

ECONOMIC AND FINANCIAL ANALYSIS

A. Introduction

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

B. Economic Analysis of ADB's Policy-Based Loan for Azerbaijan

2. Azerbaijan has been facing economic recession caused primarily by a sharp fall in hydrocarbon prices since mid-2014. Excessive reliance on hydrocarbon revenues for supporting the state budget has made the economy vulnerable to external shocks. The consolidated fiscal balance plunged from a surplus of 2.8% of gross domestic product (GDP) in 2014 to a deficit of 4.8% in 2015, while for 2016 the fiscal balance for the central government was balanced. However, without transfers from the sovereign wealth fund, the budget deficit amounted to 13.4% of GDP.¹ Gross domestic product growth fell from 2.8% in 2014 to 1.1% in 2015 and further down to -3.1% in 2016. The current account balance rapidly moved from a surplus to a deficit, putting substantial pressure on the manat. The Central Bank of Azerbaijan intervened to maintain the fixed exchange rate. This led to a heavy depletion of foreign exchange reserves and eventually the central bank devalued the manat twice in 2015 by 49.4%, from \$1 = AZN0.78 in February 2015 to \$1 = AZN1.55 in December 2015, and moved to a managed floating exchange rate regime. The currency devaluation had negative economic repercussions. Public confidence in the manat weakened, with a greater tendency to dollarize deposits. For the banks it resulted in sharp deterioration of asset quality and consequently the banks had to make larger provisions for loan losses, which affected their profitability and eroded their capitalization. Banks which failed to raise the capital infusions lost their licenses. As many as eleven commercial banks were closed in 2016.

3. Heavy dependence on the hydrocarbon subsector has also undermined the growth of the non-oil private sector in Azerbaijan. The capital-intensive nature of the hydrocarbon subsector offers limited options for employment. While agriculture does provide employment opportunities to 37% of the population, low levels of productivity and the fact that it only contributes to 5% of GDP makes job creation difficult. In addition, high transaction costs, poor corporate governance, and a weak competitive environment present substantial barrier to the expansion of the small, nonhydrocarbon base. The crisis prompted the government to embark on diversification of the economy and create an ecosystem to promote larger private sector development. In a country where 57% of the population is under 35 years of age and seeking active employment, only a thriving broad-based private sector can support inclusive growth.²

4. To counter the effect of economic slowdown, the government launched a countercyclical stimulus package in 2016 comprising social assistance programs that included increase in wages, retirement benefits, social and health benefits, social housing, tax benefits, economic diversification toward strengthening the non-oil sector, and employment generation. While these measures were essential to address the immediate macroeconomic situation, the government realized that deep-rooted structural reforms are critical to reviving growth and consolidating finances to a sustainable path.

¹ International Monetary Fund. 2016. *2016 Article IV Consultation—Press Release; Staff Report; and Statistical Annex*. <https://www.imf.org/external/pubs/ft/scr/2016/cr16296.pdf>

² <http://www.stat.gov.az/source/demography/ap/>

5. The objective of the proposed policy-based loan is to facilitate diversification of growth. The output areas are (i) rule-based fiscal planning introduced to improve efficiency of public resource utilization, (ii) state-owned enterprises (SOEs) restructured to improve legal and institutional arrangements and strengthen private sector participation in economic activities, and (iii) access to credit improved to facilitate economic diversification. The beneficiaries of the proposed program will be the citizens of Azerbaijan who will directly benefit from the improved economic opportunities and help restore the confidence in the banking and financial system. It will also free up the fiscal resources needed for more effective allocation of resources based on a medium-term plan.

C. Development Financing Requirement

6. Based on detailed discussions with the government officials, it was agreed between ADB and the government to support the following costs of reforms under the program: (i) the Deposit Insurance Fund, for meeting the obligations of banks towards depositors; (iii) the National Fund for Entrepreneurship to help in SME development; (iv) making the Credit Guarantee Fund operational. The total financing requirement is summarized in Table 1.

Table 1: Development Financing Requirement
(\$ million)

Item	Amount
One time budgetary support to ADIF	320
Budgetary support to NFES during 2017–2018	180
Budgetary support for operationalization of Credit Guarantee Fund during 2017–2018	200
Total	700

ADIF = Azerbaijan Deposit Insurance Fund, NFES = National Fund for Entrepreneurship Support.
Source: Asian Development Bank Staff Estimates

D. Economic Benefits

7. The policy actions under the proposed loan are directed to facilitating targeted public investments in social and economic infrastructure backed by improved allocative efficiency of public spending through medium-term rule-based fiscal planning. The program will also help to improve the legal and institutional structures of SOEs to minimize fiscal transfers from the state budget. Greater participation of the private sector in the economy will be supported by (i) facilitating greater access to finance for the private sector, and (ii) creating an enabling environment that can help to strengthen private sector participation in economic activities. Higher levels of public investments along with a supporting ecosystem that is more receptive to the enhanced role of the private sector in various economic activities will help to crowd-in private investments and boost economic growth.

8. Policy interventions aimed at facilitating private investment include
- (i) supporting the Azerbaijan Deposit Insurance Fund (ADIF) to play a more effective role in providing insurance cover to depositors and improve the credibility of the banking and financial system,
 - (ii) providing the National Fund for Entrepreneurship Support (NFES) with the necessary assistance so that it can continue and scale-up the financing of investment projects undertaken by SMEs in the priority areas of socioeconomic development,
 - (iii) facilitating setting up of a credit guarantee fund for SMEs that provides access to credit with reduced collateral, and

- (iv) supporting the creation of credit bureaus to improve citizens' access to financial services and strengthen consumer rights.

9. **Supporting the Azerbaijan Deposit Insurance Fund in restoring the credibility of the banking system.** Following the 2015 devaluations, the banking system of the country came under immense stress with eleven banks losing their license in 2016. The ADIF was constituted in accordance with decree 530 of the president of Azerbaijan in 2007 to deal with such exigencies in the banking subsector. The ADIF was meant to ensure protection against loss of deposits by providing insurance cover on deposits made by individual depositors in commercial banks. This was to boost the confidence of the general public in the banking and financial system and foster development of the banking subsector in the country. All banks are mandated to be members of the ADIF; as of 2016, 32 banks were members. The ADIF disbursed \$89.44 million in 2015 and \$347.65 million in 2016 as compensation paid to depositors. However, such large payments have wiped off the asset base of the ADIF, making it unable to meet any future liabilities. The government will provide budgetary allocation of \$320 million in 2017 to help cover the ADIF's financial obligations.

10. **Private sector development and economic diversification.** The president of Azerbaijan approved an action plan in June 2017 on improving the business environment and improving the ranking of the country in international ratings covering business-related themes. Specific areas in the action plan include

- (i) development of financial markets and availability of loanable funds;
- (ii) effective governance and macro-economic indicators;
- (iii) the labor market;
- (iv) physical infrastructure;
- (v) execution of contracts, dispute resolution, and closure and bankruptcy of the private enterprise;
- (vi) the judicial system and rule of law;
- (vii) corporate governance, investments, and investors' interests;
- (viii) foreign trade and trade tariffs;
- (ix) human capital;
- (x) efficiency of the commodity market and competition;
- (xi) technologies and innovations;
- (xii) tax and accountability;
- (xiii) border trade;
- (xiv) connection to the power supply network;
- (xv) corruption and transparency; and
- (xvi) property registration.

11. The Commission on Increasing Expediency of the Business Environment is responsible for coordinating execution of the action plan. Once implemented, the various measures are expected to significantly ease the regulatory and legal bottlenecks in the ease of doing business for SMEs in Azerbaijan. The proposed program will provide support to the implementation of some aspects of the action plan, particularly in connection with SME development.

12. **National Fund for Entrepreneurship Support.** The National Fund for Entrepreneurship Support was constituted under the Ministry of Economy. Authorized lending institutions including banks and nonbanking financial institutions can issue loans on preferential terms according to the criteria framed by the supervisory board of the fund to finance investment

projects that are in the priority areas for socioeconomic development of the country. Table 2 captures the performance of the fund during 2013–2016.

Table 2: Highlights of the National Fund for Entrepreneurship Support

	(\$ '000)			
	2013	2014	2015	2016
Cash and cash equivalents	14,696	5,538	524	4,542
Loans to credit institutions	399,816	501,522	567,275	597,692
Total assets	414,645	507,178	567,886	602,291
Transfers from state budget (cumulative)	405,154	494,357	553,917	595,721
Other reserves	111	65	39	14
Contributed surplus	9,351	12,717	13,924	6,550
Other liabilities	28	39	7	7
Total liabilities	414,645	507,178	567,886	602,291
Operating income	4,433	5,449	6,815	11,636
Operating income after impairment of loans	4,489	3,715	1,571	(17,653)
Profit for the year	4,130	3,319	1,181	(7,399)
No. of entrepreneurs supported		5,560	5,243	2,477
Estimated number of jobs created		12,564	12,600	8,106

() = negative.

Note: \$1 = AZN0.592.

Source: Annual report of NFES, various years.

13. The economic downturn and closure of banks have affected the functioning of the NEFS. Loan provisions increased sharply in 2015-2016 and have been exacerbated by the closure of banks in the last during 2015 and 2016. Given larger losses, there is greater risk aversion by the banks that constrains extending support to a larger set of SMEs. Moreover, it can have a negative impact on the functioning of the overall SME ecosystem and business sentiment, undermining the implementation of the action plan for improving the business environment in Azerbaijan. The functioning of the NFES will get negatively affected without the necessary state and budgetary support. A higher budgetary allocation to the NFES can help to offset these negative sentiments and improve the quality of the balance sheet, which will help expand the portfolio of enterprises supported by the NFES through banks. Budgetary support of \$180 million during 2017–2018 can help realign the NFES to meet the current requirements.

14. **Credit Guarantee Fund.** The Credit Guarantee Fund was envisaged in December 2016 under a strategic roadmap to strengthen the small and medium-sized enterprises (SME). The fund is mandated to provide credit guarantees to SMEs and exporters. The fund functions under the supervisory ambit of the Financial Market Supervisory Authority. An action plan was also drawn up on additional measures to improve the ease of doing business. The action plan was approved by the decree of the president in June 2017. The credit guarantee fund will be fully implemented during 2017–2018, with \$200 million being considered during this time for operationalization.

15. **Quantitative assessment of the economic benefits of the program.** Empirical literature clearly suggests that there is no convincing evidence to support whether public investment crowd-in or crowd-out the private investment. Public investments are financed either through taxes or access to loans from banks and financial institutions and in the process, can crowd out private investment. However, it has also been seen that public investments in social and physical infrastructure increase the productivity of private investments and reduce the costs of production for the private sector. Under such a scenario, net effect will be crowding-in of private investments. In addition, government or SOE contracts with the private sector either

directly or through subcontracts increases crowding in of private investments. Since the proposed program focuses on these aspects of social and economic infrastructure that seek to establish a larger footprint for the private sector, for illustration purposes an alternative assumption of crowding-in private sector investment attributable to improved public investment has been simulated, and its contribution to changes in the growth rate of the economy estimated.

16. Changes in the economic growth rate is related to changes in private investment rate by the following equations: Private Investment Rate (Private Investment/GDP) $i_{pv} = \Phi + \beta i_{pb}$, where, i_{pb} is the public investment rate and β is the crowding-in coefficient. Therefore, $\Delta i_{pv} = \beta \Delta i_{pb}$. The incremental capital output ratio is $\Delta K / \Delta Y = \theta^3 = (I_{pv} + I_{pb}) / \Delta Y$, where I is total investment. We can further simplify, $i_{pv} + i_{pb} = \theta \Delta Y / Y = \theta g$, where g is the growth rate. $\Delta i_{pv} + \Delta i_{pb} = \theta \Delta g$; note that $\Delta i_{pv} = \beta \Delta i_{pb}$. Substituting for i_{pb} and, after some simplification, we finally get the change in the growth rate: $\Delta g = \Delta i_{pv} * (1 + \beta) / (\beta * \theta)$

17. Based on three alternate values of β (0.25, 0.30, and 0.5⁴) and three alternate values of Δi_{pv} (1.0, 1.5, and 2.0⁵), the simulations have been done to estimate changes in the growth rate, for illustration purposes (Table 3).

Table 3: Estimation of Changes in Growth Rate Associated with Changes in Private Investment Rate

Change in Private Investment Rate	Crowding-in Coefficient		
	0.25	0.30	0.50
1.0	2.20	1.90	1.30
1.5	3.40	2.90	2.00
2.0	4.50	3.90	2.70

Source: Asian development Bank Staff Estimate

18. As evident from Table 3, even a conservative assumption of a 1.0 percentage point increase in the private investment rate, following a change in the public investment rate, has a positive effect on the change in economic growth rate by 2.2, 1.9, and 1.3 percentage points, thus increasing the growth rate depending upon the choice of crowding-in coefficient.

19. **Government capacity.** Government capacity to implement the proposed program needs to be supported by the transaction technical assistance team for capacity building of the government officials. The technical assistance team has already been mobilized and is working with the government counterparts for implementation of the program.

20. **Economic risks.** Some of the perceived economic risks include (i) availability of the government's own resources for the proposed reforms; (ii) collapse of more banks, which would have a cascading effect on the finance sector; and (iii) external shocks, like further drops in hydrocarbon prices from their current levels, would put depreciation pressure on the local currency.

³ The incremental capital output ratio for the Azerbaijan economy averaged 2.23 during 2000–2015.

⁴ This implies that a 10-percentage point increase in the public investment rate is associated with 2.5, 3, or 5 percentage point increase in the private investment rate in the economy.

⁵ Percentage point increase in the private investment rate.