ECONOMIC ANALYSIS

A. Introduction

1. The analytical framework for determining the efficient and sustainable use of resources is based on publications by the Asian Development Bank (ADB), including its Guidelines for the Economic Analysis of Projects (2017).

B. Economic Analysis of ADB's Program Loan

2. The economic analysis reveals that exports in Pakistan suffer for the following reasons: (i) high cost of raw materials; (ii) inadequate access to finance, especially for working capital; (iii) poor trade facilitation; and (iv) high tax burden on entrepreneurs.

3. Consequently, Pakistan's export performance lags that of South Asian and Southeast Asian comparator countries, some of which are relatively new entrants to the textile market, such as Bangladesh, Cambodia, Sri Lanka, and Viet Nam. During 1990–2016, Pakistan's export growth averaged 5.6% per annum, compared with 8.3% in Sri Lanka, 11.8% in Bangladesh, 26.7% in Viet Nam, and 27.1% in Cambodia. Pakistan's ratio of exports to gross domestic product (GDP)—8.2% in 2017—is by far the lowest among its competitor countries and lower than the regional average of 17.7%. Foreign direct investment in Pakistan, including its export industries, remained relatively low (0.92% of GDP in 2017) even as the government stepped up infrastructure spending. The proposed program will help Pakistan improve its export competitiveness.

4. **The proposed program.** The effect of the reforms supported by the program will be greater competitiveness of Pakistan's exports. This is expected to be achieved by:

(i) **Tax and tariff rationalization**. The principal objective is to promote a business environment that boosts export competitiveness and encourages private investment. The abolition of several regulatory duties and customs duties on raw materials and intermediate inputs will help increase price competitiveness. Under advance actions as a prerequisite for subprogram 1, the government (i) approved the National Tariff Policy, (ii) rationalized the tariff rates into a maximum of four slabs with a peak rate of 20%, (iii) abolished customs duties and regulatory duties on several raw materials and intermediate inputs, (iv) reduced customs duties and regulatory duties on some other raw materials, and (v) reduced the corporate income tax rate to 29% for fiscal year (FY) 2019 (ended 30 June 2019) to facilitate corporate investment and trade. Under subprogram 2, the government will (i) remove the condition of availability of locally manufactured goods for exempted capital goods, and (ii) exempt several other raw material and intermediate inputs from customs duties. Moreover, the goods and services tax on diesel will be reduced and the electricity surcharge for industrial consumers will be removed. The corporate tax rate will be further reduced to 28% for FY2020 and to 27% for FY2021. The dividend tax will be reduced to 10% under subprogram 2.

(ii) **Institutional strengthening**. The rationalization of taxes, duties, and tariffs cannot improve Pakistan's exports unless the trade-relevant legal and institutional structures are strengthened at the same time. Three important areas are targeted under the proposed loan: (i) operationalizing the National Single Window (NSW), (ii) operationalizing the Exim Bank of Pakistan (EXIMBP), and (iii) strengthening the system of certification and accreditation. Under subprogram 1, the government (i) prepared the draft e-commerce act; (ii) approved the operational rules for the Pakistan National Accreditation Council (PNAC): (iii) notified a high-level steering committee for the NSW;[1] (iv) approved a road map to operationalize the NSW; (v) prepared the legal framework for the NSW for interdepartmental consultations, while PNAC published its long-term plans, policies, and schemes—including specific plans for women entrepreneurs in the area of gem and jewelry certification; and (vi) approved amendments to the Refinance and Credit Guarantee Scheme for Women Entrepreneurs in Underserved Areas that will expand access to finance for women entrepreneurs. These reforms will continue will logically sequenced policy actions proposed for subprogram 2. Under subprogram 2, the government will (i) submit the e-commerce act to the National Assembly for approval; (ii) amend the Pakistan National Accreditation Act to (a) reconstitute the PNAC board of directors to include professionals with sector expertise and scientific knowledge; restrict ex-officio members to one-third of total board members; ensure at least one woman on the board; and set a 3-year fixed term for each board member (other than ex officio members); and (b) empower the board of governors to recommend three candidates to the federal government for appointment as PNAC director general and/or chief executive officer; (iii) submit the compliance report on all the activities targeted to be completed by 2019 in the NSW road map; (iv) submit the legal framework for NSW operations to the National Assembly for legislation; (v) finalize the transfer of modules and activities from the web-based commercial operations platform to the NSW; and (vi) approve the governance structure, business plan, and legal framework for the EXIMBP.

C. Development Financing Requirement

5. Based on detailed discussions with the government officials, it was estimated that the proposed program will have major cost implications: (i) an estimated loss of revenue during FY2019–FY2021 from the tax and tariff rationalization, and (ii) funding needs to strengthen trade-relevant institutions such as the NSW and EXIMBP (Table 1).

Table 1: Cost of Reforms
($ million)

Loss of revenue	2,042
Funds needed for institutional strengthening	100
Total	2,142

Source: Asian Development Bank estimates.

D. Economic Benefits

6. **Benefits of high export growth**. The key direct and indirect benefits considered are divided into four groups:

(i) Given low but statistically significant price elasticity of export demand (as shown in the box at the end of this document), the rationalization of tariffs, regulatory

[1] The single-window system in trade allows parties to lodge standardized information and documents with a single-entry point to fulfill all import, export, and transit-related regulatory requirements. After introducing the single window in Singapore, the time needed to process trade documents fell from 4 days to 15 minutes. The total savings for the business community from the use of uTradeHub, a paperless trading system in the Republic of Korea, are estimated at $1.82 billion. Savings accrue from lower transmission costs by using e-documents; from greater productivity thanks to automated administration work; and from more efficient management, storage, and retrieval of information and documents thanks to information technology (https://unnext.unescap.org/sites/default/files/switajik-sangwon.pdf) (accessed 29 June 2010).

duties, and commodity taxes will improve Pakistan's export competitiveness. This in turn helps develop sound foreign exchange reserves and enables higher growth by creating demand for necessary domestically manufactured raw materials.

(ii) Higher foreign exchange reserves will also allow domestic output to increase, permitting the resulting increase in imports.

(iii) Several reforms related to trade facilitation, such as better access to finance, will ease the supply-side constraints and lead to trade diversification, catering to the group with higher income elasticity of demand;[2] and

(iv) Private investment will increase thanks to lower corporate tax rates. This will in turn lead to more growth, trade diversification, and employment opportunities.

7. **Do exports lead to growth?** To validate our assertion in para, 6, the Granger causality test was carried out between GDP growth (at constant prices) and the unit volume index of exports (UVM) using data for the period 1975–2016.[3] UVM data does not exist before 1980, so the UVM data between 1975 and 1979 was interpolated using the export growth at constant prices as reported in the national accounts data (old series with e base year 1980-81=100).

8. Both series (GDP and UVM) were converted into natural log to dampen variations. The result with a 1-year lag is as follows:

Table 2: Granger Causality Test

No. of Observations 42	F-Statistic	Probability
Null Hypothesis: Exports does not Granger Causes Growth	3.96	0.05

Source: Asian Development Bank estimates.

9. The results in Table 2 clearly reject the null hypothesis. In other words, exports do have statistically significant impact on growth. This result, however, was not tested after controlling for other exogenous variables, and the longer period of lags turns out to be supporting acceptance of the null hypothesis. This will require further statistical analysis.

10. **Program beneficiaries**. The beneficiaries of the proposed program will be the people of Pakistan who will directly benefit from the improved growth and employment opportunities. This in turn will help the government to create additional fiscal space. The other important economic benefit of the proposed program is that it promotes an economic model that facilitates the private sector.

11. **Government capacity.** The government's capacity to implement the proposed program is on the low side at the moment. The Finance Division, Federal Board of Revenue, PNAC, and EXIMBP will need support for the implementation of the programmatic approach.

12. **Economic risks.** Some of the perceived major economic risks are: (i) unavailability of the government's own resources for the proposed reforms; (ii) lack of private interest in the privatization drive; and (iii) poor fiscal headroom, which forces the government to continue the high tax burden on exporters.

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[2] For example, J. Felipe et al. 2009. Is Pakistan's Growth Rate Balance-of-Payments Constrained? Policies and Implications for Development of Growth*. ADB Economics Working paper series*. No. 160. Manila: ADB.

[3] Data source: World Development Indicators.

13. **Coordination of foreign aid.** The potential for conflict between the foreign aid agencies while executing and implementing the program is low because ADB's project team undertook the necessary review of donors' activities in Pakistan and briefed the key ones on the proposed program.

14. **Conditions attached to the loan.** All identified economic issues are adequately and appropriately included in the policy matrix.

Price Sensitivity of Pakistan's Exports

An export demand function, at the aggregate level, was estimated using data for 2000–2016 (Source: World Development Indicators) to assess price sensitivity of Pakistan's exports. The estimated equation is as follows;

Ln UVM = -3.64 - 0.27 Ln UVI + 0.26 D*Ln UVI+ 1.33 Ln GDP;
(-7.59) (-2.14) (3.88) (8.15)
R^2 = 0.93, R (bar square) = 0.91; D.W = 1.25; t- statistics are in parentheses.

Where,
UVM = unit volume index;
UVI = unit value index
D = 1 for 2008–2014 and zero otherwise
GDP = World GDP at constant prices

All variables are expressed in natural logarithm. It is worth mentioning that the fluctuations in UVI capture both domestic price fluctuations as well as the exchange rate fluctuations. The price elasticity turns out to be significant and negative. However, the price elasticity was less during the financial crisis period (2008–2014). One reason for this phenomenon is the way international trade is financed. About 40%–50% of trade finance contracts use "letters of credit" (LOCs). The importer requests its issuing bank to issue a LOC that guarantees payment for the imports. Using this LOC as collateral, the exporter obtains a working capital loan from its negotiating bank to process the order. However, the issuing bank is always exposed to some risks—most importantly, the insolvency risk of the applicant, i.e., the risk that the applicant runs insolvent before he is able to repay the LOC. The defaults in the interbank lending markets that occurred in 2008 may have made the banks excessively reluctant to issue LOCs, and this is likely to have had a significant impact on export demand, despite offering a price discount. The World Bank commissioned a survey on trade and trade finance developments in developing countries during the first quarter of 2009 to collect field information. In total, 425 firms and 78 banks were surveyed in 14 developing countries across five regions. The survey report summarizes the findings and discusses the type of policies that governments and international organizations put in place to mitigate the impact of the crisis. In sum, the survey findings confirm that the global financial crisis constrained trade finance for exporters and importers in developing countries. But the impact varied by firm size, sector activity, and the countries' integration into the global economy. Small and medium-sized enterprises were hurt in particular, and export diversification was made more difficult, especially in low-income countries (M. Malouche. 2009. Trade and Trade Finance Developments in 14 Developing Countries Post September 2008; A World Bank Survey. Policy Research working paper; no. WPS 5138. World Bank. https://openknowledge.worldbank.org/handle/10986/4329 License: CC BY 3.0 IGO).

Therefore, Pakistan's exports will benefit from low tariffs and duties on raw materials and intermediate inputs, including energy. Low domestic prices and the competitive exchange rate will help restore Pakistan's competitiveness in international trade.

One caveat of this empirical analysis is that unit root tests were not carried out for the dependent and the independent variables.

Source: ADB staff estimates.