taken even in such a case not to hurt the economic recovery. For instance, during the first half of 2020-21, the private credit increased by 43 percent. The majority of this credit (Rs220 billion) went to private sector businesses compared to around Rs85 billion to consumer financing.

The policy tightening to reduce the consumer finance side of the demand could hurt the business sector more through the cost channel of monetary policy. The demand-push inflation may remain contained by the current policy rate since the economy has spare capacity. Thus, in this situation, the monetary policy response needs to be careful. Keeping the real interest rate positive at high inflation levels – especially when a higher proportion is coming from the supply-side – could severely hurt the efforts made by the government and the SBP for the economic rebound.

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Government Interventions and Exports from Pakistan

Aadil Nakhoda &
Qazi Masood Ahmed

INTRODUCTION

Pakistan reported a $245 million surplus in its current account in 2020, following a deficit of $8.6 billion in 2019.[1] Although the current account position improved in 2020 over 2019, during the first ten months of the fiscal year 2020-21, the trade deficit was 21.7 percent higher than that reported in the same period of the previous fiscal year. Further, exports and imports increased by 13.6 percent and 17.8 percent, respectively, during the same period. Both activities are likely linked to the economic conditions in Pakistan that have been emphasized upon in the rest of this chapter. The current external balance position provides the government with some critical respite. Therefore, the policymakers should take advantage of this cushion to undertake reforms that address structural challenges in the country's export basket. This will address the pressure on the budget deficit associated with the incentives often awarded to selected sectors and help build up capabilities to boost exports from Pakistan.

The exports from Pakistan are rife with high production costs and are stifled by resource constraints. This not only limits the diversification in the export basket but also increases the dependence of exporters on government assistance to improve their competitiveness in the world market. Interventions such as production subsidies and tax-based export incentives are commonly handed out to exporters in order to boost their export sales by improving their cost competitiveness against major regional competitors. Although such a form of assistance is common in several countries, it is likely that benefits in Pakistan are overly concentrated within a few industries and limited to a narrow range of products. Other measures of export promotion include import tariffs to limit foreign competition in the domestic market. During the current pandemic, export bans on certain products were introduced in order to prioritize local demand. Although these measures have varying implications on government revenue, they can affect economic welfare and trade development.

This chapter analyzes the impact of the interventions by the government on different products exported from Pakistan in terms of their competitiveness based on export unit value and the relative advantage for Pakistan concerning their share in global exports. Specifically, this study will:

[1] Data on current account position, remittances and balance on trade in services borrowed from State Bank of Pakistan. Data on trade balance borrowed from Pakistan Bureau of Statistics.

- Highlight the sectors which benefit the most from these incentives and determine whether the benefits are spread over several commodities or concentrated to only a few commodities.
- Show the inability to achieve trade diversification in the last several decades and the failure to shift towards higher exports of value-added commodities in the textile sector as cotton-based textile products dominate the exports from Pakistan with the help of government intervention through trade policies.

The revealed comparative advantage (RCA) is calculated as the ratio of the share of a product in the exports from Pakistan to the share of the product in global exports. If this ratio exceeds 1, it can imply that Pakistan exceeds its fair share in global exports. This study benchmarks unit values and RCAs of exports from Pakistan to that of the respective values for China and India. Therefore, if the RCA of Pakistan exceeds that of China and India for a particular product, the fair share of Pakistan in global trade for that product will exceed that of India and China. Further, if the export unit value of a particular product is lower than the export unit value reported for China and India, Pakistan will likely exhibit greater competitiveness in terms of its cost of production, as reflected by the unit value. The analysis looks only at the trade values associated with the potential products affected by the trade policy interventions based on their relative export unit values and RCAs relative to that of China and India.[2]

DATA

The data on export values for Pakistan, China and India is extracted from CEPII's BACI dataset.[3] The year 2019 is considered for the analysis. The data on products potentially affected by the interventions in trade policies by the government in favour of Pakistani businesses against foreign commercial interests are obtained from Global Trade Alert. The interventions considered for the analysis started in or before 2020 and ended in either 2020 or 2021. In other words, the interventions were likely to affect trade during the pandemic period.[4] The interventions include production subsidies, tax-based export incentives, and import tariffs. The detail on each intervention is provided in Appendix-A. Approximately $16.05 billion worth of exports from Pakistan are affected by the trade policy interventions mentioned above.

[2] It is important to mention that all interventions independently affect the products exported from Pakistan. This study assumes that there is no cross-subsidization across industries and across products within industries. Also, this study assumes that the role of exporter networks is negligible in boosting export sales of related products in different markets. These can be a subject for future studies.

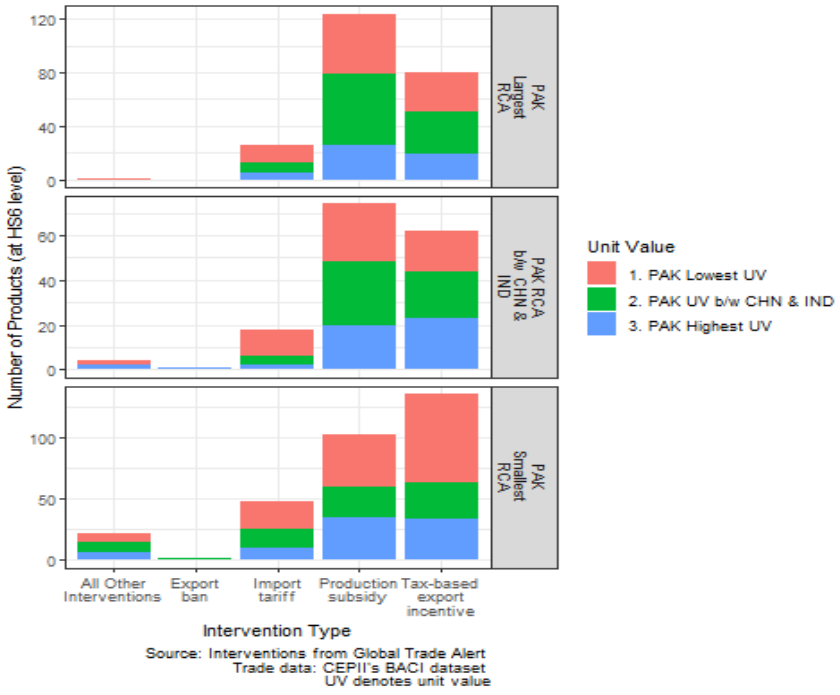
[3] http://cepii.fr/CEPII/en/bdd_modele/presentation.asp?id=37; https://www.globaltradealert.org/

[4] A negligible number of interventions involving import tariffs do not have an end date. Such interventions were introduced before 2013. The earliest year for all the interventions considered in this study is 2015.

RESULTS

As shown in Figure 4.1, the majority of the products benefitting from production subsidies and tax-based incentives, and in which Pakistan reports the largest RCA (placed in the top frame in Figure 4.1), also report either the lowest export unit value against China and India or export unit value between either of the two countries. These products include kitchen and toilet linen, apparel, and cotton yarn and fabric containing a high percentage of cotton. In other words, Pakistan not only gets more than its fair share relative to China and India but also reports a lower cost of production as gauged by the export unit value. On the other hand, a smaller percentage of products having a larger RCA relative to China and India incur the highest export unit value. This includes products that do not belong within the traditional range of predominantly cotton-based textile products typically exported from Pakistan, such as leather further prepared after tanning, fabric woven from synthetic fibers, and fabric containing less than 85% by weight of cotton. Although Pakistan has an advantage in terms of its share, China and India are able to export at a lower unit value.

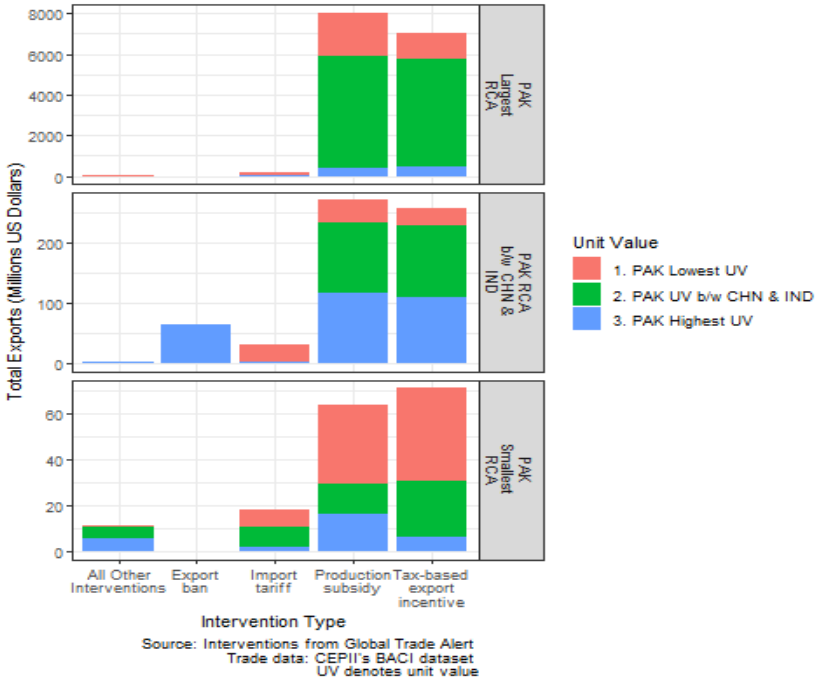
Figure 4.1: Number of Products Reporting Favourable Government Interventions in Respect to Foreign Commercial Interests



A significant number of products that receive either production subsidies or tax-based export incentives with the smallest RCA levels relative to the two countries report the lowest export unit values. Apart from apparel, these include light engineering products. Pakistan exports such products at competitive prices but does not possess the resources necessary to tap into the potential and expand its exports to gain a larger share in the world market. It is

likely that cost-based subsidies are not necessarily resulting in a larger export share in such non-traditional exports. Lastly, import tariffs are applied on the imports of 48 products that report the smallest RCAs, whereas the products reporting intervention in other categories are more likely to report lower export unit values compared to China and India. This suggests that import tariffs may not be serving their purposes as they are protecting products that either have lower levels of comparative advantage or are already selling at lower prices than regional competitors. Such products are likely to be available at lower costs in the domestic markets as well. It is important to mention that the number of products potentially affected by the export ban and all other interventions is almost negligible compared to those receiving production subsidies and tax-based incentives.

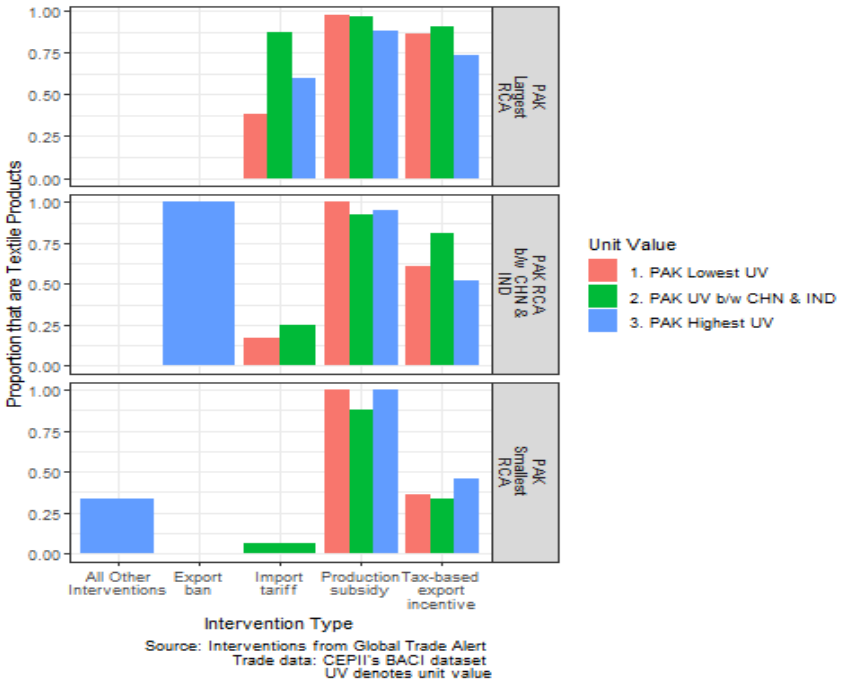
Figure 4.2: Total Exports of Products Reporting Favorable Government Interventions in Respect to Foreign Commercial Interests



The impact of government interventions on exports is reported in Figure 4.2. The products benefitting from production subsidies and tax-based incentives and having RCAs larger than that of China and India are likely to generate the highest export value if their export unit value is between that of China and India. With approximately $6 billion worth of exports generated from the category mentioned above, it has a significant contribution to total exports from Pakistan. Approximately $4 billion are earned from the exports of three textile apparel products that include trousers, jerseys and t-shirts primarily made of cotton. Further, Pakistan has the lowest export unit value in the exports of kitchen and toilet linen and certain varieties of cotton yarn and fabric. The tax-based export incentives and

production subsidies are likely to be crucial in generating cost advantage for a narrow range of traditional cotton-based textile products. For the products belonging to the bottom frame in Figure 4.2, Pakistan reports cost advantage but not necessarily higher levels of RCA. For instance, Pakistan is able to export certain varieties of t-shirts made of man-made fibers at lower unit value but does not necessarily have the resources to push for a larger share in its exports and gain more than its fair share, hence limiting its RCA. On the other hand, Pakistan receives tax-based export incentives on the exports of manufactured products, engineering products, and vegetable products. These products report RCAs between that of China and India but are not necessarily competitive in the global market. These products belong to the middle frame in Figure 4.2. Factors other than production subsidies and tax-based export incentives are likely driving their trade as Pakistan generates approximately $100 million worth of exports from such products. In essence, it is necessary to consider the resource constraints that impact the capacity of Pakistani exporters in order to improve export diversification in Pakistan.

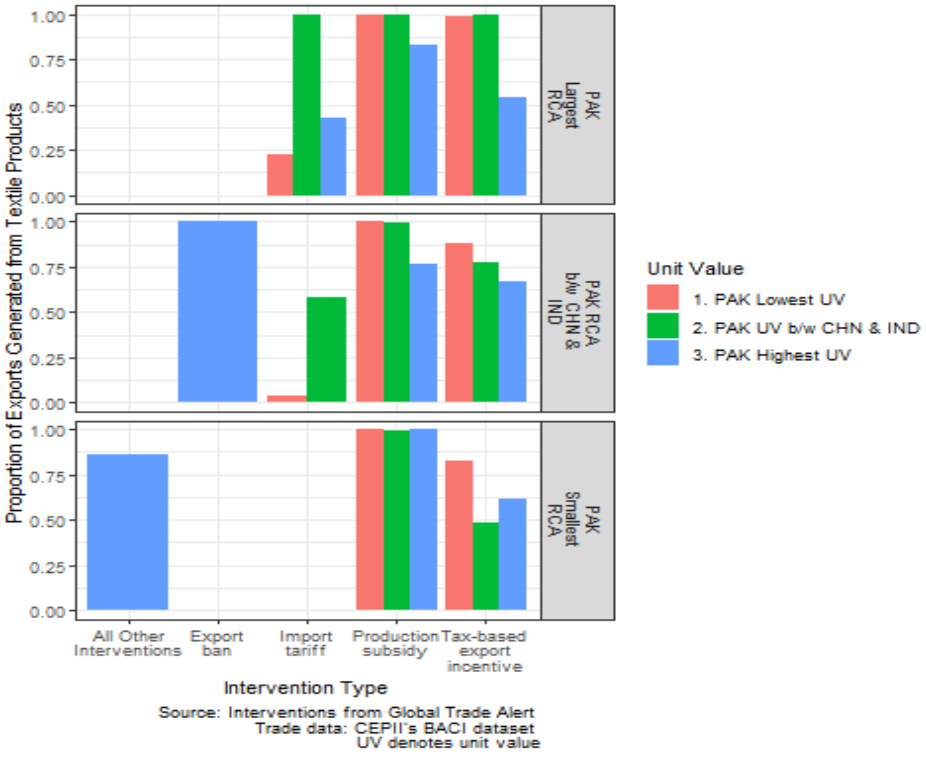
Figure 4.3: Proportion of Products Belonging to Textile Industry Reporting Favorable Government Interventions in Respect to Foreign Commercial Interests



The proportion of products that belong to the textile industry and face a particular intervention are presented in Figure 4.3. The production subsidy is mainly received by the textile sector. More than 50 percent of all the products that receive tax-based export incentives and either report the largest RCA or RCA between that of China and India belong to the textile industry regardless of the export unit value. On the other hand, the products

receiving tax-based export incentives and reporting the smallest RCAs are mostly non-textile products. Import tariffs, export bans and other interventions have varying impacts on textile and non-textile producers. Import tariffs are more likely to impact non-textile products that report the largest RCAs but the lowest export unit value in relation to China and India. However, the export ban imposed at the onset of the pandemic is targeting mainly textile products and that too reporting the highest export unit value. All other interventions are primarily geared towards non-textile products.

Figure 4.4: Proportion of Exports of Products Belonging to Textile Industry Reporting Favourable Government Interventions in Respect to Foreign Commercial Interests



The total exports from textile products as a proportion of total exports originating from Pakistan and reporting government intervention through trade policy are presented in Figure 4.4. It is clear that the textile industry is the biggest beneficiary of production subsidies and tax-based export incentives. Although this should be expected since approximately 60 percent of Pakistan's exports are contributed by the textile industry, the proportion of exports receiving production subsidy and tax-based incentives exceed the overall contribution of textile products in total exports originating from Pakistan. The exports receiving either production subsidies or tax-based export incentives and reporting the lowest export unit value relative to the unit value of exports from China and India predominantly belong to the textile industry.

MAIN FINDINGS

The main findings of the analysis are as follow:

- The textile products are the major beneficiaries of government intervention, which benefits mostly a limited number of products.
- A few textile products not only report higher values of RCAs relative to China and India but also report lower export unit value, suggesting greater exports than their fair share.
- The performance of non-textile products, even though less in number, receiving similar benefits through government interventions is relatively poor; such products also report lower RCAs relative to their counterparts produced in China and India.
- The benefits in terms of trade policy interventions for textile producers are limited to a narrow range of products, primarily concentrating on cotton-based products. Even within the textile industry, the trade policy interventions have not catered to the diversification in man-made fiber-based products.
- The findings assert that it is imperative to improve the capabilities of the producers in order to ensure that Pakistani exporters can increase their comparative advantage across a wider range of products and gain more than their fair share relative to that of China and India. This requires a holistic approach, which involves providing the right mix of resources, including cheap labor, material input, physical capital, human capital and aggressive economic diplomacy rather than only focusing on handouts and subsidies targeted to selected industries. The study vehemently emphasized the need for rationalizing production and export-related subsidies in such a way to promote value-added products in textile sectors and also a relatively higher share of existing subsidies to non-textile sectors. As benefits from one industry can spill over into the other, diversifying the export basket of Pakistan can have multiplying effects on the overall welfare in the economy.

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APPENDIX-A

List of Interventions from Global Trade Alerts valid in 2020-2021:
Export Ban
• Exports of certain personal protective equipment banned temporarily due to the covid-19 pandemic • Export of onions temporarily banned • Export of anti-malarial drugs banned due to the C covid-19 pandemic • Temporary export ban on all edible items in response to the Covid-19 pandemic
Import Tariff
• Incentives and import tariff amendments under Automotive Development Policy • Regulatory duty increased/imposed on several products • Regulatory duty imposed on cotton imports • Reference value for imports of fabrics for blankets increased
Production Subsidy
• Subsidized electricity package announced for certain sectors
Other Interventions
• Trade implications of the 2015-16 Budget • Incentives and import tariff amendments under Automotive Development Policy • Termination of provisional anti-dumping duty on imports of aluminum beverage cans from Jordan, Sri Lanka and the United Arab Emirates (termination of investigation on imports from Turkey) • Temporary refinance facility announced to stimulate investments in manufacturing (due to the Covid-19 outbreak) • Refinance facility for payment of wages and salaries announced in response to the Covid-19 pandemic • Electricity payment relief for SMEs in response to the Covid-19 pandemic • Import of crude oil banned in response to the Covid-19 pandemic • Package for agricultural economy announced in response to the Covid-19 pandemic • Trade implications of the 2020-21 federal budget • Fund size of exports financing facilities enhanced • Interest rates on temporary refinance facility reduced • Import ban on furnace oil • Refinance scheme announced for payments of wages for businesses affected by the Covid-19 pandemic

The Business Confidence Index: Growth and Trade Prospects

Aadil Nakhoda &
Qazi Masood Ahmed

INTRODUCTION

Policymakers commonly use business confidence surveys, which provide important input to promote business activities by bringing forth crucial information on the conditions prevailing in the economy. In Pakistan, the Business Confidence Survey is conducted by the State Bank of Pakistan (SBP) in collaboration with the Institute of Business Administration (IBA), Karachi. It is a bi-monthly telephonic survey conducted in the even-numbered months of the calendar year. The survey includes the firms belonging to the manufacturing, construction, financial services, retail and wholesale, and services sectors across Pakistan. Approximately 400 firms are surveyed in each wave. The respondent firms share their perceptions on the current and expected (in the next six months) performance of the economy through several indicators. While all indicators provide important information to policymakers, this study focuses on the indicators related to the business environment, employment and the purchasing manager's index. The detail is available at SBP's website on the Business Confidence Survey.1 The trend in the indicators provided in the business confidence survey is compared to those of major indicators on economic activity that are readily available, namely large-scale manufacturing index and exporting activities. This chapter aims to provide useful information to the SBP's policymakers to formulate a "forward-looking" monetary policy. It would help policymakers to include people and firms' perceptions while making decisions on the policy rate and monetary tools to set the future course of economic development.

METHODOLOGY

The results of the Business Confidence Survey are reported in the form of a diffusion index, which is calculated based on the answers received on each indicator. The responses are collected on the basis of five options, ranging from 'very positive' to 'very negative'. The diffusion index can fall between 0 and 100, with 50 indicating a neutral perception, greater than 50 indicating a positive perception and less than 50 indicating a negative perception.

The sample of firms was extracted from the business registry provided by the Securities and Exchange Commission of Pakistan (SECP). Firms with the highest paid-up capital within selected sectors were selected.

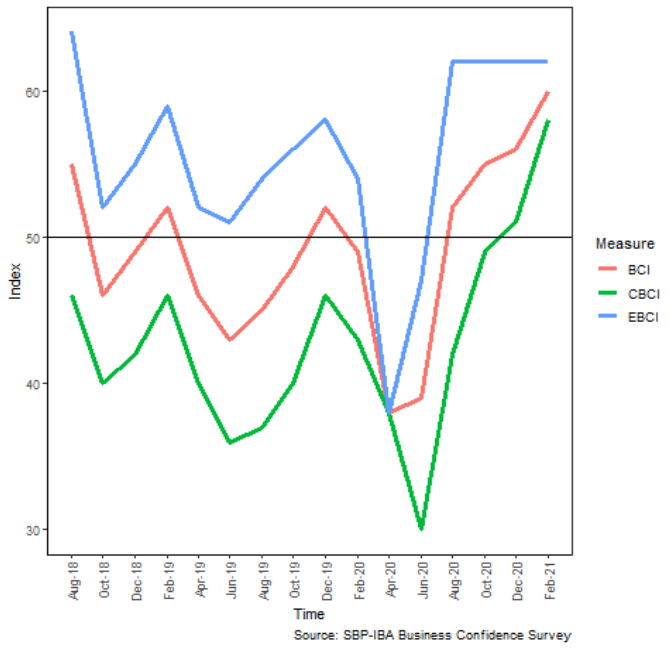
[1] The website can be accessed through the following url: https://www.sbp.org.pk/research/BCS.asp

RESULTS

The diffusion indices of major indicators are presented in the following figures. These include the Business Confidence Index (BCI), Employment Index and the Purchasing Manager's Index. In order to obtain a better understanding of the current and expected economic and business conditions, the current business and expected confidence indices and the current and expected employment indices are also analyzed. If the perceptions on the economy hold and are a good predictor of actual conditions, the trend in the BCI should follow the trend in indicators that account for the actual level of production. The large-scale manufacturing index and exporting activities are likely to show similar trends as the business confidence index. The following analysis shows that the BCI, as determined in the SBP-IBA Business Confidence Survey, follows a similar trend to the large-scale manufacturing index and the level of exports from Pakistan. The data on the quantum index of large-scale manufacturing (the base year 2005-06) and total exports from Pakistan is obtained from the Pakistan Bureau of Statistics (PBS). The time period considered is August 2018 (when the current government was formed) to February 2021.2

The BCI, which is the average of the current business confidence index (CBCI) and the expected business confidence index (EBCI), was in the positive zone (above 50) in August 2018 (Figure 5.1). It, however, fell into the negative zone in the next wave, recovered for a brief period in February 2019 and then went back into the negative zone. The trough reported in June 2019 coincides with the approval of the International Monetary Funds's (IMF) 39-Month Extended Fund Facility Program of $6 billion. The recovery continued till February 2020 as the BCI entered back into the positive zone. This too was short-lived as the pandemic hit the economy, plummeting the BCI well into the negative zone. As the government was able to control the spread of the pandemic and a strict lockdown eroding the economic activity lasted only for a few months, the BCI reported a

Figure 5.1: The Recent Trend in Business Confidence Index



[2] It is not the purpose of this exercise to econometrically prove the validity of the business confidence index. The main purpose is to present the business confidence index and report on its trend along with that of major indicators on economic activity.

sharp recovery. This indicated improved confidence of the business community in the economic conditions. BCI entered into the positive zone in August 2020 and has since then continued to show an upward trend. The most interesting aspect has been the EBCI, which has remained in the positive zone much throughout the 2½ years. On the other hand, the CBCI, which remained in the negative zone between August 2018 and December 2020, is now in the positive zone as well. This clearly indicates that the perception of the business community on the economy is positive as the three indicators are now well into the positive zone.

The three selected indicators from the survey are reported in Figure 5.2. It is clear that expected levels, both for the business confidence and employment, have remained in the positive zone much throughout the 2 ½ years. The only time it plummeted into the negative zone was during the first two waves during the pandemic, when Pakistan reported a strict lockdown. As the lockdown conditions eased, all the indicators marked a recovery. The current levels of all indicators in February 2021 were in the positive zone.

Figure 5.2: The Recent Trend in Selected Indicators from the SBP-IBA Business Confidence Survey

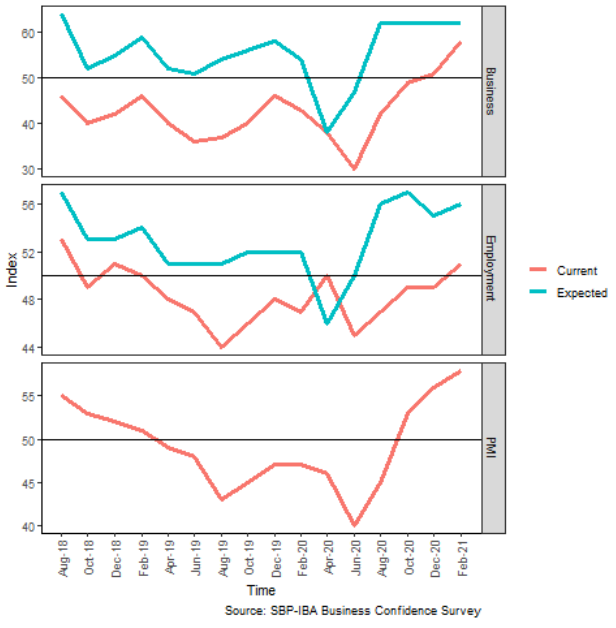
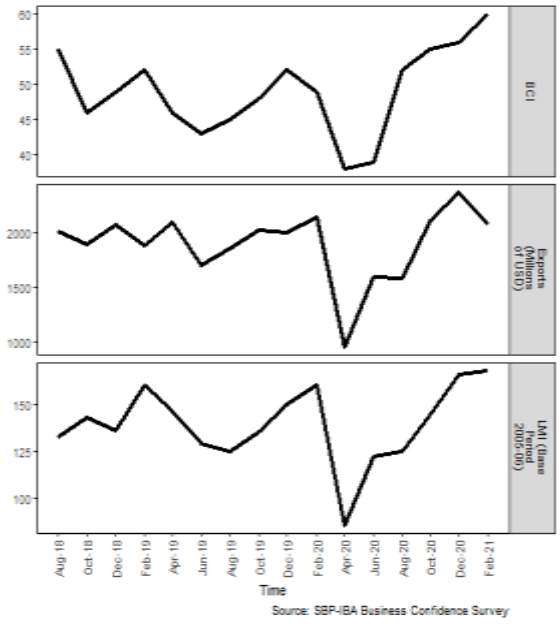


Figure 5.3: The Trend of Business Confidence Index in Relation to Exports and LMI



The trend in the BCI is presented in relation to the trends in exporting activities and Large-Scale Manufacturing Index (LMI) in Figure 5.3. All three indicators reported a decline in April 2019 and June 2019 as the confidence of the business community declined. The confidence of businesses improved after the inflows of funds from the IMF, the World Bank and the Asian Development Bank – declining trend was reversed and the economic indicators showed an improvement till February 2020. As the pandemic hit the economy of Pakistan, there was a

sharp decline in the three indicators, as expected. The LMI fell below 100 in April 2020, the first time since July 2016. However, with the recovery, the LMI, in January 2021, reported its highest level since July 2016. The same trend can be seen for the exports from Pakistan. Exports plummeted to below $1 billion in April 2020 at the onset of the pandemic. The exports then recovered to their highest levels. Pakistan has been consistently reporting exports of $2 billion per month for the past few months.

It is concluded that the long-run trends of the BCI, LMI and exports move in the same direction indicating the predictability of BCI in terms of macroeconomic variables. In essence, the BCI does well in following the trend of LMI and of exporting activities in Pakistan. It is, therefore, imperative and useful that policymakers closely analyze the BCI in order to ensure that the right mix of economic policies is adopted. In summary, BCI can be used as a valuable tool to predict the direction of Pakistan's economy. The recovery after the pandemic-induced lockdown was clearly predicted and the current growth levels in the economy seem to be well explained by this indicator.

Budget 2020-21 and its Impact on Construction Industry

Khadija Bari

INTRODUCTION

Soon after the current government came into power, it was faced with the unusual challenge of Covid-19, which has shaken economies worldwide. Developing countries like Pakistan suffered the worst and the numbers speak of the damage itself. During the fiscal year 2019-20, GDP growth projections plummeted from 3.3% to -0.4% when economic growth scaled down to Rs 3 trillion. Pakistan's exports decreased while there was a wave of poverty and massive unemployment, with figures stating that about 60,000 workers lost their source of income.

Keeping in mind these unprecedented times and growing demand for houses due to a 2.4% annual population growth rate as per census 2017, the Government of Pakistan announced a Stimulus Package of up to Rs12,00 billion, out of which Rs905 billion was utilized in a conscious effort against the socio-economic challenge with special relief for farmers and daily wage workers, many of which belong to the construction sector, under the *Ehsaas* Programme. Likewise, incentives were given to the construction sector to boost industry growth. Since construction is an industry through which 42 industries are related and it employs 8% of the labor force, it was well thought that this would boost other sectors and help in uplifting the economy. Budget allocation relevant to the construction industry is summarized in Table 6.1.

Table 6.1: Budget Allocation to the Construction Industry, *Rs in Million*

Classification	Budget 2020-21
Housing & Works Division	8,737
Low-Cost Housing	1,000
Housing and Community Amenities	35,680
Naya Pakistan Housing Authority (Subsidies)	30,000
Technology Upgradation Fund (Grant)	400
Construction and Transport	15,638
Interest free Loans to WAPDA For Operation and Maintenance, Hub Dam & Khanpur Dam	20
Loan to State Engineering Corporation	25
Loans to Pakistan Steel Mills Karachi	16,000
National Highway Authority	118,675

Source: Annual Budget Statement 2020-21, Government of Pakistan.

Apart from the above budget allocation, the government gave special importance to the construction sector by offering the following stimulants:

1. *Tax Amnesty Scheme:* Investors who invest in the construction sector would not be questioned about the source of their wealth. There will be no tax to regularize their wealth and investors will be allowed to bring their investment on their tax returns.

2. *Reduction in Capital Gains Tax (CGT):* The holding period of CGT imposition to be reduced from 8 years to 4 years. Furthermore, there was proposed 7.5%, 5%, 2.5% and 0% CGT on static properties sold within two, three, four years and beyond four years of initial purchase, respectively. People constructing, buying or selling their first houses are exempted from several taxes and fees, including Advance Tax, Capital Gains Tax, Stamp Duty Tax and Registration Fees.

3. *Tax Rate on Construction Sector:* Fixed tax rate to be imposed on land and construction to be assessed on the basis of per square yard and per square foot of property, respectively. If the construction entity is associated with Naya Pakistan Housing Scheme, 90% of the tax will be reimbursed. Sales tax and excise duties levied on construction materials will be reduced.

4. *Tax Relief on Allied Sectors:* Withholding tax on materials and services to be abolished except on organized sectors like steel and cement. However, those sectors will be provided compensation in other areas. For example, federal excise duty on cement is to be reduced from Rs2 to Rs .75 per kilo, which will bring down the price of a cement bag by Rs 25. Similarly, regulatory duties on steel and hot-rolled iron coils is to be lowered with a margin of 6.5% and 5.5%, respectively.

5. *Banks to Increase Credit Financing for Construction:* State Bank of Pakistan (SBP) has asked all banks to allocate at least 5% of their private credit to domestic residential and non-residential construction projects. Prior to this, the figure was only 1.5%.

6. *Construction Bank of Pakistan:* The government is planning to set up Construction Bank of Pakistan, which would allow construction-related firms to acquire funds on an easy basis.

The government also took the following steps to make sure that the above package to the industry is implemented in letter and spirit.

1) Paperwork for setting up Construction Industry Development Board (CIDB) was initiated by the government.
2) The government formulated National Committee on Housing Construction and Development (NCHCD) to ensure that the above package is well implemented.

3) Real Estate Regulatory Authority was also formed to keep property transactions in compliance with government regulations. The fact that builders and developers are now required to record their projects digitally on the Federal Board of Revenue's portal "Iris" under uniform building bylaws, it is expected that there will be a decrease in illegal buildings.

ASSESSMENT OF GOVERNMENT STIMULUS TO THE CONSTRUCTION INDUSTRY

Soon after the announcement of the budget and special packages, results started to show in good spirit. Public sector spending further gave a push to the construction sector when development expenditures, particularly on roads and dams, rose by 15.4% and hence increased demand of construction allied industries.[1]

While it is too early to assess the absolute impact of these reforms, there have been certain indicators that the industry is heading in the right direction.

1) Cement output rose by 22.8% during the first quarter of 2020-21, whereas during the same period of last year, it had decreased by 1.4%. Local demand for cement was supplemented by large scale projects such as the construction of Diamer Bhasha Dam and Burhan Dera Ismail Khan Motorway.
2) Long steel products that are more often used in the construction industry had an ascending growth of output with billets production showing a rise of 26% during the period. However, flat steel products which are used in the automobile and appliances sector continued to show a decline by which the overall steel industry declined by 8.1%.
3) Stakeholders from the construction industry welcomed the incentives given by the government. In an interview with Dawn newspaper, an industrialist stated that "the construction industry is a major employer and comes with a lot of allied industries. It is a tried and tested way the world over for construction to kick-start an economy."[2] The market has begun to speculate this improvement and hence the property prices have risen countrywide.
4) Construction activity grew by 8.06% due to an increase in government expenditure for 2019-20, according to the Pakistan Economic Survey 2019-20. From the data gathered till August 2020, 40 projects had been filed in the portal while another 4,812 were drafted for registration. Association of Builders and Developers Pakistan (ABAD) has decided to pour in Rs1,370 billion for the development of multiple projects, including up to 40 high rise buildings in the business city of Karachi, residential projects tied to

[1] SBP Quarterly Report 2020-21, State Bank of Pakistan.

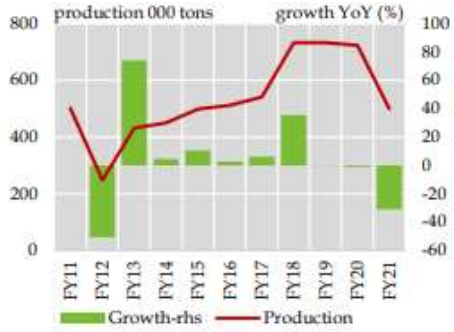
[2] Hadi Akberali, COO Strategy, Amreli Steels, as cited in https://aurora.dawn.com/news/1143839.

Naya Pakistan Housing Program as well 1,000 more construction assignments overall in the entire country. The rising number of advertisements of housing societies and commercial blocks in both print and electronic media is another positive sign for this industry, even a commoner can comprehend.

Figure 6.1: Steel Production

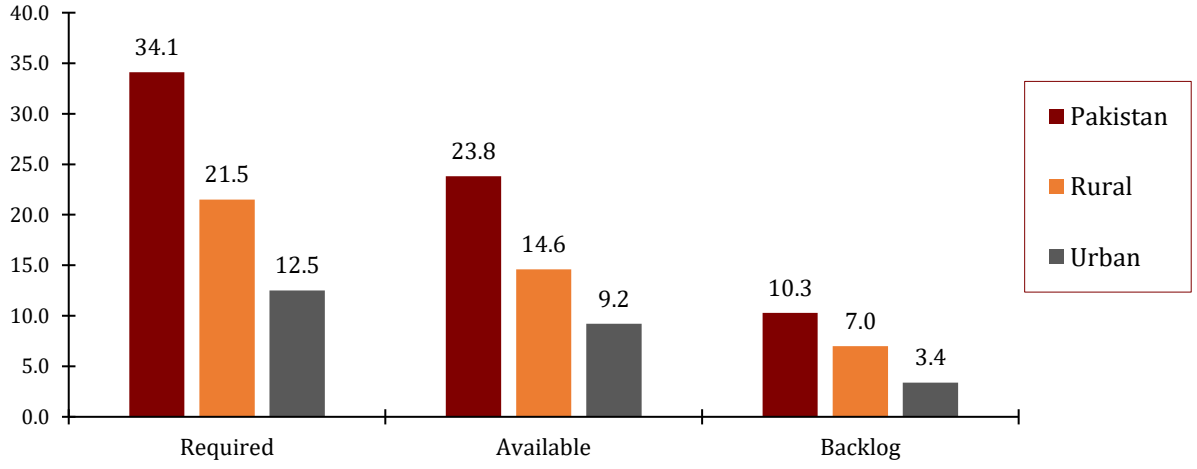
Long Steel Production

Flat Steel Production



5) Relief packages and low financing, including allocation of Rs1.5 billion interest-free loans through Akhuwat Foundation, will specifically help the lower-middle and middle-income population of the country, whereas small and medium-sized developers will increase their projects to take advantage of the incentives, which will hopefully reduce the housing backlog issue. Pakistan is currently facing an overall housing backlog of 10.3 million housing units. Of the total, the urban housing shortage is estimated to be around 3.4 million housing units, while the rural housing shortage is over 7 million housing units. (Naqvi, 2021).

Figure 6.2: Housing needs across Pakistan



CHALLENGES FACED BY THE CONSTRUCTION SECTOR

Many challenges hinder the growth in the construction sector. Some of the key concerns that require immediate intention are discussed below.

Inefficient Regulatory Authority Board: Currently, there are two bodies operating to oversee the sector, namely Security Exchange Commission Pakistan (SECP) and Pakistan Engineering Council (PEC). The SECP is a governmental regulatory authority that is responsible for regulating and supervising capital markets, non-bank financial intermediaries, corporate firms, insurance and Mudarba companies, etc. The broad array of sectors under its supervision hampers its efficiency, which is one of the major reasons why registration of contractors with SECP has been reduced to just being a formality. The PEC, on the other hand, despite being the regulatory body for the construction sector, is not working on the principles on which its foundation was laid. For example, PEC only emphasizes contractors to hire qualified engineers but does not make an effort to scrutinize the soundness of the qualification, eligibility and availability of the applying candidates. It is mandatory for engineering firms to register themselves with PEC with a particular number of points which then allows them to participate in any government or private project bidding. As a result, many of the retired engineers who have registered with PEC in the past rent out their certifications for a minimal amount to contractors who then use them to apply for PEC points, while the real certification holders are not even employees of those contractors. These kinds of malpractices have plagued this sector for a long time and continue to be a major problem.

The above irregularities lead to a plethora of issues, the most important of which is the non-conformity with the technical requirements of projects. In the recent past, lack of knowledge of construction methods as well as the regular nature of blunders in project designs has cost the lives of many individuals. Additionally, the normal standard of procedure of granting contracts is on the basis of the lowest cost rather than better quality. This gives an unfair advantage to those contractors who use rented out degrees of retired engineers as they do not have to pay for the salaries of these highly qualified engineers. Consequently, the more worthy, reliable and truthful contractors are weeded out of the market, leaving it full of manipulative and corrupt contractors. This has negatively impacted the standards of the construction sector in Pakistan, and due to this very reason, large scale, important and high-cost projects are now given to foreign contractors.

Negligence in Implementation of Health and Safety Protocols: In Pakistan, many workers suffer from injuries and death due to accidents that happen on construction sites. The reporting rate of these accidents is very low compared to other countries.

There are two main reasons for the lack of safety concerns. Firstly, the contractors bid on the project at a low cost, and generally, it is difficult to get the project done at such a low cost by following all health and safety standards. Secondly, more than often, the contractors transfer the responsibility of health and safety to the subcontractors. Most of the subcontracting companies are not aware of the safety systems, and their employees are mostly unaware of safe practices at the workplace as a majority of them are uneducated and come from the saith-munshi culture.

Unavailability and Rising Cost of Raw-Materials: Due to the unavailability of quality raw material from the local market, contractors and builders have to import raw materials like steel, glass, aluminium from other countries. However, due to currency depreciation and increase in inflation, prices of raw materials have nearly doubled. This along with increased tariffs on the import of raw materials have made access to quality raw materials more difficult for the contractors. These contractors thus resort to changing the composition of concrete, which exposes people to high risks. A number of unfortunate incidents have taken place over the last few years, leading to the deaths of thousands of people.

Disruptions in Cash Flows: In recent years, the construction sector has faced several problems related to liquidity. The primary reason why there are cash flow problems in this sector is that clients make delays in payments after the contractor has been selected for a particular project. This results in negative cash flows for the contractors. Sometimes, the contractors have to finance projects from their own pockets in the hope that the client will make payments after the project is completed. However, at times, this becomes a double-edged sword for the contractors who have to pay hefty amounts as bribes (mostly to government offices) to get their payments cleared. Such instances take place because of the absence of a contractor protection board.

Another issue that has resulted in cash flow disruption is that many of the contractors in the past have defaulted on their loans taken from the financial institutions. That is why now financial institutions and insurance companies consider the construction sector a high-risk business, and hence they have a cautious approach and are reluctant in giving loans to this sector.

Incompetent Workforce/Brain-drain: Many people pursue bachelor and master's degrees in civil engineering from reputed universities in Pakistan; however, these engineers do not always stay in Pakistan. Most of the engineers move to foreign countries after completing their degrees due to better career opportunities. Moreover, there is a lack of carrier growth for highly educated people in the construction industry in Pakistan as firms prefer hiring unskilled workers that are cheaper than the qualified workforce. According to the PEC website, there were around 260,000 engineers registered with the Pakistan Engineering

Council in 2019, out of which 30% of the engineers are serving abroad. This is due to the fact that an average civil engineer in Pakistan earns only around Rs150,000, whereas, in foreign countries, engineers can earn much more with the same level of skills and experience. For example, in UAE and Malaysia, the average income of a civil engineer (converted in Pakistani rupees) is Rs916,000 and Rs350,000, respectively.

Lack of collaboration between industry and academia is another reason due to which graduates are not equipped with the on-site experience that is demanded by the industry. Lack of collaboration means that the industry does not communicate its requirements to academia which then fails to design its program to meet industry needs.

THE WAY FORWARD

The government needs to take more steps to strengthen the construction sector considering its potential to lead the economy. The foremost action required is the establishment of an efficient regulatory authority that can address the issues faced by this sector. Constituting an autonomous body would ensure that all the stakeholders can be on the same page and work together for the betterment of the industry. This body will be responsible for pointing out the loopholes, providing recommendations, and making reforms to provide the construction sector the ground for capacity building and bring about improvements in efficiency and work practices. It should ensure the implementation of guidelines by firms regarding quality through direct intervention in the industry. The regulatory authority should also act as a facilitator by participating in joint R&D with construction firms to initiate innovative construction methods and techniques. Incentives like tax rebates or innovation ratings can be given to motivate firms towards R&D.

Once the construction regulation body is formalized, it should put forth safety laws and regulations that the stakeholders must adopt in order to implement safety practices. Workshops, sessions and training programs should be arranged and participation in them must be made compulsory. Practical demonstrations should also be provided to the workers at the construction site to show them the hazards of not using a particular safety equipment. The regulatory authority should carry out physical visits to monitor the implementation of the set guidelines. Firms not abiding by them should be penalized through heavy fines.

Authorities like the competition commission of Pakistan should come into action by preventing market practices like cartels in the cement sector to curb the unnecessary price hikes. Local industries like the steel industry should be given attention by increasing their capacity so that rich local resources are used to produce steel locally. This would reduce the costs for the construction sector and improve its supply chain.

The inclusion of the banking sector and relaxing the stringent leasing requirements of leasing institutions would ease the availability of capital and allow contractual firms to employ more machinery and increase their productivity. A major solution would be to involve financial institutions in this sector and introduce Development Finance Companies (DFCs), which would provide an avenue for channeling external assistance to the construction industry.

The quality of the construction can be improved by empowering local authorities like Karachi Developing Authority and Defense Housing Authority as they can closely monitor the construction taking place in their respected areas and ensure smooth operations.

Note: Muhammed Ahsan Iqbal, Muzammil Imran, Syed Muhammed Irtiza Wahidi, Usama Ehtesham, and Yahya Ahmad provided assistance in collecting data and compiling this chapter.

Energy Sector: Overview and Challenges

Lalarukh Ejaz

INTRODUCTION

The energy sector is one of the most important sectors for the growth and development of the economy. It is the most critical input for industrial and commercial activities and a basic necessity for the domestic sector. The energy consumption of an economy is directly proportional to economic growth, and therefore, the GDP growth of a country can be used as a measure to predict its energy needs and plan and implement measures to manage the supply.

In Pakistan, the tumultuous political environment over the years has created numerous challenges and problems for the energy sector. As a consequence, the energy sector has long been characterized by a chronic crisis that has not only derailed progress in this sector but has also crippled the economy and has resulted in tremendous cost in terms of employment and fiscal contribution required to keep this sector running. The energy sector is known to have cost $82 billion in lost GDP between 2007-2020.1

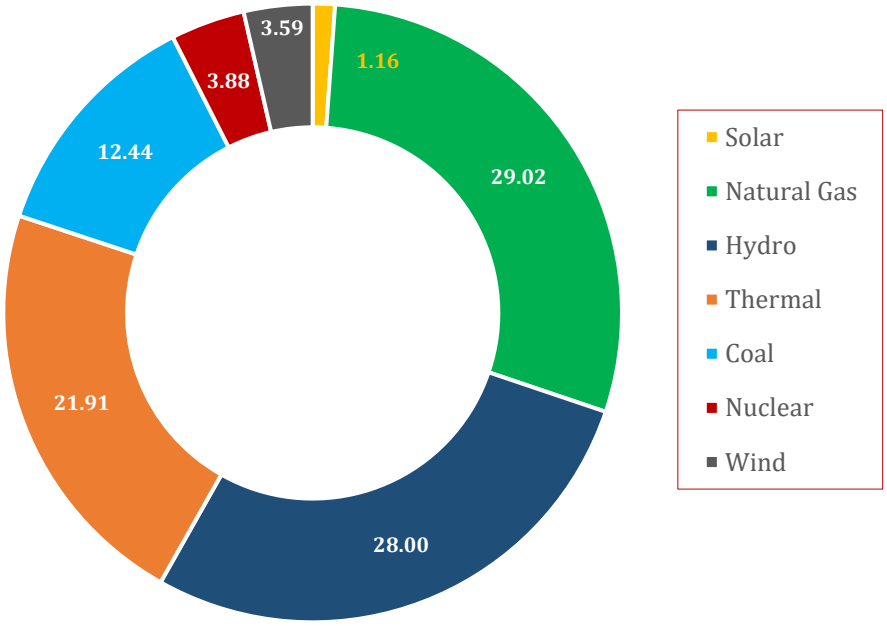
There are many challenges that face the energy sector, and the investors have been turned off by the chronic problem of circular debt as well as many other problems and issues that plague this sector. Investors are also deterred by security concerns in pursuing renewable energy projects in remote areas such as Balochistan that have been subject to insurgencies and military operations.

The viability of this sector has been compromised further due to force majeure implicit in delayed price adjustments and granting of temporary subsidies to help contain public opinion on inflation. According to IMF, Covid-19 related economic slowdown has directly caused a loss of 0.3% of GDP to the DISCOs, arising from deferred payments and a downward shift from high-tariff industry to low-tariff domestic consumers.

This chapter looks into the types of fuels that make up the energy mix of Pakistan, highlights the challenges facing this sector, and offers recommendations to improve the situation.

[1] https://www.dawn.com/news/1606884

Figure 7.1: Pakistan's Energy Mix – (%)



Source: WRI, PPIB, AEDB, PAEC.

THE ENERGY MIX CONUNDRUM

Figure 7.1 depicts the energy mix of Pakistan.[2] The country mainly relies on natural gas, water, and oil to meet energy requirements. The dependence on oil imports is quite high as local oil production only meets 18 percent of local demand. The oil imports account for a considerable portion of the import bill and the situation is further worsened by the frequent and heavy depreciation of the rupee. Efforts have been made to reduce the share of oil in the generation of power. The share of oil has decreased from 26.49 percent in 2017 to 11.54 percent in 2018. The switch has been made in favor of natural gas.[3]

The power generation capacity is primarily fueled by natural gas accounting for 43 percent of total power generation; 19 percent comes from LNG and 24 percent from domestic gas. However, natural gas production has peaked at 34 billion cubic meters and is only 80 percent of total consumption.

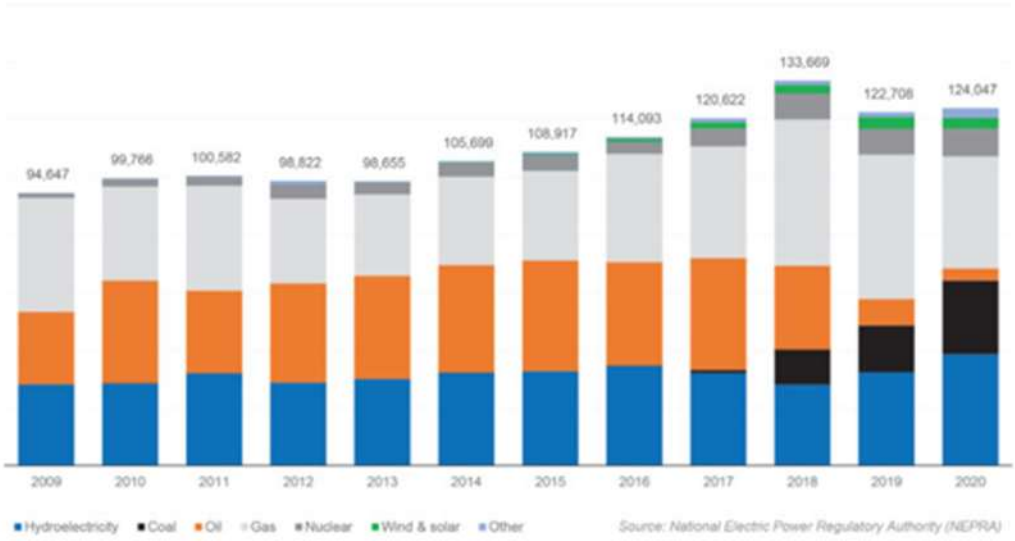
Hydropower is also responsible for a significant portion of power generation. In the wake of heavy load shedding and power outages prior to 2017, the generation capacity has been expanded by about 10,000 MW. However, the shortage continues, and this is particularly

[2] https://www.dawn.com/news/1501131

[3] https://www.worldbank.org/en/news/feature/2020/11/09/a-renewable-energy-future-for-pakistans-power-system

evident during the winter months when electricity demand is higher and production of hydroelectric power decreases.[4] Figure 7.2 shows the way in which the fuel for electricity generation has changed over the years.[5]

Figure 7.2: Electricity Generation in Pakistan



Source: NEPRA.

The government is looking to increase the reliance on coal with achieving a balance between import of good quality coal and local production. Construction of coal plants is under way, which will add 6.6 GW to total capacity by 2025.

The share of renewable resources such as wind and solar is still very limited. However, Pakistan has immense potential in this area. According to the World Bank (2020) report, Pakistan's current electricity demand can be easily met if the country uses 0.071 percent of its area to generate solar power.[6] Similarly, Pakistan has quite a few wind corridors where the average wind speed is 7.87 m/s. Many international companies are setting up operations in Sindh and Punjab. Chinese companies have invested in wind projects that have made up 36.8 percent of the new capacity between 2014 and 2018. Despite this potential, as of November 2020, solar and wind energy account for only a little over 4 percent of total installed capacity.

[4] https://www.pacra.com/sector_research/Power%20Sector%20-%20PACRA%20Research%20-%20Jan'21_1611329371.pdf

[5] https://www.nepra.org.pk/publications/State%20of%20Industry%20Reports/State%20of%20Industry%20Report%202020.pdf

[6] https://www.worldbank.org/en/news/feature/2020/11/09/a-renewable-energy-future-for-pakistans-power-system

The Variable Renewable Energy Integration and Planning study conducted by the World Bank over an 18-month period in alliance with the Power System Planning Department attempted at the identification of the optimal level of renewable energy the power system can absorb. It was revealed that the variable energy could be increased to 30 percent of the energy mix by 2030. The new projects will increase renewable capacity by 7,000 MW by 2025.[7]

CHALLENGES FACING THE ENERGY SECTOR

The provision of electricity to all parts of the country has been a constant challenge. This is particularly true in the rural areas where only 54 percent of the population has access to electricity. Pakistan aims to achieve electrification for all rural and urban areas by 2030. However, the electrification programs are heavily dependent on grid expansion which requires a great deal of finance and, as a consequence, is often held back due to limited availability of funds. Renewable energy systems are only beginning to be introduced, particularly in rural areas.

Another major challenge is the lack of thought and importance given to the energy sector over the past years. Not much work has gone into improving the structure, and as a consequence, the energy institutions and the energy policy of Pakistan are not fully evolved and is highly fragmented. Due to limited coordination and governance in this sector, corruption has been rampant as the selected ministers and officials have been more focused on personal interests and benefits rather than long term planning. The institutional restructuring took place in 2017, and the Ministry of Petroleum and Natural Resources and the power division of the Ministry of Water and Power has been merged under the Ministry of Energy in an attempt to improve governance and transparency.

Furthermore, decisions taken by previous governments around 15-20 years ago have favored an energy mix that still greatly depends on the use of fossil fuels such as furnace oil and coal, and which end up providing electricity that is relatively expensive compared to electricity that is generated by hydropower or alternative sources like wind and air. The energy mix as it stands currently also runs counter to the Prime Minister's Clean Green Initiative for Pakistan and hence needs to be modified to a growing dependence on cheaper sources of energy such as air and wind power.

The Prime Minister's Special Assistant on Power and Energy has said that currently, 64% of Pakistan's electricity is generated using fossil fuels and renewable fuels are less than

[7] https://www.worldbank.org/en/news/feature/2020/11/09/a-renewable-energy-future-for-pakistans-power-system

5%.[8] And changing this proportion to make it less disproportionately in favor of fossil fuels will not be an easy matter, not least because several new power plants that are being built as part of the CPEC corridor are being supported by the Government of China and they all use fossil fuels such as furnace oil or coal.

Line Losses and the Impact on Power Tariffs:

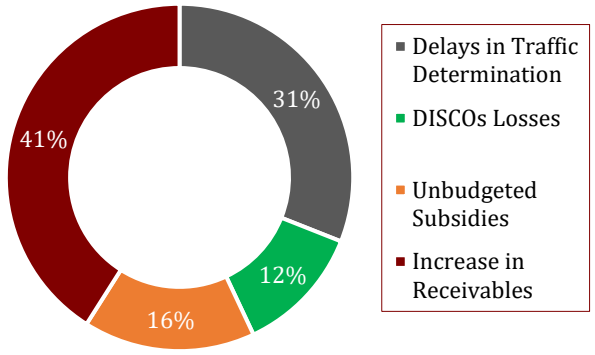
Pakistan has among the highest distribution and transmission losses of electricity in Asia. As of 2019, they stood at 18.3%, taken as an average of all distribution companies.[9]

These line losses erode the profitability of the power generation and distribution companies, and which then forces them to raise power tariffs, and in the end, the burden of the losses is paid by the consumer. Instead of becoming more efficient and seeing that their line losses are reduced to the level that is internationally accepted, a situation has arisen where these are made up for increases in the cost of electricity. This, in turn, has an inflationary impact on the economy since electricity is an input in industry, commerce and business.

The Circular Debt Monster:

As of April 2021, the circular debt in the energy sector had crossed Rs.2.55 trillion ($16.6 billion). Delayed payments to power generation and distribution companies interfere in further electricity generation and can cause shortages since the latter may not have enough cash to purchase inputs like furnace oil. As shown in Figure 7.3, 41 percent of the arrears arise from increase in receivables followed by delays in tariff determination.[10]

Figure 7.3: Source-wise Distribution of Arrears 2019-20



Source: Sattar (2020) in Malik, A. (2020).

Furthermore, in an attempt to trim the burgeoning circular debt, the federal government at times helps to pay off some of the arrears. However, this comes at the expense of other development priorities. This restriction of fiscal space is not good for the government's budgetary allocations and is basically tantamount to throwing taxpayers money down a black hole since all it is being used is to pay a debt. It is absolutely critical that the

[8] https://www.reuters.com/article/us-pakistan-energy-climate-change-featur-idUSKBN2AO27C

[9] https://www.dawn.com/news/1460225

[10] Malik, A. (2020). *Circular Debt—an Unfortunate Misnomer* (No. 2020: 20). Pakistan Institute of Development Economics.

authorities are able to build broad-based consensus among all stakeholders, including the public, allowing it to achieve recovery of arrears while simultaneously managing expectations of disposable income for a majority of the consumers; this is the segment of the economy that is benefitting most from the unsustainable level of subsidies at the expense of a small group of unsubsidized consumers.

Enough Capacity, but not Enough Electricity:
Pakistan's installed capacity of 40,000 megawatts is more than enough to meet the demand for electricity, but the issue also relates to transmission and generation capacity.11 Despite this, there is often a shortage of electricity, especially in the summers. Part of this has to do with the circular debt issue whereby power plants do not produce electricity because they do not have the funds required to pay for the fuel which is used as a raw material to generate power.

The other issue related to this is that while there is more than enough installed capacity to meet the demand for electricity, there isn't nearly enough capacity to transmit and distribute this much power. That means investments will have to be made to enhance the transmission and distribution network in the country.

Furthermore, the fact that the government has to pay capacity charges to independent power producers regardless of whether the latter produce power or not is a significant drain on government resources since they cumulatively run into several billion rupees every month.

While the reduction in the stock of circular debt in the short to medium term by privatizing power sector assets is a low hanging fruit, the government needs to stand firm in not guaranteeing offtake going forward.

FIXING PAKISTAN'S POWER SECTOR: THE WAY FORWARD

Pakistan's energy sector is currently in urgent need of reform. But it cannot be a quick fix since several measures have been tried and tested in the past by many governments and only ended up making the situation worse.

According to the Economic Survey 2019-20, the government has an Integrated Energy Plan which it believes will not only help in envisioning the energy demands and supply but also in forming evidence-based policy decisions. That said, any reform of the energy sector will

[11] https://nepra.org.pk/publications/State%20of%20Industry%20Reports/State%20of%20Industry%20Report%202020.pdf

not bear fruit unless and until the deep-seated problem of the circular debt is tackled head-on and fixed.

At the moment, Pakistan has a surplus of power as new capacity has been added to the grid and demand has decreased due to the pandemic and the frequent lock downs resulting in the closure of industrial and commercial activities. However, this surplus cannot be relied on as demand will increase as and when the situation improves; thus, building on variable renewable energy will be beneficial to reduce costs and delays associated with thermal plants and hydropower projects. The government also needs to execute the policy already in place to encourage the use of alternative energy sources for producing power so that the energy mix can include more relatively cheaper and environmentally friendly sources of production.

Restructuring of the power sector is critical to achieving greater competition and efficiency in this sector. In the short term, to increase competitiveness, a partnership between the public and the private sector can be fostered. In the long run, privatization of the distribution companies that has long been in process should be initiated to deal with the bureaucratic culture together with improvements in metering, billing, clearing the circular debt hangover and improvements in collections systems and investment.

Renegotiation of deals signed with the IPPs by previous governments, including buyouts of their remaining agreement tenures and replacing them with power plants using cheaper alternative energy sources for fuel, could bring down the cost of producing electricity or at least keep it under a manageable level.

A significant and permanent reduction in the circular debt will provide substantial fiscal space for the federal budget, and this can be used to fund much-needed social sector development initiatives. It will also help streamline and ensure the provision of affordable and uninterrupted power to all sectors of the economy, which in turn will prove to be a significant boost for further economic and industrial growth.

There is a need to improve the regulatory environment and develop operational policies and frameworks to implement those policies. The objective should not only focus on addressing short term energy shortages but more extended plans to address issues of increasing capacity and reducing line losses. Cutting line losses will make power utilities more profitable and reduce their incentive to increase power tariffs as compensation for line losses.

Funds and loans from foreign investors are mostly taken for coal and natural gas projects. Enough emphasis has not been placed on renewables. Such investments run into problems

because of financial difficulties faced by the power sector and the government. Government projects can aim to increase the installed capacity of wind and solar power generation in the future. This can be done through competitive bidding to reduce prices and costs. Variable renewable energy projects can replace power generation from thermal plants that are inefficient and use heavy fuel oil. However, the focus should be to retain a balance as despite the decreasing cost of variable renewable energy sources, the expansion plan to produce local coal needs to be pursued. This is essential to meet the basic power generation requirements.12 The way forward towards reforming the country's energy sector could result in major dividends for the industry and the overall national economy.

[12] https://www.thenews.com.pk/print/745917-fixing-pakistan-s-power-sector-a-roadmap

Review of Agriculture Sector in Pakistan

Heman Das Lohano

INTRODUCTION

Pakistan is facing dual issues of food security and water security. Water resources in Pakistan are under significant pressure due to increasing and conflicting water demand from municipalities for domestic users, agriculture and industries, and water requirements for the environment. The situation is likely to be exacerbated in the future with climate change, population growth, and urbanization.

Agriculture cannot thrive without sound water management, and sound water management requires more efficient and productive use of water by agriculture. In the light of increasing pressure on overall water demand, and the likely situation in future resulting from climate change, continued population growth and urbanization, it is critical that the steps are taken towards socially, environmentally, and economically sound management of water and agriculture sector.

Proper management of agriculture sector and water resources is not only important to address the issues of food security and water security, but it is also a prerequisite for moving forward in the process of agricultural transformation that would eventually support overall growth of the economy. The framework of agricultural transformation shows how agriculture-based countries can potentially evolve over time from a low-income to a high-income country (FAO, 2021a; Timmer, 1988).

The main objectives of this study are to examine the performance of agriculture sector, examine the trends in crops sector, assess the government support systems that affect the crops sector and water usage, and to draw policy implications for integrated management of crop sector and water resources and for agricultural transformation in Pakistan. The study uses a combination of literature review and analysis of descriptive statistics using secondary data available in government publications. For examining the trend in crop production and cropped area, we estimate time trend regression models, as the actual observations may fluctuate from year to year temporarily due to positive or negative shocks in a particular year.

PERFORMANCE OF AGRICULTURE SECTOR AND RESOURCES

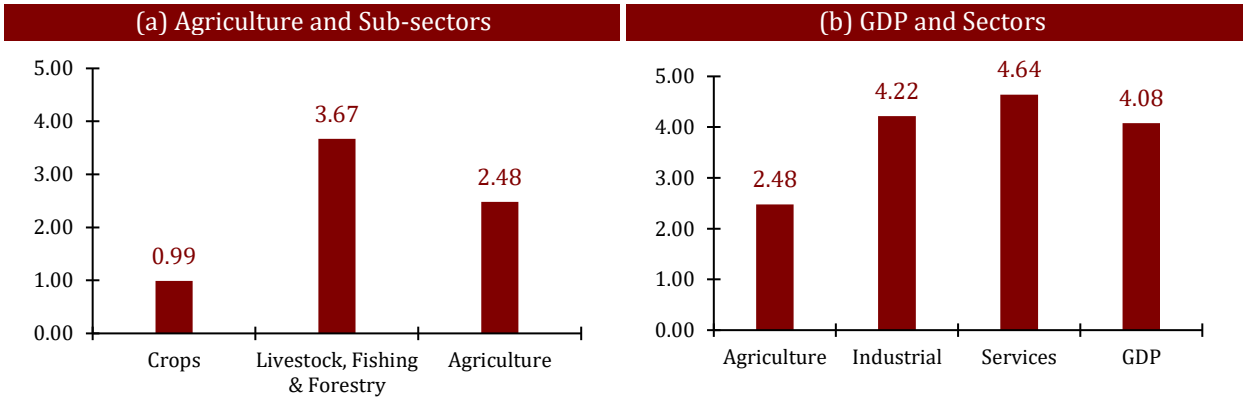
Agriculture accounts for 19.2 percent of GDP in Pakistan. The contribution of agriculture is much higher in terms of employment. Agriculture accounts for 38.5 percent of total employment (GOP, 2021). However, the performance of agriculture sector has been lower

than other sectors. Agriculture sector, especially the crops subsector, of Pakistan is facing low growth rates and low water productivity, despite a significant amount of public expenditure allocated to irrigation and agriculture.

During the past two decades, from 2000-01 to 2020-21, the average growth rate of real GDP in Pakistan was 4.1 percent while the average growth rate of agriculture sector was 2.5 percent. Furthermore, the average growth rate of crops subsector was much lower, only 1 percent, as illustrated in Figure 8.1.

Agriculture water productivity in Pakistan is quite low as compared to other countries in the region. Irrigation agriculture water use efficiency measures agricultural value added per unit of water used for the agriculture sector, expressed in USD per cubic meter with agriculture including irrigated crops, livestock, and aquaculture. The estimates show that irrigation agriculture water use efficiency in Pakistan is 0.30, while it is 0.41, 0.54, 0.61, and 0.75 in India, Bhutan, Nepal, and Bangladesh, respectively (FAO, 2021b).

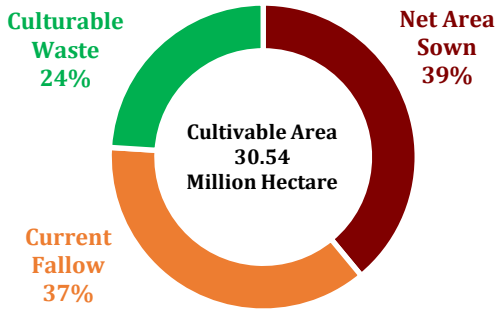
Figure 8.1: Average Growth Rates in GDP and Sectors in Pakistan during 2000-01 to 2000-21



Source: Author's computation using data from Pakistan Economic Survey (GOP, various years)

The geographical area of Pakistan is 79.61 million hectares, out of which total cultivable area is 30.54 million hectares, located in canal command areas and rain-fed areas. The net area sown is 15.13 million hectares, which is 39 percent of cultivable area while 37 percent is fallow land and 24 percent is culturable waste, as shown in Figure 8.2. Fallow land is the farm area not sown in a year for the purpose of regaining fertility or any other reason such

Figure 8.2: Utilization of Cultivable Area in Pakistan



Source: Pakistan Statistical Yearbook 2019 (GOP, 2020)

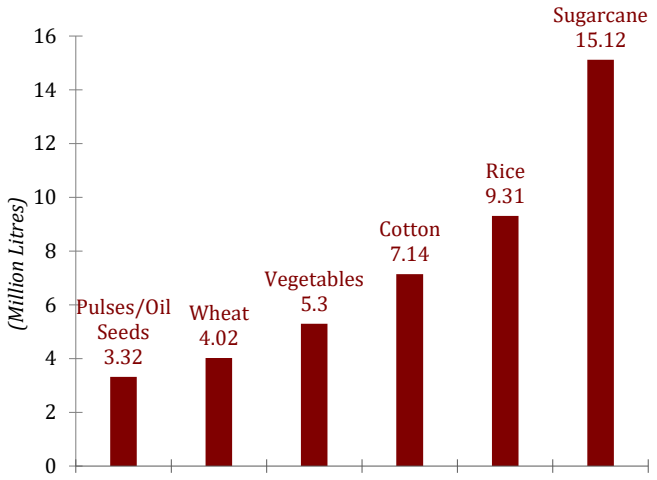
as unavailability of irrigation water, but it was sown in the previous year. Culturable waste is uncultivated farm area which is otherwise cultivable but was not cultivated during a year as well as the previous year due to presence of any of the constraints like unavailability of irrigation water, waterlogging, salinity, un-levelling of land, and lack of funds. This shows that there is a lot of farmlands not being cultivated due to shortage of water and other issues. Agriculture sector uses 90 percent of canal water (Qureshi and Ashraf, 2019). However, most of the farmers are using traditional method of irrigation by flooding the farm field. Furthermore, there are water losses due inefficiency in irrigation water network.

CROP PRODUCTION, EXPORTS, AND IMPORTS

Trend in Cropped Area and Crop Production

Crop water requirement (CWR) is different for each crop. Furthermore, water requirement for each crop depends on the agro-climatic conditions. In Pakistan, the average crop water requirements in million liters per hectare are 15.12 for sugarcane, 9.31 for rice, 7.14 for cotton, 5.30 for vegetables, 4.02 for wheat, and 3.32 for pulses or oilseeds, as illustrated in Figure 8.3. These results show that sugarcane and rice are water thirsty crops. Wheat, vegetables, and cotton are moderate water-use crops while pulses and oilseeds are water thrifty crops, requiring relatively small amounts of water to irrigate one hectare of crop. The average CWR for sugarcane is around four to five times higher than that for pulses or oilseeds. Similarly, the average CWR for rice is nearly three times higher than that for pulses or oil seeds.

Figure 8.3: Average Crop Water Requirements in Million Liters per Hectare in Pakistan



Note: One mm water on a hectare is equal to 10,000 liters

Source: Author's computations based on estimates in Amir and Habib (2015)

Table 8.1 presents the regression estimates of trend in the cropped area and production of crops grown in Pakistan using data from 2000-01 to 2018-19. Figures 8.4–8.6 illustrate the trend in cropped area graphically. The regression results show an upward trend in the cropped area and production of water thirsty crops including rice and sugarcane. The trend analysis shows that the cropped area and production of rice have increased, on average, at the rate of 1.15 and 2.89 percent per year, respectively. The cropped area and production of sugarcane have increased, on average, at the rate of 1.13 and 2.77 percent per year, respectively.

Wheat and cotton are moderate water-use crops. The trend analysis shows that the cropped area and production of wheat has increased, on average, at the rate of 0.63 and 1.89 percent per year, respectively. The cropped area of cotton shows a downward trend while cotton production does not show statistically significant trend due increase in cotton yield.

Table 8.1: Regression Estimates of Trend in Cropped Area and Production during 2000-01 and 2018-19

Crop	Annual percentage change	
	Trend in cropped area	Trend in production
Water thirsty crops		
Rice	1.15**	2.89***
Sugarcane	1.13**	2.77***
Moderate water-use crops		
Wheat	0.63***	1.89***
Cotton	-0.91***	0.10
Water thrifty crops		
Pulses	-1.01***	-2.18*
Rapeseed & Mustard	-2.06***	0.56
Sunflower	-1.71	-1.77
Other oil seeds	-0.54	-0.48
High value and moderate water-use crops		
Fruits	0.24	0.80***
Vegetables	1.17***	0.60***
All other crops		
Sum of area under remaining crops	-0.09	
Total cropped area	0.21*	

Note: ***, ** and *indicate significant at the 1%, 5%, and 10% significance levels, respectively
Source: Author's computation using data from Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019).

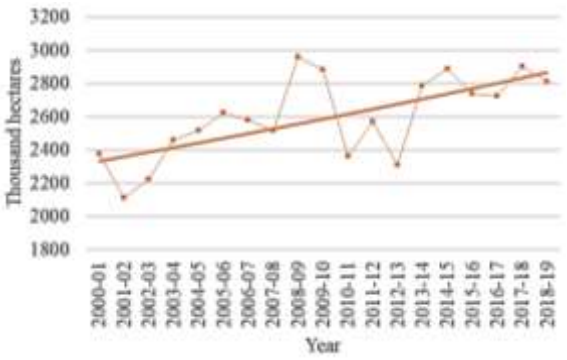
Pulses and oilseeds are water thrifty crops. The cropped area and production of pulses have significantly decreased, on average, at the rate of 1.01 and 2.18 percent per year, respectively. In the oilseeds, the cropped area and production of rapeseed and mustard (combined) have significantly decreased, on average, at the rate of -2.06 and 0.56 percent per year, respectively. The cropped area of sunflower increased from 2000-01 to 2007-08, after which it shows a downward trend, as illustrated in Figure 8.6. Due to initial upward trend and then downward trend, the trend line for entire period together does not show statistically significant trend.

In high value crops, the cropped area of fruits does not show statistically significant trend while production of fruits shows an upward trend. The cropped area and production of vegetables have increased, on average, at the rate of 1.17 and 0.60 percent per year, respectively.

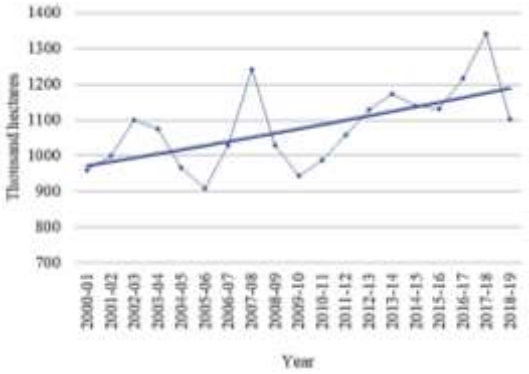
In absolute terms, the cropped area of rice and sugarcane, has increased by 433 and 141 thousand hectares, respectively, during 2000-01 to 2018-19. The cropped area of wheat has also increased by 497 thousand hectares during the same period. The cropped area of cotton has decreased by 555 thousand hectares. Cropped area of pulses has also decreased by 152 thousand hectares while combined rapeseed and mustard cropped area has decreased by 8 thousand hectares. The trend analysis of cropped area shows that the farmers have shifted from water thrifty to water thirsty crops.

Figure 8.4: Trend in cropped area of water thirsty crops in Pakistan

(a) Rice Area and Fitted Line



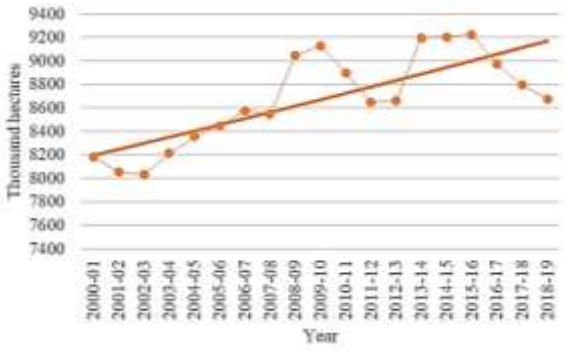
(b) Sugarcane Area and Fitted Line



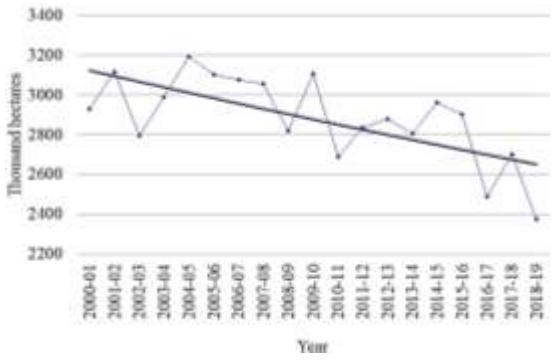
Source: Author's computation using data from Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019)

Figure 8.5: Trend in cropped area of moderate water-use crops

(a) Wheat Area and Fitted Line



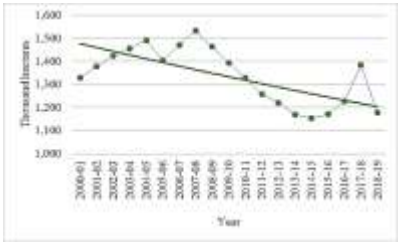
(b) Cotton Area and Fitted Line



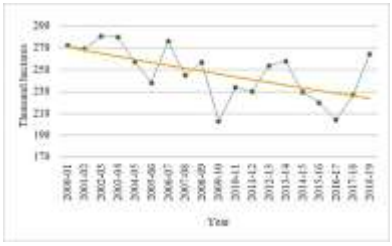
Source: Author's computation using data from Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019)

Figure 8.6: Trend in cropped area of water thrifty crops

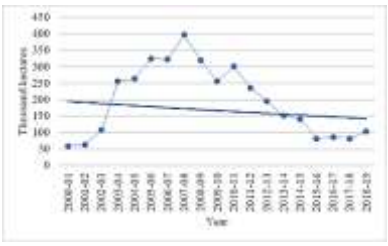
(a) Pulses Area and Fitted Line



(b) Rapeseed and Mustard Area and Fitted Line



(c) Sunflower Area and Fitted Line



Source: Author's computation using data from Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019)

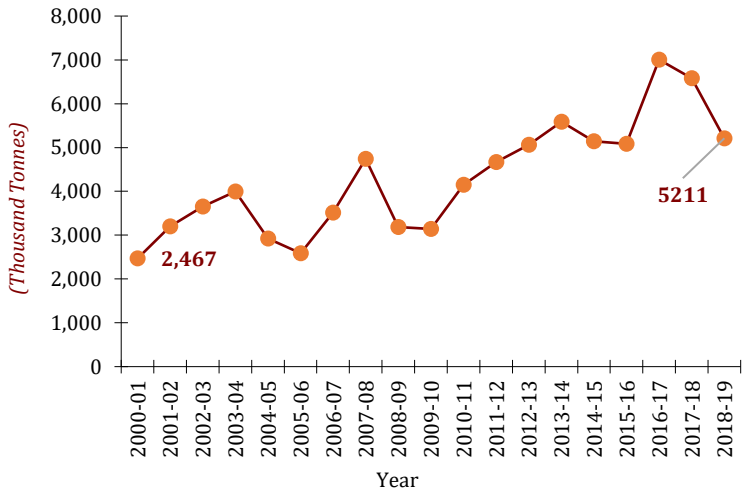
Trend in Exports and Imports

The number of sugar mills in Pakistan has increased from 69 in 2000-01 to 89 in 2018-19. The license for sugar mills is granted by the government. Thus, through the license, the government can potentially control the production of sugar as well as sugarcane.

Despite being a water thirsty crop, production of sugarcane in Pakistan has increased over time – from 2.5 million tonnes in 2000-01 to 5.2 million tonnes in 2018-19 – as illustrated in Figure 8.7. As Pakistan exports as well as imports sugar, Figure 8.8 presents the value of net exports of sugar. The results show that, in recent years, Pakistan's status has changed from overall net importer to overall net exporter of sugar, due to increase in sugar production. Similarly, both production and export of rice have increased from 2000-01 to 2018-19. Total production of rice in Pakistan has increased from 1.7 to 2.6 million tonnes, as shown in Figure 8.9. The value of rice exports has increased from Rs31 billion to Rs285 billion during this period (Figure 8.10).

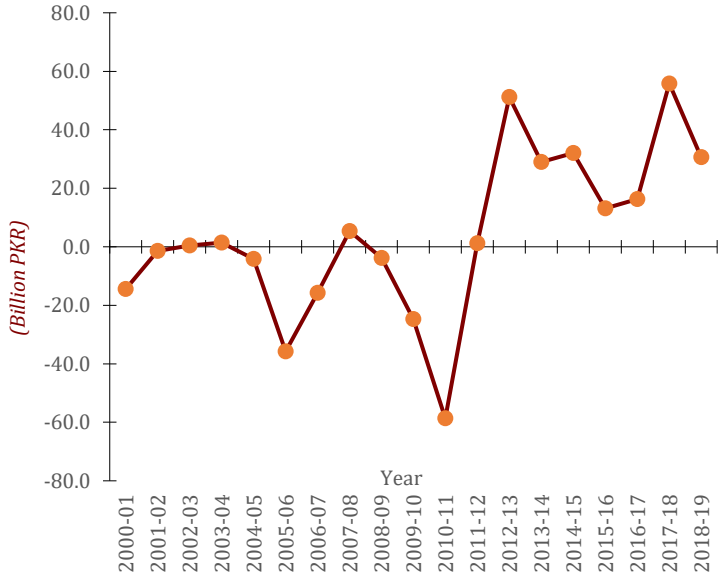
Pulses and oil seeds are water thrifty crops, but Pakistan has reduced the cultivation of these crops and thus has relied on their imports. Figure 8.11 presents the value of imports of pulses and edible oils. From 2000-01 to 2018-19, import of pulses has

Figure 8.7: Sugar Production in Pakistan



Source: Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019).

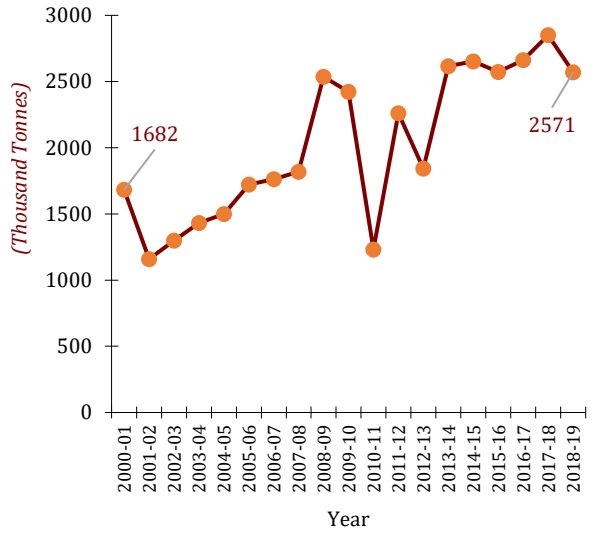
Figure 8.8: Sugar Net Export from Pakistan



Source: Pakistan Sugar Mills Association, Annual Reports (PSMA, 2020, 2013); Pakistan Statistical Year Book 2019 (GOP, 2020).

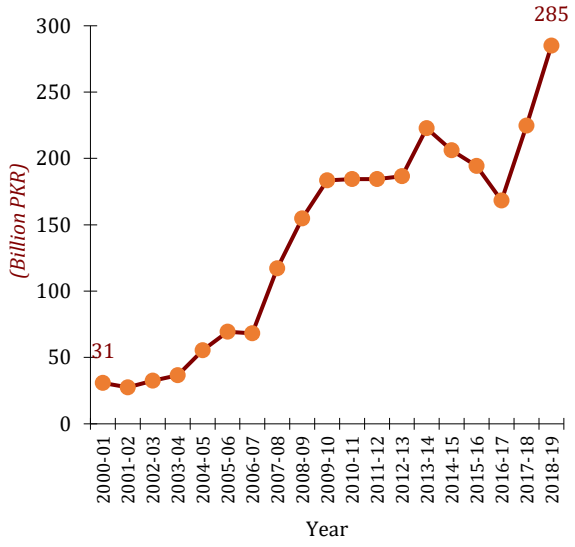
increased from Rs8 billion to Rs68.3 billion while import of edible oils has increased from Rs19 billion to Rs265.4 billion.

Figure 8.9: Rice Production in Pakistan



Source: Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019).

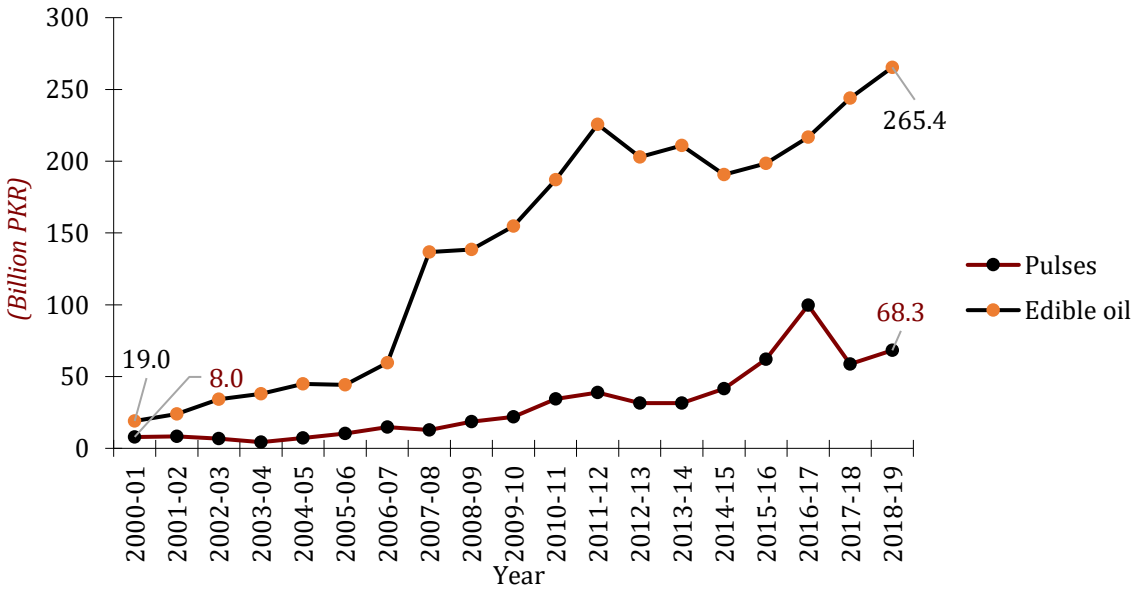
Figure 8.10: Rice Exports from Pakistan



Source: Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019).

Figure 8.11: Pulses and Edible Oil Imports in Pakistan

Import Items



Source: Pakistan Statistical Year Book 2019 (GOP, 2020); Agricultural Statistics of Pakistan (GOP, 2019).

GOVERNMENT SUPPORT AND INTERVENTIONS

Table 8.2 presents the budget for current expenditure, development expenditure and total expenditure for agriculture-related sectors including irrigation, agriculture, animal husbandry, forestry, fisheries, and irrigation in each of the four provinces: Punjab, Sindh, Khyber Pakhtunkhwa (KPK) and Balochistan for the year 2021-22. The last column presents the sum of provincial budget. Overall, in the provincial budgets, Rs126 billion has been allocated to agriculture departments, mainly for crops, fruits and vegetables while Rs110 billion allocated to irrigation. Animal husbandry, forestry and fisheries have been allocated around Rs34 billion, Rs24 billion, and Rs9 billion, respectively. In the provincial budget, on average, agriculture departments budget account for 2.2 percent while irrigation departments accounts for 1.93 percent. All these agriculture-related sectors account for 5.34 percent in the total provincial budgets.

Apart from the budget for these agriculture related departments, each provincial government as well as federal government allocates a separate budget for subsidies for agriculture and wheat procurement. For 2021-22, the federal government has allocated Rs12 billion for agriculture while each province has allocated different amount to support agriculture. Federal government has also allocated budget Rs280 billion for providing finances for wheat procurement in Pakistan.

In order to lower the fertilizer price for farmers, Government of Pakistan provides various types of subsidies. Natural gas is used as feedstock as well as fuel in the manufacturing of nitrogenous fertilizers. Three companies, namely Sui Northern Gas Pipeline Limited, Sui Southern Gas Company Limited, and Mari Petroleum Company are providing gas to the fertilizer sector (NFDC, 2020). The federal government provides subsidy on gas feedstock to fertilizer companies with the aim to lower the fertilizer price for farmers. In 2019-20, the federal government spent Rs126 billion as a natural gas feedstock subsidy to fertilizer companies. In addition, the federal government provides direct subsidy on imported fertilizer.

Among the inputs, irrigation water service is most highly subsidized in Pakistan. Revenue from irrigation water charges covers a very small proportion of operation and maintenance costs.

Table 8.2: Budget for Agriculture Related Sectors in 2021-22 (Rs in Billion)

	Punjab	Sindh	KPK	Balochistan	Total
Current Expenditure	**1,968.01**	**1,148.87**	**724.93**	**346.86**	**4,188.67**
Agriculture	34.44	16.13	4.29	11.82	66.68
Animal Husbandry	13.81	5.07	2.32	4.53	25.73
Forestry	5.11	2.16	4.07	1.54	12.88
Fisheries	0.97	0.87	0.25	1.17	3.26
Irrigation	19.03	21.23	5.34	3.15	48.75
Development Expenditure	**560**	**329.03**	**371.07**	**237.22**	**1,497.32**
Agriculture	30.65	12.90	6.25	9.55	59.35
Animal Husbandry	3.6	0.1	2.11	2.1	7.91
Forestry	4.32	1.5	3.68	1.99	11.50
Fisheries	0.61	1.8	0.27	3.5	6.18
Irrigation	0.17	40.86	0.12	20.03	61.18
Sum of Current and Development	**2,528.01**	**1,477.90**	**1,096.00**	**584.08**	**5,685.99**
Agriculture	65.09	29.03	10.54	21.37	126.03
Animal Husbandry	17.41	5.17	4.43	6.63	33.64
Forestry	9.43	3.67	7.75	3.53	24.38
Fisheries	1.58	2.67	0.52	4.67	9.44
Irrigation	19.20	62.09	5.46	23.18	109.93
Share in Provincial Budget (%)					
Agriculture	2.57	1.96	0.96	3.66	2.22
Animal Husbandry	0.69	0.35	0.40	1.14	0.59
Forestry	0.37	0.25	0.71	0.60	0.43
Fisheries	0.06	0.18	0.05	0.80	0.17
Irrigation	0.76	4.20	0.50	3.97	1.93

Sources: Annual budget books of Punjab, Sindh, KPK, and Balochistan.

CONCLUSIONS AND POLICY IMPLICATIONS

Agriculture sector of Pakistan is facing low growth rates and low water productivity. Keeping in view the increasing pressure on water demand from households, agriculture and industries as well as water requirements for the environment, it is important that the steps are taken to transform Pakistan's agriculture sector into one characterized by water-efficient, high value product-oriented, more climate resilient, more cost-effective, and high capacity to accommodate an increasing urbanized population. Pakistan not only needs to address the issues of food security and water security, but agricultural transformation would eventually support overall growth of the economy. Agricultural transformation is needed not only to address the issues of food security and water security, but it would also support

overall growth of the economy. In this section, we draw conclusions and policy implication based on findings of this study.

Policy Framework

According to Pakistan Vision 2025, the fourth pillar of Pakistan vision is "energy, food and water security" (GOP, 2014). National Water Policy of Pakistan (GOP, 2018) provides a broad policy framework and guiding principles for water security, food security, and integrated water resources management in Pakistan. Based on the National Water Policy of Pakistan, provinces are also developing provincial water policy with aim to formulate more detailed plans for sustainable development and management of water resources in the provinces. According to the National Water Policy (GOP, 2018), strategies and action plans for irrigated agriculture shall be developed with aims to improve water productivity, efficiency, reliability and equity. Furthermore, the national water policy recommends participatory management of irrigation network, ban on flood irrigation method, use of bio-fertilizer and bio-pesticides, developing water-saving varieties of crops through biotechnology, and increase in water charges to recover operation and maintenance costs of infrastructure.

According to the National Food Security Policy of Pakistan of 2018, pulse and oil seeds must be incentivized and promoted as a strategy for import substitution, instead of promoting export of sugar and wheat.

Support for Improving Water Productivity

Findings of this study show that, in Pakistan, production of water thirsty crops, such as sugarcane and rice, has increased over time, while the production of water thrifty crops, such as pulses and oilseeds, has decreased over time. These trends are mainly due to missing market-based water pricing, as irrigation water charges are too low to affect cropping pattern and use of water saving technologies, such as laser guided land levelers, drip irrigation, and many others. Furthermore, water charges are not volumetrically based. More importantly, the distorted incentives, introduced by some policies, in both input and output markets have encouraged production of water thirsty crops, which are also being exported. These incentives have thus indirectly discouraged the cultivation of water thrifty crops, especially pulses and oilseeds. The consumer demand for pulses and oilseeds keeps growing but is being met by importing pulses and edible oil. Thus, Pakistan is net exporter of blue virtual water.

In order to increase water productivity, cultivation of water thrifty crops and high value crops need to be supported. Different forms of support can be considered such as direct support on provision of high yielding varieties seeds, support in value chain of the products from water thrifty crops, support in technology adoption, and direct payments for saving water with adoption of water thrifty crops. Recently, the government of Punjab has started

smart subsidy for incentivizing cultivation of pulses and oilseeds while government of Sindh is in process of starting such initiative.

The license for sugar mills is granted by the government. Thus, through the license, the government can potentially control the production of sugar as well as sugarcane. This will indirectly induce cultivation of other crops.

Price support system and procurement policy needs be completely revised and redesigned. Government needs to establish digital platform for monitoring important agriculture products. A regulatory system to monitor and regulate prices needs to be introduced to promote all crops with more focus on oilseeds, pulses, fruits, vegetables, and high value crops.

Value Chain of Crops

Water productivity of crops can be increased not only by using less water but also by increasing the value of agricultural products in value chain, especially for high value crops that are water thrifty also. Rural-based processing is mainly limited to sugar, rice-milling and cotton ginning, while such facilities are largely absent for high value crops. Most fruits and vegetables, as well as a large portion of grains and oil seeds are traded in the wholesale agricultural markets. There are also a number of restrictive and non-transparent marketing arrangements which create large gaps between prices paid at retail outlets and what farmers receive. Lack of storage and processing facilities, along with non-transparent market practices cause massive fluctuations in prices (GOS, 2018). Improving value chain of high value and water thrifty crops will create market for these products and will also reduce the price risks of these crops.

Crop Yields

Water productivity of crops can also be increased with increase in the yields of water thrifty crops and high value crops. There is huge difference between the observed yields and potential yield. Crop yields can be increased by developing new high yielding varieties. Furthermore, there is huge difference in the crop yield by progressive farmer and ordinary farmer. Thus, better management and access to quality inputs can increase the yield. Agriculture extension departments can potentially support the farmer in increasing the yields of water thrifty crops and high value crops. Higher yields of these crops will provide incentive to farmers to grow these crops.

Irrigation Water Pricing for Water Thirsty Crops

The National Water Policy of Pakistan of 2018 recognizes that the surface irrigation water is underpriced and thus requires the measures to increase the water rates to meet the operation and maintenance costs of infrastructure for long-term sustainability of the irrigation sector. Water rates are too low to affect behavior of farmers in choosing crops. Revision in the irrigation water rates, especially for water thirsty crops, is required not only

for financial sustainability but also for improvement in the service delivery, as irrigation infrastructure requires proper maintenance. Thus, the revision of irrigation water rates would ensure long-term sustainability.

Underpricing of irrigation water has been singled out by many water and development experts as one of the crucial reasons for unabated use of water in irrigation. However, in order to change the farmers' behavior, irrigation water prices would have to be raised by tenfold to twentyfold, which is economically and politically impossible (Molle, 2010). Thus, it may take some time to raise water rates for water thirsty crops. In the short-run, one of effective ways of increasing the water productivity is to incentivize farmers to shift their crop choice from water-thirsty and low economic value ones to water-efficient and high value crops.

Input Markets

Fertilizer market is dominated by a few big companies. Thus, subsidy on gas feedstock and other incentives given to fertilizer companies do not fully pass on to the farmers. Federal government provides subsidy to fertilizer industry. The mechanism of providing the subsidy on fertilizer needs to be revised so that all subsidy reaches to farmers, with more support to small farmers.

There is also need to inspect fertilizer market properly. Crop production is a seasonal phenomenon. Thus, at the sowing time and other critical stages, there is sudden huge demand for fertilizer. Fertilizer availability is uncertain at different stages and thus leads to price fluctuations and sale of lower quality fertilizer products. Furthermore, many farmers overuse the fertilizer, which results in many environmental issues.

Seed plays an important role in crop production. Most of the seed supplied through informal system is of substandard quality. Thus, there is a need to support seed industry for provision of certified seed and promote development of high yielding varieties and climate smart seed varieties.

Enabling Environment

As discussed above, management of agriculture sector and water resources is not only important to address the issues of food security and water security, but it is also prerequisite for moving forward in the process of agricultural transformation that would eventually support overall growth of the economy.

The phases of agricultural transformation are summarized in Table 8.3 (FAO, 2021; Timmer, 1988). This framework shows the importance of agriculture transformation and how agriculture-based countries can potentially evolve over time from a low-income to a high-income country. Laborde (2019) and FAO (2021) found empirical evidence how various

lower- and middle-income countries have experienced remarkable progress in transforming agriculture.

The process of agriculture transformation is largely influenced by the management of country's structural endowments, such as water, land, soils, and human resources. As underscored in the theoretical and empirical literature, agriculture transformation also requires supporting enabling environment, institutions, legal support, and public investment, which determine the country's capacity for agriculture transformation, and also determines how fast the country can move forward in the process. (Laborde, 2019).

Table 8.3: Phases of Agriculture Transformation

Phases	Focus Areas for Policy
Phase 1: Getting agriculture moving	
Early phase when improved technologies are adopted.	Institutional change, new technologies, market structures, incentives, and investments in rural infrastructure.
Phase 2: Agriculture as a contributor to growth	
Agricultural sector continues to adopt productivity-enhancing technologies, and enhance enabling environment, including innovative institutional change and inclusive legislations.	Establishing agriculture-industry market linkages, as well as technology and incentives that support the creation of a sustainable agriculture sector.
Phase 3: Agriculture integrated into the macroeconomy	
Progressive investment in rural infrastructure, market linkages and integration of factor and product markets between agriculture and other sectors facilitate the integration of agriculture into the macroeconomy.	Managing trade, shocks in commodity markets and market regulations.
Phase 4: Agriculture in industrialized economies	
During this stage agriculture is a much smaller sector of the economy and food expenditures occupy a small share in consumer budgets.	Managing commodity market shocks and environmental impacts and protection, and the supply of verifiable healthy diets.

Sources: FAO (2021) and Timmer (1988)

The process of agriculture transformation is largely influenced by the management of country's structural endowments, such as water, land, soils, and human resources. As underscored in the theoretical and empirical literature, agriculture transformation also requires supporting enabling environment, institutions, legal support, and public investment, which determine the country's capacity for agriculture transformation, and also determines how fast the country can move forward in the process. (Laborde, 2019).

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Labor Market Dynamics: Before and During the Pandemic

Asma Hyder

INTRODUCTION

Powerful new technologies are being adopted in almost all sectors around the globe. At the beginning of the 21st century, in many developed countries, employment took a downward trend along with increasing productivity. In the recent decade, many countries have experienced jobless growth due to high technology adoption and the mechanization of many jobs. In some countries, the technology adoption and development of new skills is fast, while this process is slow in many places and results in unemployment. Thus, technology brings high economic growth and productivity but slow or weak job creation, especially in developing countries. Similarly, many middle-level-skills jobs are diminishing due to technology, for instance, clerks, security, and other coded and routine jobs, which machines can efficiently perform, given a set code. This hypothesis is intuitively plausible and provides evidence that industries in which middle-level skills are heavily used have seen the adoption of computers. Consequently, the extent of middle-level skills is reduced in those industries. There is a significant amount of evidence available in the literature on job polarization.[1]

The phenomenon of job polarisation is slow but has been realized in recent years in Pakistan's labor market. There has been an increase in managerial, professional and related occupations along with a rise in elementary level occupations that require human hands and cannot be performed with machines. However, there is a decrease in middle-level skills, which are referred to as coded jobs. People are leaving middle-level skills because machines are taking place, and workers are moving to both sides of the tail of skill distribution. The change in the occupational share is also reflected in the industrial employment share. Figure 9.1 and Table 9.1 show the change in such occupations and corresponding industries from 2013 to 2017. Middle-level occupations are vanishing and corresponding jobs in related industries are lessening. The highest increase in employment share is in the manufacturing industry, followed by the transportation and construction industry.

On the other hand, job share in agriculture and public administration has declined. Whilst polarization has not been occurring, skill upgradation can be seen in few occupations. As discussed above, technology is mostly introduced in occupations related to banking, supervisory positions, agriculture, plant and machinery. The share of clerks, administrative managers, demonstrators and sales service workers has decreased in these occupations, and technology has taken over the jobs. The demand for occupations like professionals and

[1] See for instance: Dinardo, Autor, Levy and Murnane 2003, Autor, Katz and Kearney (2006, 2008); Goos and Manning 2007; Autor, et al. (2013) and Goos and Manning 2007

related occupations, elementary occupations, plants and craft related occupations is increasing.

Figure 9.1: Difference of Occupation-Wise Distributional Share, 2013/14 to 2017/18 – (%)

Source: Authors own calculations from Labor Force Surveys

Table 9.1: Change in Industrial Employment Share from 2013-14 to 2017-18

Industry	Change in Employment Share (%)
Agriculture, forestry and fishing	-3.67
Mining and quarrying	0.08
Manufacturing	1.72
Electricity, gas, steam	-0.17
Water supply; waste management activities	0.01
Construction	0.33
Wholesale and retail trade	0.28
Transportation and storage	0.51
Accommodation and food service activities	0.26
Information and communication	0.01
Financial and insurance activities	-0.02
Real estate activities	0.12
Professional, scientific and technical activities	0.03
Administrative and support service activities	0.47
Public administration and defence	-0.34
Education	0.14
Human health and social work activities	0.09
Arts, entertainment and recreation	0.03
Other service activities	0.01
Activities of households as employers	0.09
Activities of ext. organizations and bodies	0.01

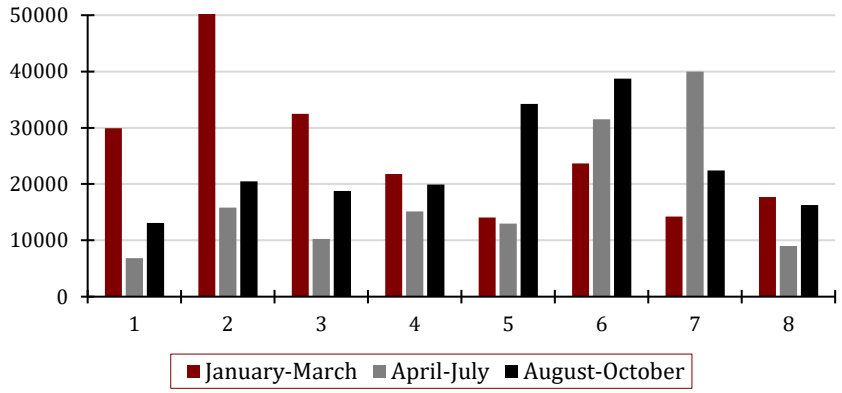
However, this process of job polarization and changing dynamics of the labor market is very slow in Pakistan due to slow technology transfer and adoption compared to the rest of the world. The impact of information and communication technology is low in Pakistan. According to The Network Readiness Index (NRI), Pakistan is ranked 110th in secure internet servers, 115th in e-commerce legislation, 124th in internet users and 111th in the overall Network Readiness Index among 134 nations.[2] Slow technology transfer and lack of adoption are the main reasons for Pakistan's low ability in creating new and better jobs domestically as well as in the global value chain (GVC), which is evident from the rest of the sections in this report.

IMPACT OF COVID-19 SHOCK ON LABOR MARKET

Figure 9.2 presents the change in average wages in selected industries. The data was collected by the Pakistan Bureau of Statistics (PBS) to capture the impact of Covid-19 on labor market through a survey 'Special Survey for Evaluating Socio-Economic Impact of Covid-19 on Wellbeing of People', conducted in 2020. The three quarters of the year 2020 are classified as follows:

Period – I	Period – II	Period – III
COVID-19 initial period *(January – March 2020)*	COVID-19 high intensity and lockdown period *(April – June 2020)*	Post Lockdown period *(August – December 2020)*

Figure 9.2: Average Wages in Selected Industries during 2020, *Rs per month*



1 = Agriculture, forestry and fishing
2 = Manufacturing
3 = Construction
4 = Transportation and storage
5 = Information and communication
6 = Administrative and support service activities
7 = Arts, entertainment and recreation
8 = Other service activities

Source: Special Survey for Evaluating Socio-economic Impact of Covid-19 on Well-being of People, PBS

U-shape trends are visible in all industries during the above three periods according to intensity of virus spread and lockdown, except for a couple of industries, i.e., 'Administrative and support services' and 'Art and entertainment'. There was a sharp increase in the

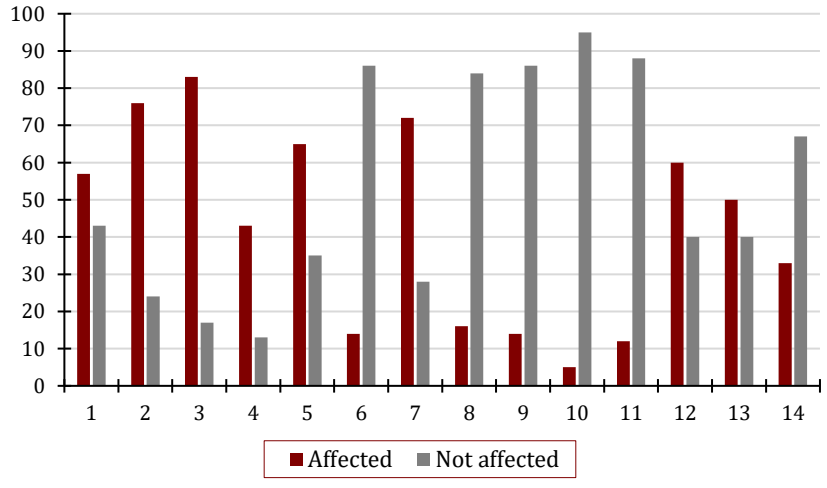
[2] The Network Readiness Report 2020.

lockdown period, which continued in the post-lockdown period in the art and entertainment category. Due to the lockdown, not only workers but also students started using online libraries and archives, online games, video and other online entertainment products. Therefore, the online entertainment businesses flourished during this period. The highly affected category was manufacturing with minor recovery signs in the post-lockdown period. The information and communication category remained unaffected during the lockdown and grew in the post-lockdown period.

Who has been hurt most?

In this survey, 22% of the participants replied that they were affected in some way, for instance, job or wage loss temporarily, for a shorter period or in some cases for a more extended period or even permanently. As shown in Figure 3, the top three highly affected employment categories are: (i) piece-rate workers (affected=83%), (ii) casual paid employees (affected=76%), and (iii) non-agricultural own account workers (affected=72%). Piece rate and casual paid workers would get into the market as the economy recovers after the pandemic or once the larger population is vaccinated. However, the own account workers and employer category may take longer to recover. Self-employment or entrepreneurship is already a fragile category, which takes a longer period of time to establish and sustain in the market. Their recovery would be a challenge; probably, many would be driven out of the market permanently. These most affected categories are also a judgement call for weak labor market institutions in terms of precarious employment and job insecurity. The pandemic affected the labor markets across the globe, and Pakistan is not an exception. However, the situation could have been better had any insurance or safety nets system were in place to buffer such shocks.

Figure 9.3: Proportion of Workers whose Employment was Affected by Covid-19, %

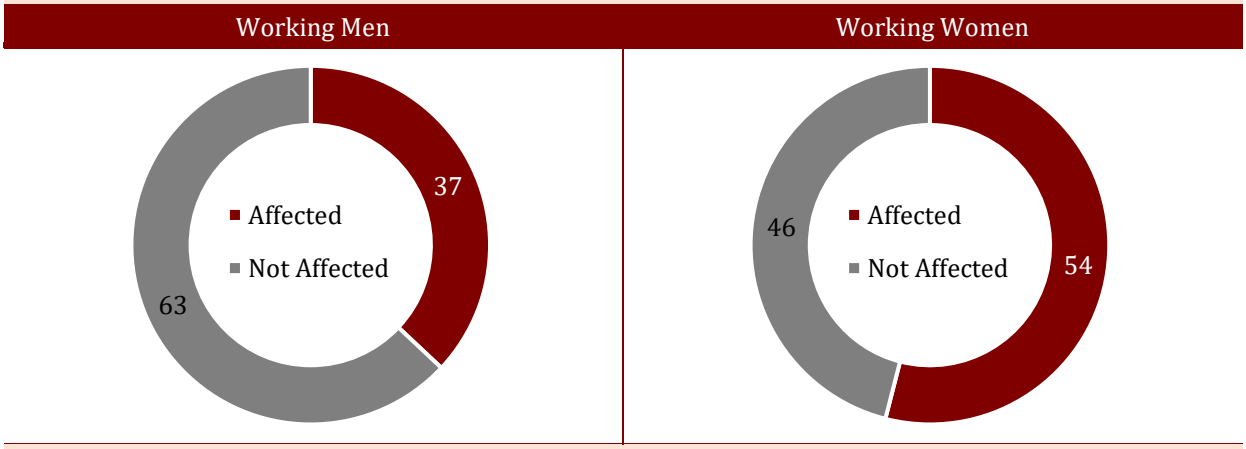


1 = Regular
2 = Casual paid employees
3 = Piece rate workers
4 = Paid-Non family
5 = Employers
6 = Own account workers (Agriculture)
7 = Own account workers (non-Agriculture)
8 = Owner Cultivator
9 = Share cropper
10 = Contract Cultivator
11 = Family workers (Agriculture)
12 = Family Workers (non-Agriculture)
13 = Producer Cooperative
14 = Other

Source: Special Survey for Evaluating Socio-economic Impact of Covid-19 on Well-being of People, PBS

The survey respondents comprised 88% male and 12% female workers. A gender analysis shows that women are much more affected than their female counterparts in the labor market. Female labor force participation is very low in Pakistan, and women workers are vulnerable due to weak mobility and bargaining power. Figure 9.4 shows that the proportion of affected female workers is significantly higher than male workers – 54% of working women were affected compared to 37% working men.

Figure 9.4: Effect on Employment by Gender, *percent of total working men and women*



Source: Special Survey for Evaluating Socio-economic Impact of Covid-19 on Well-being of People, PBS

RECOMMENDATIONS:

The above analysis shows the dire need for the labor market information system. It is important to strengthen the technical training system, and the curriculum should be aligned with the international labor market. The analysis also emphasizes women's education and labor market participation.

The following recommendations are made to promote the employment opportunities in the country:

- The government needs to identify the global competitive skills and map them with the provincial Technical and Vocational Education and Training Authorities (TVETAs) and academic institutions.
- The pandemic has further weakened the labor market of Pakistan in terms of vulnerability, social security, and the absence of any buffer mechanism against any adversities. Thus, the Covid-19 should be considered as an eye-opening experience and labor market system should be redefined.
- Large Scale Manufacturing seems to be the leading contributor in GDP in coming years – youth should be trained as the potential workforce of this sector.
- Self-employment and nascent entrepreneurs should be encouraged and get tax exemptions. E-commerce and other such businesses should be facilitated.

The State of Education during the Covid-19 Crisis

Fatima Sadik & Rabbia Tariq

INTRODUCTION

Covid-19 has claimed millions of lives worldwide. What started as a health crisis is now impacting every sector of the economy. Governments around the world have imposed lockdowns to control the spread of the virus. The widespread closure of schools and educational institutes in Pakistan started in February 2020 and to this day, schools have not completely reopened.

The pandemic has worsened the education crisis that Pakistan has been going through. Before the spread of Covid-19, 22.8 million children between the ages of 5-16 were out of school in Pakistan, out of which 60% were girls.[1] According to Human Development Report 2020, Pakistan ranked 154 out of 189 countries in Human Development Index (HDI), failing to improve in key educational indicators like gross enrolment ratio and spending on education in comparison to other countries. Pakistan's primary school dropout rate is the third-highest (22.7%) in the region, after only Bangladesh and Nepal[2].

Pakistan is expected to have the highest number of dropouts in the world due to Covid-19 (Geven & Hasan, 2020). This is a matter of utmost concern, especially when Pakistan has committed to providing free, compulsory, and quality primary and secondary education to all girls and boys by 2030, as a signatory of Sustainable Development Goal (SDG 4). In the light of the pandemic, new challenges have emerged that hinder progress in meeting this Goal. This chapter focuses on comparing the government priority areas set in the Pakistan Economic Survey of 2019-20 for the education sector with the ground realities. The issues such as reduced incomes leading to higher drop-outs, lack of access to basic infrastructure for online education, and the resultant loss in learning, and decline in returns to education are discussed in the following sections.

GOVERNMENT'S AGENDA AND GROUND REALITIES

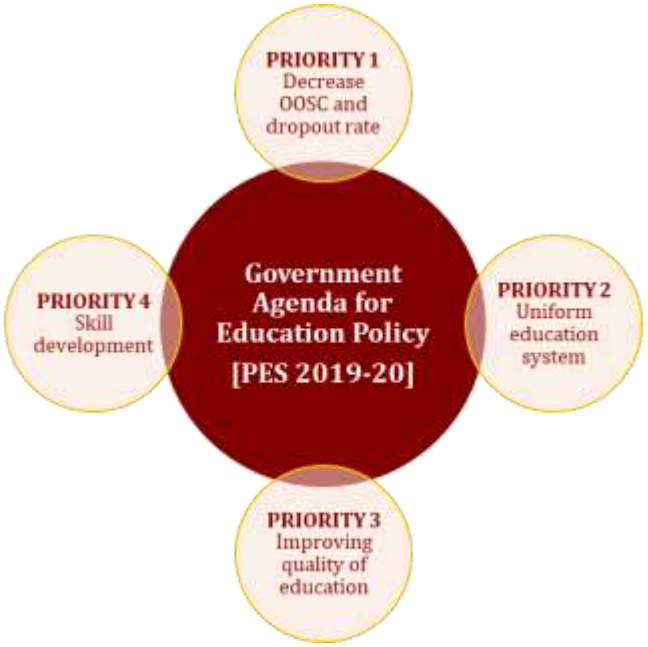
The government's agenda for education as presented in the Pakistan Economic Survey of 2019-20 revolves around four priority areas. These areas are summarized in Figure 10.1. These priority areas are aimed at reducing out-of-school children, provision of uniform education to remove disparity and inequality, improving the quality of education by focusing

[1] Pakistan Education Statistics 2017-18.

[2] Pakistan Economic Survey (2019-20).

on teacher's training, and improving skills by increasing public-private partnerships with industry. The pandemic is expected to make things worse for the education sector of Pakistan. With the decrease in incomes, closure of schools, and shifting towards online education, all priority areas set in the policy are expected to be affected negatively.

Figure 10.1: Government Agenda for Education Policy (Pakistan Economic Survey 2019-20)



Source: Pakistan Economic Survey 2020-21.

Performance against Priority 1: Decrease Out-of-School Children and Drop-out Rate

The closure of businesses and lay-offs as a result of lockdown has resulted in reduced incomes which is the main determinant of educational attainment and out-of-school children. According to the calculations based on the special survey for evaluating the socio-economic impact of Covid-19 on the wellbeing of people, conducted by the Pakistan Bureau of Statistics (PBS), people have moved to lower-income quintiles during lockdown (Table 10.1). Out of the total households (HHs) in the lowest income quintile, almost 50% of the households are those that have transitioned from higher income groups during the lockdown. Out of the total HHs in the highest income group and upper-middle-income group in the surveyed sample, around 25% HHs have transitioned towards the lower-income groups compared to their income quintile before the lockdown. This clearly shows the reduced incomes during the peak lockdown period of 2020.

Table 10.1: Transition between Income Quintiles from Before-lockdown Period to During-lockdown Period

Income quintile Before Lockdown	Income quintile During Lockdown					Total
	lower	lower-middle	middle	upper-middle	upper	
lower	64.11	35.89	0	0	0	100
lower-middle	18.54	69.07	7.81	4.59	0	100
middle	19.98	19.25	16.32	43.33	1.13	100
upper-middle	15.63	1.99	7.4	60.41	14.58	100
upper	11.84	1.49	0.65	10.55	75.46	100

If we look at the income group transition between before- and after-lockdown phases (Table 10.2), when there were some signs of business recovery and government-run income

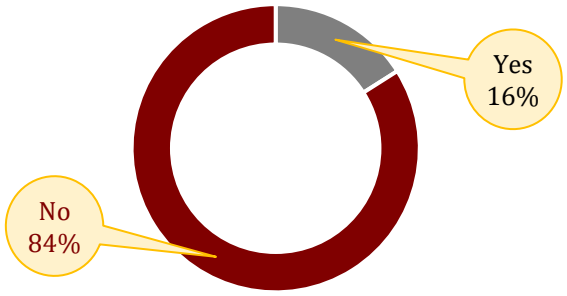
transfer programs were in place, 8% of lower-middle before lockdown has still slipped towards lowest income group after the lockdown. Similarly, 10% of the middle-income group, 8% of the upper-middle-income group, and 10% of the highest income group households have regressed towards lower-income groups.

Table 10.2: Transition between Income Quintiles from Before-lockdown Period to After-lockdown Period

Income quintile Before Lockdown	Income quintile After Lockdown					Total
	lower	lower-middle	middle	upper-middle	upper	
lower	76.6	19.96	1.82	1.58	0	100
lower-middle	8.12	67.67	23.13	0.94	0.13	100
middle	2.87	7.74	63.47	25.73	0.19	100
upper-middle	1.97	1.57	4.78	86.48	5.2	100
upper	0.94	0	1.65	7.58	89.83	100

This reduction in income has affected the dropout rate and the proportion of those who have dropped out of school due to the non-availability of the monthly fee is 16% of the total sample (Figure 10.2). This means that due to a drop in incomes, households find it hard to finance education, and thus the drop-out rate has increased during the Covid-19 crisis in Pakistan.

Figure 10.2: Discontinuation of education of children in a HH due to non-availability of monthly fee



Performance against Priority 2: Uniform Education System

Government representatives are very vocal about bringing a uniform curriculum for different education systems. However, due to the Covid-19 crisis, the worst-hit area of education is the uniformity of education within different systems of education at all levels. As the lockdown was announced in March 2020, educational institutions were asked to go online and continue the service delivery. This was announced without much preparation as there was a dearth of infrastructure at that time to ensure smooth and uniform service delivery. During the lockdown phase of 2020, almost 73% of total urban households in the sample reported no internet access. The situation is worse in Balochistan's urban areas, where only around 10% of the households have internet connections.

The situation is worse in rural areas where the households with no internet connection are around 86% of the total rural sample. Consider the situation where even the higher educational institutions have been closed and students are asked to move back to their

native areas to continue their classes online. Smooth and uniform education delivery cannot be ensured in the absence of basic infrastructure, like the internet connection. This would create a further imbalance in the already unequal education system.

Figure 10.3: Internet Connections Across **Urban** Households – Province-wise

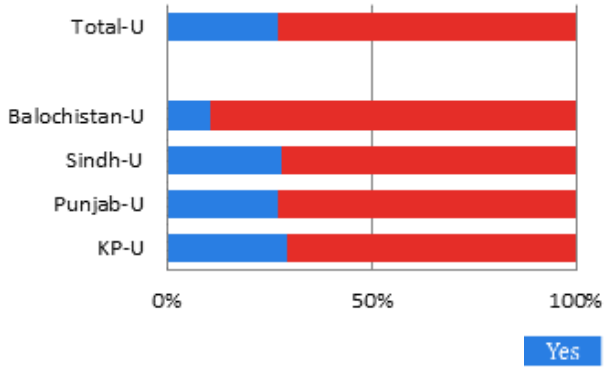
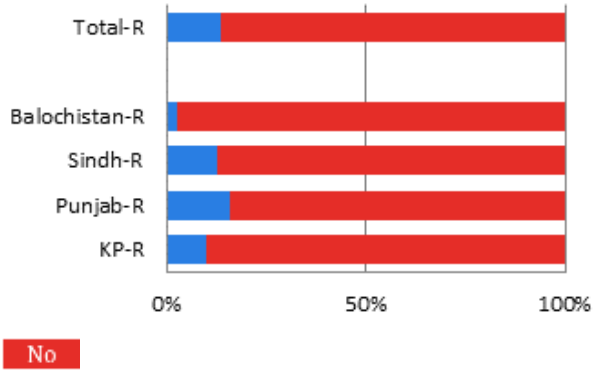


Figure 10.4: Internet Connections Across **Rural** Households – Province-wise



A similar picture can be seen in the ownership of laptops/computers in Pakistan. Only 11% of households own laptops or computers in Pakistan as reported in the special survey during the 2020 lockdown. The situation gets worse when we look at the rural-urban divide in this regard. Even in urban areas, laptop/computer ownership is just 12.3% while in rural areas, only 5% of households own laptops or computers.

Figure 10.5: Computer/Laptop Ownership in Pakistan

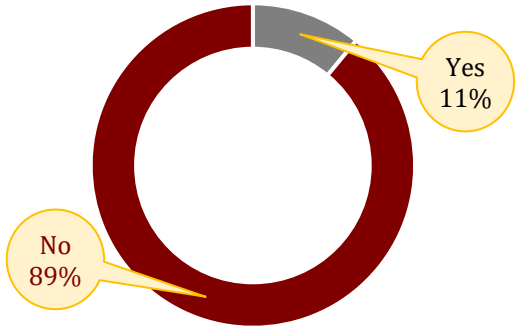


Figure 10.6: Computer/Laptop Ownership in **Urban** Households – Province-wise

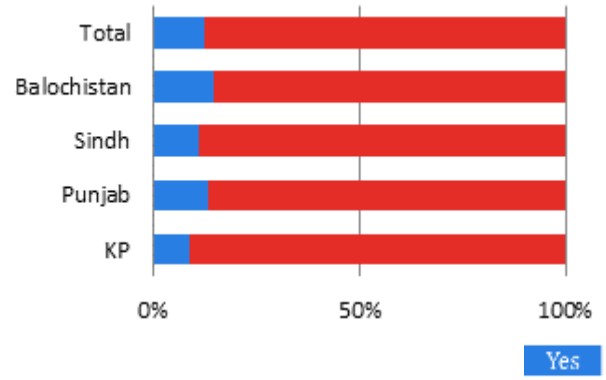
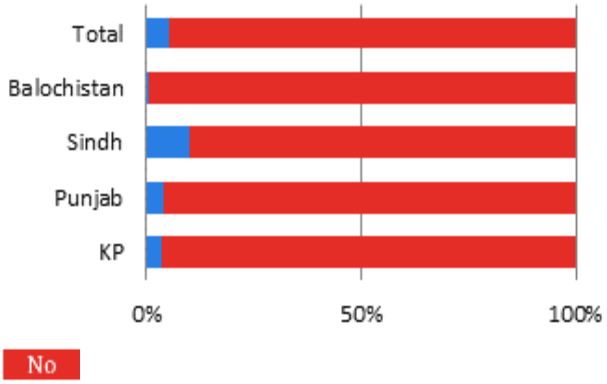
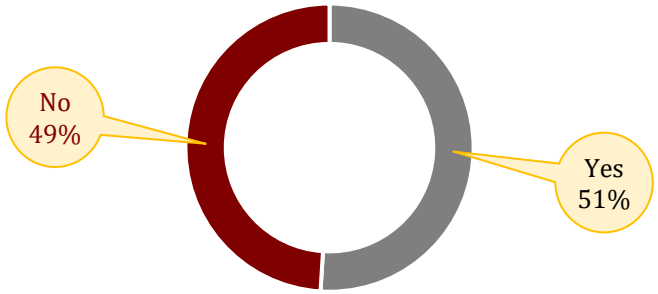


Figure 10.7: Computer/Laptop Ownership in **Rural** Households – Province-wise



The government has tried to make access to education easier by starting Pakistan's first educational television channel "*TeleSchool*" with a slogan of '*education at home'*. The main objective of this initiative is to mitigate the learning losses due to the Covid-19 crisis and the subsequent closure of educational institutions.

Figure 10.8: Television Ownership at Households Level



Any household that has access to television can have access to this initiative. If we look at the distribution of television ownership at the household level, 49% of households are still left out due to the lack of television in their homes. In addition to that, Akmal et al. (2020), based on a survey of households with children enrolled in the Citizen Foundation Schools, conclude that 66% of households do not use technology at all. Moreover, in households with access to a TV and a mobile, only 47% are using technology for remote learning.

Figure 10.9: Distribution of Television Ownership across **Urban** Households – Province-wise

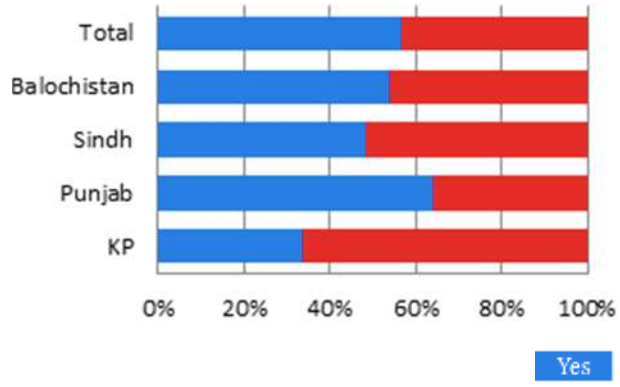
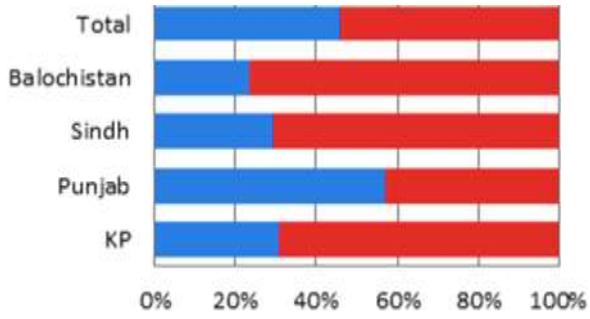


Figure 10.10: Distribution of Television Ownership across **Rural** Households – Province-wise



Performance against Priority 3: Improving Quality of Education

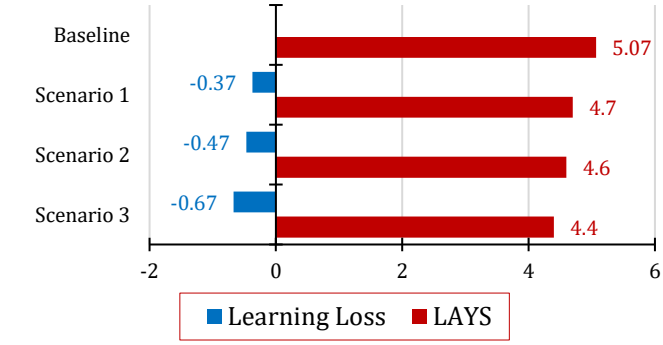
Quality of education is best judged by the learning gains and human capital acquisition. However, calamities can cause a lasting impact on the quality of education. Andrabi et al. (2020) provide evidence that in the aftermath of the 2005 earthquake in Pakistan, children aged between 3 and 15 years experienced lasting learning losses despite remedial efforts. A three-month closure of school accumulated to the loss of 1.5 years of learning, four years after the earthquake. Kaffenberger (2021) estimates that if learning in third grade is reduced by one-third, learning levels in tenth grade are lower by a full year. Moreover, if learning in third grade is reduced by 50% due to school closure and learning regression, learning losses in tenth grade accumulate to 1.5 years compared to if there was no pandemic.

Following Azevedo et al. (2020), we have simulated losses in Learning Adjusted Years of Schooling (LAYS) based on three scenarios. The duration of school closures, the support provided by the government of Pakistan to mitigate the losses in learning, such as *TeleSchool,* and the effectiveness of such measures help us to ascertain the decline in LAYS due to Covid-19. We have taken HCI 2020 as baseline values and in each scenario, assumptions are made about the duration of school closure and effectiveness of support provided by the government of Pakistan (Table 10.3).

Table 10.3: Parameters for scenarios[3]	
A. Learning gains or school productivity (in HLO points/year)	30
Scenario 1: Schools are closed for 4 out of 10 months and the support provided by the government is high (28%)	
B1. School closure (share of a school year)	40%
C1. Mitigation effectiveness (0 to 100%)	28%
D1. HLO decrease (points) = A*B1*(1-C1)	8.6
Scenario 2: Schools are closed for 6 out of 10 months and the support provided by the government is low (13%)	
B2. School closure (share of a school year)	60%
C2. Mitigation effectiveness (0 to 100%)	13%
D2. HLO decrease (points) = A*B2*(1-C2)	15.66
Scenario 3: Schools are closed for 8 out of 10 months and the support provided by the government is negligible (6%)	
B3. School closure (share of a school year)	80%
C3. Mitigation effectiveness (0 to 100%)	6%
D3. HLO decrease (points) = A*B3*(1-C3)	22.56

An average student in Pakistan spends 9.3 years in school, out of which only 5 years are spent in learning. Hence, 4.3 years of an average student are wasted in schools due to poor quality of education. Due to Covid-19, the situation is expected to worsen. The simulations suggest that LAYS could fall between 4.7 – 4.4. Results indicate that school closure due to Covid-19 will lead to a decline in LAYS between

Figure 10.11: Learning Loss under different scenarios



[3] Based on *Azevedo* (2020)

0.4 and 0.7 for an average student in Pakistan. These results are similar to that of Geven & Hasan (2020).

RETURNS TO EDUCATION

According to Human Capital theory (Becker, 1962), individuals invest in education because they expect a wide variety of returns from it, including monetary returns. By using a survey conducted by the PBS on the impact of Covid-19, this study estimates the decline in returns to education for three periods: pre-covid, during-lockdown, and post-lockdown. The first lockdown in Pakistan was imposed from April 2020 till July 2020. This study takes that duration as during-lockdown period. The pre-covid duration is defined as January-March 2020 and the post-lockdown period is defined as August-November 2020. The survey reveals that 35% of the working-age population was active in pre-covid duration and due to Covid-19 active population declined to 22%. At the household head level, the data reveals that around 19% of households have experienced an income shock during the lockdown period.

A Mincerian education function is estimated for each period to observe the changes in returns to different levels of education, including primary, middle, matric, intermediate, bachelor's, and higher (masters and PhDs.) for household heads (see Table A-10.1: Appendix). A general picture of decline in returns to education for all levels comes forth. The results indicate that during lockdown returns to primary education lost statistical significance. For the middle level of education, returns declined from 31% to 24% during-lockdown. After the lockdown ended, the returns rose to 27%. For the matriculation level, the returns declined in all three time periods, from 50% to 49% to 45%. Similarly, for the intermediate level, the returns declined from 47% to 45% during the lockdown and recovered slightly to 46% after the lockdown.

Wodon et al. (2018) find that during a crisis, return to higher education increases. The results affirm that finding; for bachelor's level of education, the returns increased during the lockdown and then returned to the pre-covid level. For the level of education above bachelors, there is an increase in returns during the lockdown, followed by a decline in the post-lockdown period.

In addition to that, the pandemic is threatening the strides made in uplifting the socio-economic status of women (B.Kattan et al., 2021). Literature suggests that returns to education for women are higher than that for men in Pakistan. Aslam (2007) reports that for men an additional year of schooling increases return between 7 and 11%, whereas for women the increase in return is between 13 and 18%. Montenegro & Patrinos (2014) report higher returns for women for primary, secondary, and tertiary levels of education. We also

find higher returns for women for matriculation, intermediate, bachelor's, and higher degrees in the pre-covid period. However, UNESCO predicts that 11 million girls might never return to school because of Covid-19. Moreover, evidence from the time of Ebola suggests that girls are at a higher risk than boys from losing out on learning due to school closures (Bandiera et al., 2019).

Azevedo et al. (2020) predict lower levels of learning, future earnings, and education due to Covid-19. Learning poverty, inequality, and economic hardships are expected to worsen, and women are likely to be more severely impacted.

CONCLUSION

The pandemic has pushed back millions from realizing gains from education; moreover, a decline in returns to education may shift investment away from human capital development by households and start a vicious cycle of low investment and low returns. Hence, urgent action is required to help the marginalized recover and continue progress.

It is needless to say that students are not meeting the learning objectives determined by the curriculum. Perhaps, it will be more fruitful to reassess the learning priorities given the challenges posed by the pandemic. The focus should be on foundation years since once a student can read and write, there is a lot they can accomplish on their own. In addition to that, policymakers need to realize that whenever schools reopen, they cannot operate with a business-as-usual approach. Findings related to learning losses necessitate remediation and reorientation of instructions to align with children's learning levels (Kaffenberger, 2021). Hence, it is necessary for the schools and the state to start planning for the inclusion of remediation programs in their curriculum posthaste.

Meanwhile, all efforts should be made to continue learning. Use of shift systems at schools, enhancing parent and community involvement with schools and teachers, sending regular and small tasks through SMS to parents are some ways to ensure continuity of learning. Education financing at federal and provincial levels needs to be protected and the share of expenditure on education should be maintained rather than curtailed.

Data Sources

1. The Learning-Adjusted Years of Schooling (LAYS), Harmonized Learning Outcome (HLO), and Expected Years of Schooling (EYS) from the World Bank's Human Capital Index (HCI) database released in 2020.
2. Special Survey for Evaluating Socio-economic Impact of Covid-19 on Wellbeing of People conducted by Pakistan Bureau of Statistics (PBS).

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APPENDIX

Table A-10.1: OLS results

Variables	(Pre-covid) Ln(wage)	(During-lockdown) Ln(wage)	(After lockdown) Ln(wage)
Female	-0.208*	-0.0579	-0.232**
	(0.114)	(0.175)	(0.116)
Primary	0.165***	0.0825	0.163**
	(0.0594)	(0.0780)	(0.0668)
Middle	0.312***	0.248**	0.276***
	(0.0661)	(0.110)	(0.0636)
Matric	0.502***	0.490***	0.451***
	(0.0547)	(0.0913)	(0.0602)
Intermediate	0.473***	0.457***	0.461***
	(0.0962)	(0.137)	(0.104)
Bachelors	0.809***	0.824***	0.809***
	(0.108)	(0.135)	(0.114)
Higher	1.056***	1.117***	0.976***
	(0.116)	(0.194)	(0.152)
Punjab	0.103	0.221**	0.107
	(0.0676)	(0.104)	(0.0672)
Sindh	-0.210***	-0.295***	-0.127*
	(0.0682)	(0.101)	(0.0694)
Baluchistan	0.260***	0.275**	0.239***
	(0.0827)	(0.138)	(0.0859)
Professionals	-0.121	-0.0654	-0.139
	(0.172)	(0.233)	(0.197)
Technicians	-0.148	0.0118	-0.0839
	(0.167)	(0.182)	(0.176)
Clerical	-0.320**	-0.329*	-0.0949
	(0.154)	(0.193)	(0.165)
Service and sales	-0.346**	-0.392**	-0.276*
	(0.150)	(0.170)	(0.160)
Skilled agriculture	-0.305*	-0.265	-0.109
	(0.170)	(0.197)	(0.178)
Crafts	-0.487***	-0.528**	-0.456***
	(0.167)	(0.221)	(0.175)
Plant	-0.277	-0.264	-0.154
	(0.172)	(0.208)	(0.182)
Elementary	-0.400***	-0.342*	-0.342**
	(0.152)	(0.180)	(0.164)
Mining	0.347*	0.631***	0.400
	(0.186)	(0.152)	(0.298)
Manufacturing	0.291***	0.284**	0.274***
	(0.0767)	(0.143)	(0.0795)
Energy	0.141	-0.0712	0.235
	(0.186)	(0.194)	(0.264)
Water	0.302	0.322	0.313
	(0.187)	(0.201)	(0.237)

Table A-10.1: OLS results

Variables	(Pre-covid) Ln(wage)	(During-lockdown) Ln(wage)	(After lockdown) Ln(wage)
Construction	0.264***	0.249*	0.286***
	(0.0764)	(0.151)	(0.0793)
Wholesale Vehicles	0.255***	0.317***	0.227**
	(0.0893)	(0.116)	(0.0979)
Transport	0.120	-0.0259	0.0208
	(0.0944)	(0.113)	(0.105)
Accommodation and Food	0.259**	0.298*	0.312***
	(0.102)	(0.166)	(0.107)
Info	0.413***	0.482**	0.433***
	(0.131)	(0.207)	(0.145)
Financial	0.456***	0.293	0.483***
	(0.127)	(0.278)	(0.173)
Real Estate	0.572***	1.369***	0.667***
	(0.189)	(0.452)	(0.219)
Professional	0.525***	0.789***	0.588*
	(0.194)	(0.205)	(0.316)
Admin	0.342***	0.333*	0.315**
	(0.118)	(0.171)	(0.125)
Public admin	0.476***	0.474***	0.490***
	(0.107)	(0.140)	(0.157)
Education	0.0989	0.326	0.145
	(0.162)	(0.210)	(0.193)
Health and social work	0.366***	0.547***	0.514***
	(0.114)	(0.124)	(0.125)
Arts	0.304***	0.252**	0.378***
	(0.106)	(0.117)	(0.104)
Other service	0.174*	0.207*	0.153
	(0.0998)	(0.119)	(0.101)
Activities of HHs	-0.0286	-0.0209	-0.166
	(0.136)	(0.165)	(0.129)
Urban	0.225***	0.196***	0.217***
	(0.0388)	(0.0600)	(0.0434)
Married	0.0445	0.158	0.00153
	(0.0792)	(0.123)	(0.0754)
Age	-0.000531	0.00729	-0.000342
	(0.00819)	(0.0121)	(0.00868)
Age2	6.39e-05	-1.49e-05	5.70e-05
	(8.53e-05)	(0.000123)	(9.12e-05)
Constant	9.402***	9.053***	9.316***
	(0.257)	(0.353)	(0.270)
Observations	1,815	677	1,693
R-squared	0.342	0.483	0.299

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

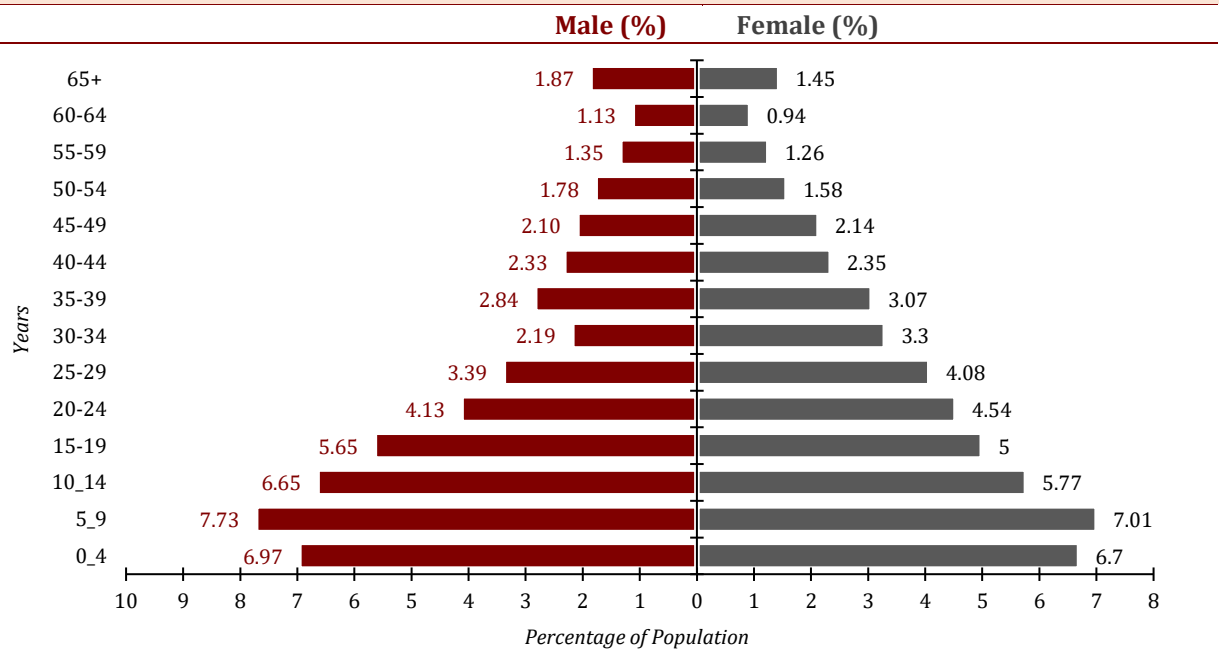
Youth Bulge and Opportunities

Arooj Waheed Dar

The foundation of progress in any country is the development of its youth. This includes development across all dimensions, i.e., education, health and well-being, employment, political participation, and civic participation. Historically, very little emphasis has been placed on youth development in Pakistan. Governments have focused primarily on developing certain sectors with little to no emphasis on youth advancement within those sectors. In 2018, the share of youth not in employment, education, or training was estimated at 30.96%.[1] In 2017, the Youth Development Index (YDI) for Pakistan was estimated at 0.47, ranging between only 0.343 and 0.63 depending upon the region[2]. This index was the second-lowest in the South-Asian region, only higher than Afghanistan's YDI (0.44).[3]

In general, the youth population of a country is defined as the number of persons aged between 15-24 years. Although Pakistan defines its youth as population aged between 15-29 years, for the purpose of this study, we will consider the global definition of youth, i.e., 15-24 years, to make our analysis more comparable and relevant.

Figure 11.1: Population Pyramid-Pakistan 2018



Source: Pakistan Bureau of Statistics (2017-18)

[1] World Bank

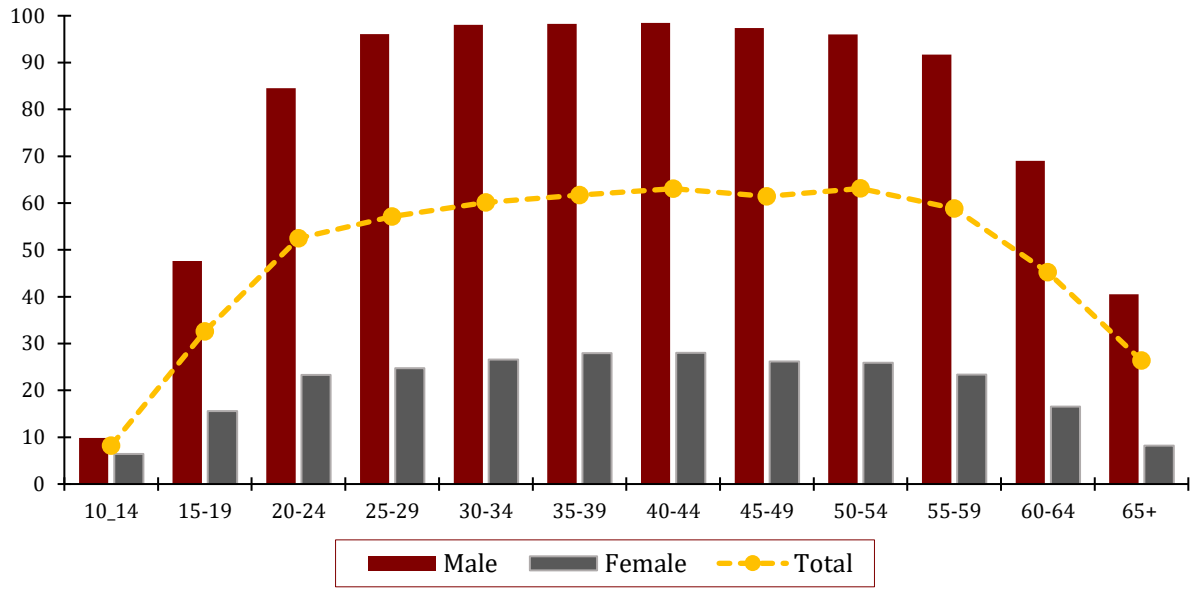
[2] Pakistan National Human Development Report 2017, UNDP

[3] Global Youth Development Index and Report 2016, Commonwealth

A review of Pakistan's population demonstrates that a significant share of the population comprises youth. Of all the individuals above the age of 10, a whopping 31.73% of the population lies between 10-24 years of age, with 19.31% population between the ages of 15-24. This high share of children and youth can be expected to drive increases in the working-age population in the coming 1-5 years. Efficient engagement of our youth in productive activities can accelerate growth and help improve living standards in the coming years once this youth becomes a part of our working-age population. However, failure to provide productive opportunities to these individuals can lead to social and civil unrest, frustration, violence, and armed conflict. During 2010-15 when Pakistan's YDI deteriorated by a staggering 18%, the country also witnessed a significant rise in civil unrest and conflict. During this time, Pakistan scored lower than the South-Asian average across all domains of youth development, except health and well-being.[4]

The population pyramid also shows that around 67% of the population is under 30, which means that Pakistan's population can generally be categorized as "young", and it will continue to remain young for the foreseeable future. Therefore, there is a need for the government to make youth development a primary policy focus for years to come.

Figure 11.2: Labor Force Participation Rates



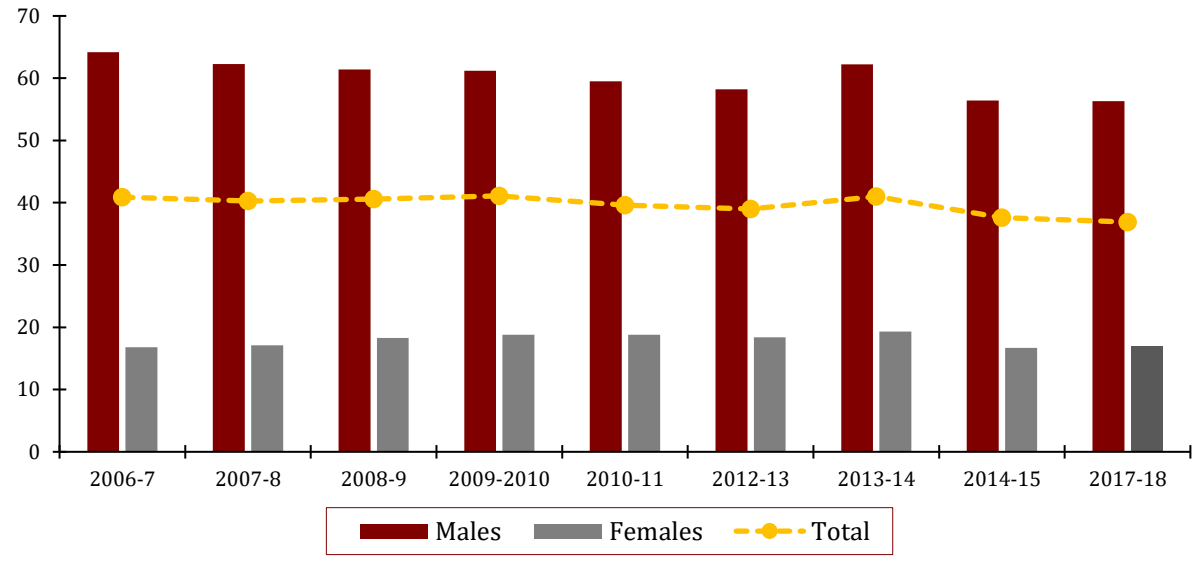
Source: Labor Force Survey (2017-18)

Figure 11.2 shows that the labor force participation rates tend to go up as individuals move from lower age brackets to higher age brackets. For males, the biggest jumps in labor force participation are recorded when individuals move from the 10-14 years age bracket to 15-

[4] Global Youth Development Index and Report 2016, Commonwealth

19 years, and then from 15-19 to 20-24 years of age. In 2017-18, the highest level of unemployment (11.56%) was recorded for individuals in the 20-24 year age bracket, which indicates that employment opportunities are insufficient to meet the demand for jobs.[5] Given the population dynamics, it can reasonably be concluded that in the coming years, we can expect a huge influx of young individuals joining the workforce as individuals from the 10-14 years age bracket move to the 15-19 years bracket, and individuals from the 15-19 years age bracket move to the 20-24 years age bracket, where labor force participation almost doubles, and yet the unemployment rate is the highest.

Figure 11.3: Employment-to-Population Ratios for Ages 15 – 24



Source: Labor Force Survey (2017-18)

Figure 11.3 shows that over time, the employment-to-population ratio has largely remained unchanged at around 40%. Between 2014-15 and 2017-18, the ratio fell down from 37.6% to 36.9%, indicating a 0.7% fall in the employment-to-population ratio.[6] This shows that the employment opportunities are barely keeping up with the youth population growth. Despite the youth-targeted policies of the previous government, including National Youth Program and Loans for Small and Medium Enterprises, the opportunities created for youth remained insufficient to improve the level of youth employment.

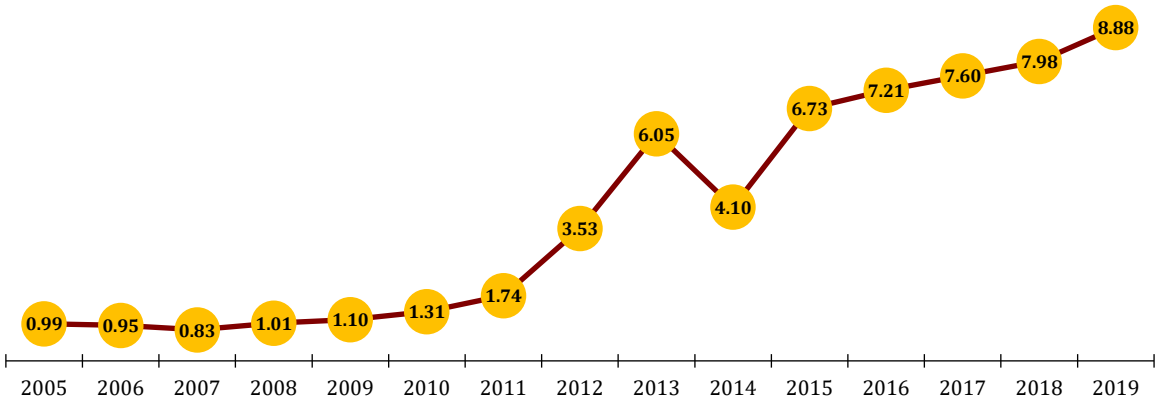
An analysis of the youth unemployment rates over the years highlights the need for immediate government intervention in terms of creating productive engagement opportunities for the youth. This upward trend in the youth unemployment rate means that a significant share of the young population looking for work is unable to find employment.

[5] Labor Force Survey 2017-18

[6] Source: Labor Force Survey Report, 2017-18

In 2019, the youth unemployment rate for Pakistan was estimated at 8.88%, a 0.9% increase from 2018.[7]

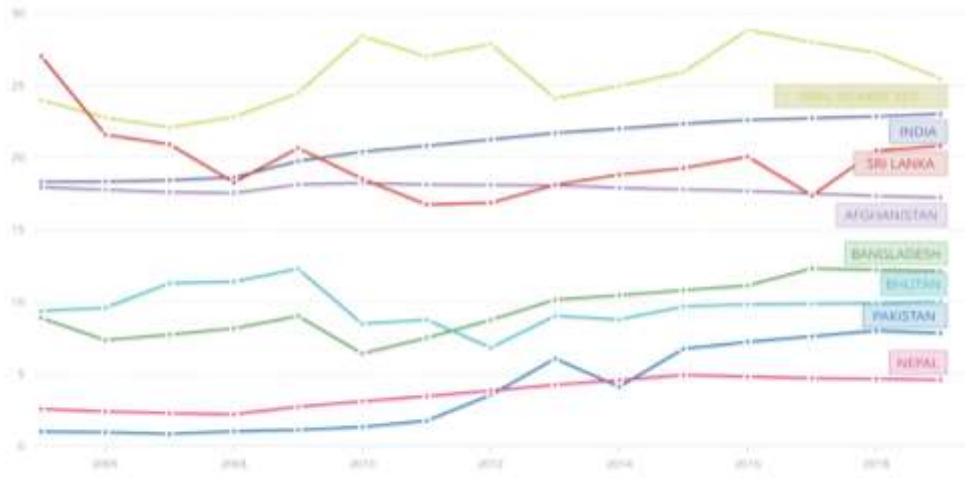
Figure 11.4: Youth Unemployment Rates



Source: World Bank, ILO

In the South Asian region, Pakistan fares well in terms of youth unemployment. For the past many years, Pakistan's youth unemployment rate has remained consistently low compared to other countries in the same region. In 2019, it was the second-lowest in the South Asian region, only higher than that of Nepal. However, the upward trend in recent years is quite worrisome and needs immediate attention. Also, the majority of the youth is employed in the informal sector where jobs are insecure and low emphasis is placed on youth advancement or labor welfare.

Figure 11.5: Youth Unemployment Rates (%) in South Asian Countries



Source: World Bank

[7] International Labour Organization (ILO)

The National Human Development Report 2017 by UNDP brought particular attention to the youth potential in Pakistan. The report highlighted the need for the government to focus on developing economic, social, and political opportunities for the youth to prepare them for future leadership roles. It emphasized that the unequivocal potential and strength of the youth lay not only in its demographic size but also in its innovative approach.

Figure 11.6: Youth Unemployment Rates (%)

Country	2019
Iran	25.46
India	23.01
Sri Lanka	20.79
Afghanistan	17.22
Bangladesh	12.13
Bhutan	10.03
Pakistan	**8.88**
Nepal	4.57

In October 2019, the government introduced the Kamyab Jawan Scheme, which promised to cater to youth education, employment, and engagement. Thus far, only 2 out of the 6 promised projects have been initiated that include the Youth Entrepreneurship Scheme (YES) and Hunarmand Pakistan.

The first series of loans under the YES was rolled out in March 2020. A total of 6,209 applications with loans amounting up to Rs3,294 million were approved in this first round. To date, a total of around Rs18 billion have been approved in loans.[8] The impact of these loans is yet to be evaluated. The effectiveness of the scheme is threatened by the onset of Covid-19, which hit Pakistan about the same time as that of the first round of this scheme. In its recent report on youth initiatives, the government mentioned that it had adapted the scheme to the circumstances presented under Covid-19; however, there is no clear indication as to what these measures exactly are.[9]

Keeping in view the evolving nature of the job market, there is a need for constant education and training to keep up with advancements in every field. Therefore, it is essential for the youth to immerse themselves in educational and training programs to stay up to date on recent developments. In terms of youth education, Pakistan ranks amongst the lowest (only out-ranking Afghanistan) in the South-Asian region. The female youth literacy rate stands at only 65.5% compared to the male youth literacy rate of 79.8%. Table 11.1 compares Pakistan's youth literacy rates with other South Asian countries.

In addition to low youth literacy rates, there is a huge disparity in the quality of education that is provided in schools across Pakistan. This disparity is evident not only across urban and rural areas but also across provinces and cities. Provision of standardized quality education is vital to ensure any significant improvement in the development of youth.

[8] State Bank of Pakistan

[9] https://www.pc.gov.pk/uploads/youth/Youth_Initiatives.pdf

Table 11.1: Comparison of Pakistan's Youth Literacy Rates with Other South Asian Countries

Country	Youth Literacy Rate (Females)	Youth Literacy Rate (Males)
Maldives	99.4	99.1
Sri Lanka	99.1	98.5
Iran	97.9	98.3
Bangladesh	94.5	91.5
Bhutan	84.5	90.4
India	81.8	90.0
Nepal	80.2	89.9
Pakistan	**65.5**	**79.8**
Afghanistan	32.1	61.9

Source: Human Development Report 2019, UNDP

To address youth literacy, the present government introduced the 'Hunarmand Pakistan' project which is aimed at skill development. Under the program, the government is working to develop accredited institutes that will provide specialized technical education to young individuals with a standardized curriculum across Pakistan. The first round of the program began in January 2020, and the government's report on youth initiatives highlighted the measures taken by the government to continue the project in the wake of Covid-19, which included switching to online classes. This program, in conjunction with the other projects headed by the National Vocational and Technical Training Commission, is expected to bring improvement in the skill level of young individuals entering the labor market.[10] The efficacy of the program can only be evaluated once the 20-month long program comes to an end later this year.

Another important aspect of youth development is the level of youth involvement in civic duties and politics. During 2010-15, the dive in Pakistan's YDI was largely a result of a decline in civic participation, which fell by 58%, and a decline in political participation that declined by 69% in the same period.[11] Under the Prime Minister's Kamyab Jawan Programme, the government announced the formation of the National Youth Council to improve political participation and the Green Youth Movement to improve civic participation. Both the projects remain dormant to date. So far, the government has only done enough to form a Youth Council which has little to no authority or power.

In conclusion, there is a need for the government to introduce and implement policies with a special focus on youth development in years to come so it can successfully channel the youth's potential. In the absence of productive opportunities, the youth can only be expected to spiral into negativity, thereby turning into a liability for the country. The Prime Minister's Kamyab Jawan Programme is undoubtedly the need of the hour, but it feels too little, too late.

[10] https://www.pc.gov.pk/uploads/youth/Youth_Initiatives.pdf

[11] Global Youth Development Index and Report 2016, Commonwealth

Social Protection

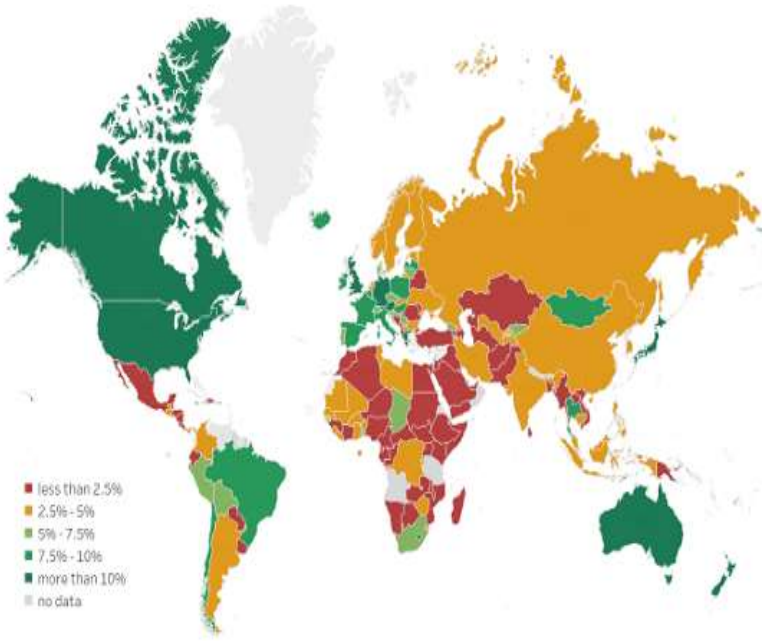
Sarah Nizamani

CRISIS AROUND THE GLOBE

As the countries around the world faced lockdowns and isolations due to the Covid-19, it brought acceptance for wild experiments in social spending. Examples include unemployment support packages, conditional and unconditional cash transfers, paid sick leaves, food programs, unemployment insurance and more. The World Bank database[1] shows that from March 2020 to May 2021, 3,333 social protection measures were implemented in 222 countries and territories.[2]

The database also shows that, on average, countries around the world spent 2 percent of their GDP on social protection. With rich countries having better fiscal space, Sweden spent 16 percent of GDP, Poland 10 percent, Slovak Republic 9 percent, United States 9 percent and Aruba 6 percent. However, among the lower-middle-income countries, Pakistan was praised for spending 1.2 percent of its GDP on social protection. Globally, Pakistan was ranked fourth in terms of the number of people covered and third in terms of percentage of population covered among those that covered 100 million people.[3]

Figure 12.1: Additional Spending and Forgone Revenue in Response to the Covid-19 Pandemic



Source: Fiscal Monitor Database of Country Fiscal Measures in Response to the COVID-19 Pandemic

[1] Social Protection and Jobs Responses to COVID-19: A Real-Time Review of Country Measures

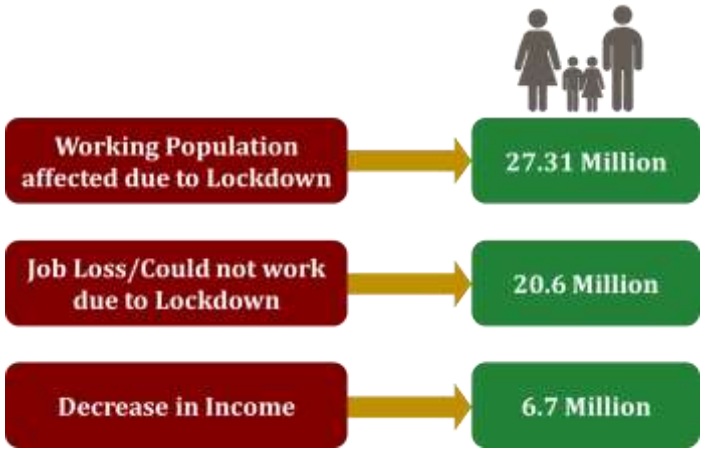
[2] Ibid.

[3] Ibid.

IMPACT OF COVID ON PAKISTAN

The Pakistan Bureau of Statistics (PBS) published a special report to measure the socio-economic impact of Covid in Pakistan. The report revealed that before the widespread pandemic, 35 percent of 10 years and older population in Pakistan (55.74 million) was working; however, the lockdowns caused this number to go down to 35.04 million (22 percent), with Sindh being the most affected province, followed by Punjab and Balochistan. Altogether, 37 percent of the working population (20.63 million) lost their jobs or could not work due to the pandemic, while 12 percent reported a reduction in income. Occupation wise, the workforce engaged in elementary occupations including agriculture, hotel and restaurant workers, mining, hawkers, vendors were the worst affected, with 36 percent lost their job or could not work during the Covid-19 period.[4] Due to reduced economic activity, the virus impacted the incomes of the household throughout the country. 53 percent of the households reported reduced income with 64 percent households in Khyber Pakhtunkhuwa, 59 percent in Sindh, 51 percent in Balochistan and 49 percent in Punjab. The survey revealed that 10 percent of the people in the country faced severe food insecurity and 30 percent faced moderate food insecurity.

Figure 12.2: Affected Population in Million



Source: PBS

Government's Response

The Covid-19 assistance reached the needy in the country mainly through three main channels: the government sector, private sector, and NGOs. While the government's programs were primarily based on cash transfers to the households through *Ehsas* and BISP payments, the private sector and NGOs were involved in the in-Kind transfers. In total, 33 percent of the households in the country received assistance where 13.5 percent assistance came from the government (the incentives given by the government in the form of subsidies in food items, bills, loans, etc. are not included in this), 12.5 percent from the private sector and 2 percent from the NGOs. Around 5.5 percent of the households in the country received assistance from both government and private sectors. The State Bank also reduced policy

[4] Special survey Evaluating Socio-Economic Impact of Covid-19 on Wellbeing of People, PBS 2020

rates, facilitated new investment policies, loan extension services and an employment scheme.[5]

THE WAY FORWARD

While the government of Pakistan has done a remarkable job in enhancing social protection considering the pandemic, there is room for improvement for the wellbeing of the public. This section suggests measurable and achievable goals for the authorities to follow before the next crisis hits. Authorities need to work out systems that cushion the citizens against income and unemployment shocks without disturbing the incentives to work. It is also essential for the federal government to build a system to trace and track the outcomes of the provincial social protection programs to attain social justice throughout the country.

Doubling the BISP/Ehsaas Program

With assistance from the IMF to help stabilize the economy, the burden of strict conditions extended by the fund has fallen on ordinary people of the country. Fortunately, the focus of authorities has shifted from stabilization to growth. However, the poverty in the world, including in Pakistan, has been fueled by the active pandemic. The literature on cash transfers has proven the success of transfers from preventing people from falling below the poverty line. It also proves that the marginal propensity to consume is higher for poorer households than the rich ones. With the increase of BISP/Ehsaas transfers, the government can help achieve many objectives of strengthening the social safety nets and help build resilience against external shocks such as income and health losses.

Gender Responsive Budgeting

The concept of "Womenomics" was launched by Japan's Prime Minister, Shinzo Abe, in 2013, which signified the role of women in stimulating economic growth by actively joining the labour market. Women in Pakistan are half of the country's population but only 20 percent of its labour force.[6] Similarly, only 7 percent of women hold a bank account in the country.[7] The majority of the women work in the agriculture sector as unpaid family workers. Several countries have adopted gender-responsive budgeting to ensure and promote gender equity and opportunities. To combat the chronic malice of unequal opportunities, Pakistan needs to do the same. The aim of gender-responsive budgeting should be to raise awareness on gender discrimination, quantify the policy impact for existing opportunities for women and level the field for both genders. A national agenda for promoting women in the workplace needs to be developed, which should also include workers in the informal labor market in the country.

[5] Countering Covid-19: Measures by State Bank of Pakistan

[6] Womenomics: Women powering the economy of Pakistan

[7] Women's inclusion

Wage Top-up for the Essential Workers

The pandemic has reminded the world of the importance of essential workers. Essential workers include workers who do not have the opportunity to perform their jobs from their homes. Unfortunately, they also happen to be ethnic minorities who are poorly paid.[8] The same can also be confirmed by the special report by the Pakistan Bureau of Statistics, which states that 36 percent of the elementary workers lost their jobs/could not work during the Covid-19 period. Considering the health risk and low incomes of the essential workers, it is an absolute necessity that a package including in-kind transfers and cash transfers be announced for these elementary workers.

Updated Social Security

The term social protection is often used interchangeably with social security. The two concepts are complementary and social security can be viewed as a part of social protection. Social security is characterized by protection of income, provision of health care services and allowances for childcare.[9] Social protection is broader and more applicable to developing countries. This is because a large chunk of the economy comprises the informal sector (71% labor in the informal sector in case of Pakistan), or the undeclared economy and the prevalence of absolute poverty is also significant. As such, the people working for the informal sector are not eligible for statutory government schemes as they are administered through registered companies. While Pakistan has done a great job on social protection, it runs low on social security as it did not introduce paid sick leaves, unemployment benefits or reduced work hours, as no regulation is applied to the informal sector. With the changing dynamics of the state, it is important to update and include social security for a more flexible and efficient labor market and state.

[8] Sewer Cleaners Wanted in Pakistan: Only Christians Need Apply.

[9] http://www.researchcollective.org/Documents/Social_Protection_Way_Forward.pdf

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