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Azerbaijan Republic: Recent Economic Developments

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AZERBAIJAN REPUBLIC

Recent Economic Developments

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Approved by European II Department

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Contents	Page
Basic Data	4
I. Overview of recent economic developments	5
A. Background	5
B. Real Sector Developments	5
C. Monetary and Banking Developments	7
D. Public Finances	13
E. External Sector	18
F. Structural Reforms	21
II. Recent developments in the financial sector: removing obstacles to financial deepening	22
A. Introduction	22
B. The Nature of Banking Activity	23
C. Banking Supervision Regime	27
D. Development of Financial Instruments	29
E. Payments System Problems and reform	30
F. Future Prospects	32
III. Real exchange rate appreciation in a resource-rich country.	33
A. Introduction	33
B. Inflation and the Nominal Appreciation of the Manat	33
C. Assessing Competitiveness	35
D. Real Exchange Rate Indexes and Indirect Indicators	36
The Real Effective Exchange Rate Index	36
Indirect Indicators of Competitiveness	39
E. A Simulation Approach	40

The Model	40
Calibrating the Model	42
The Results	42
F. Policy Implications	43
IV. Vulnerability to External Shocks and Policy Responses	44
A. Introduction	44
B. An Overview of the Oil Sector	44
C. The Impact of Oil Price Shocks	46
D. Policy Responses	48
Fiscal Policy	48
Exchange Rate Policy	50
Structural Reforms	50
E. Conclusions	51
V. Managing Oil Wealth in Azerbaijan	51
A. Rationale for Creating an Oil Fund	52
B. Managing the Oil Fund	55
Structure and Investment Strategy	55
Sources of Oil Fund Resources	57
Uses of Oil Fund Resources	59
C. Key Conclusions	62

Tables

1. Output Developments	6
2. Fiscal Deficits and Financing	13
3. Fiscal Revenue Trends	14
4. Fiscal Expenditure Trends	16
5. Balance of Payments	19
6. Indicators of Banking Sector Performance, 1993-97	23
7. Size and Structure of the Banking System	24
8. Bank Prudential Ratios	28
9. Indirect Competitiveness Indicators	40
10. Simulation Results	43
11. Balance of Payments—Oil Price Scenarios	47
12. Gross Domestic Product by Sector of Origin, 1991-97	64
13. Gross Domestic Product by Final Use, 1991-97	65
14. Energy Production, 1990-97	66
15. Crude Oil Production, 1980-97	67
16. Agricultural Production by Major Crops, 1990-97	68
17. Production Indicators, 1993-97	69
18. Average Monthly Wages, 1994-97	70
19. Average Monthly Wages by Sector, 1990-97	71

20.	Labor Market, 1992-97	72
21.	Consumer Price Index, 1994-97	73
22.	Breakdown of Consumer Price Index, 1995-97	74
23.	Consolidated Operations of the General Government, 1993-1997	75
24.	Social Protection Fund, 1993-1997	76
25.	Balance Sheet of the Azerbaijan National Bank and Monetary Survey, 1993-97	77
26.	Credit and Deposit Interest Rates, 1996-98	78
27.	Exchange Rates, 1994-98	79
28.	Balance of Payments, 1994-97	80
29.	Registered Foreign Trade, 1993-97	81
30.	Energy Balance, 1991-97	82

Figures

1.	Average Monthly Wages, 1993-98	8
2.	Monetary Indicators, 1995-98	9
3.	BICEX Auctions, 1995-98	12
4.	Exchange Rates, 1994-98	34
5.	Real Exchange Rates, 1994-98	37
6.	Consumer Price Inflation, 1994-98	38

Text Boxes

1.	New Loan Classification and Provisioning Regulations	13
2.	The Treasury Project	18
3.	Development of the Treasury Bill Market	30
4.	The Payments System Project	31
5.	The Management of Oil Funds in Kuwait	53
6.	Norway: State Petroleum Fund	57
7.	Oman: State General Reserve Fund (SGRF)	58
8.	Venezuela: Petroleum Stabilization Fund	60
9.	Nigeria: The Petroleum Trust Fund	61

Azerbaijan: Basic Data

Social and demographic indicators (1996)					
Area (in sq. km)					86,600
Population (in thousands)					7,508
Percent urban					53
Percent rural					47
Population growth rate (in percent)					1.1
Life expectancy at birth (in years)					69
Infant mortality rate (per 1,000 population)					20
Physicians (per 1,000 population)					3.9
GDP per capita (in U.S. dollars, at average 1996 exchange rate)					423

	1993	1994	1995	1996	1997
	(In percent of GDP)				
Structure of GDP					
Industry and construction	32	28	31	35	39
Agriculture	27	32	25	25	20
Other	41	40	44	40	41
	(Percentage change, unless otherwise indicated)				
Output and employment					
GDP (in billions of manats)	157	1,873	10,669	13,663	15,352
Real GDP	-23.1	-19.7	-11.8	1.3	5.8
Employment	-0.2	-2.3	-0.5	2.0	0.2
Prices and costs					
Consumer price index					
Average	1,130	1,664	412	20	3.5
End of Period	1,294	1,788	85	7	0.4
Average nominal wage	730	581	299	45	42
Real wage	-33	-62	-31	23	38
	(In millions of U.S. dollars)				
External sector					
Exports of goods	697	682	680	789	808
Imports of goods	819	845	955	1338	1375
Current account balance	-160	-121	-318	-811	-915
(in percent of GDP)	-12.2	-9.3	-13.2	-25.5	-23.7
	(In percent of GDP)				
Government					
Total revenue	40.5	33.8	17.6	17.6	19.7
Total expenditure (including net lending)	55.9	45.9	22.4	20.4	21.4
Fiscal balance (- deficit)	-15.3	-12.1	-4.9	-2.8	-1.7
Domestic financing	15.3	12.1	0.3	-0.2	-0.4
	(Percentage change)				
Financial markets					
Manat reserve money, end of period	1,136.1	642.8	129.7	33.6	35.1
Manat broad money, end of period	685.7	486.1	122.2	25.8	29.2
Manat velocity (ratio)	5.1	11.5	17.7	13.3	12.0
Exchange rate (manat/US\$)					
End of period	256	4330	4440	4098	3888
Period average	120	1433	4417	4300	3983

Source: Azerbaijan State Committee on Statistics, Azerbaijan National Bank, Ministry of Finance; and Fund staff estimates.

I. OVERVIEW OF RECENT ECONOMIC DEVELOPMENTS

A. Background

1. Following the collapse of the Soviet Union, Azerbaijan's economy suffered from serious macroeconomic imbalances. Real GDP declined by more than 70 percent over the period from 1992 to 1995, by which time high inflation had eroded real incomes, the exchange rate had weakened and international reserves were nearly depleted. These developments reflected four major factors. First, the military conflict over the Nagorno-Karabakh region had reduced the national territory by 20 percent and produced a large number of refugees. Second, Azerbaijan's traditional trade and financial links with the Baltics, Russia and other countries of the former Soviet Union (BRO) had collapsed. Third, the terms of trade had deteriorated as suppliers from the former Soviet Union moved to world market pricing. Fourth, large fiscal deficits financed by central bank money creation had fueled macroeconomic instability.

2. Prospects for growth, however, improved radically in September 1994 with the signature of the first oil Production Sharing Agreement (PSA) between foreign investors and the Azeri state oil company (SOCAR), which granted development rights for three existing large oil fields to an international oil consortium. Since then, a number of similar agreements have been signed, regulating not only oil production but also exploration. During the Soviet times Azerbaijan's oil reserves had been under-exploited because the Gosplan had given priority to the development of the Siberian oil fields.

3. In early 1995 the Azeri authorities started a comprehensive stabilization program supported by the Fund's Structural Transformation Facility. Fiscal and credit policies were tightened, while a number of structural reforms were introduced, mainly in the areas of exchange and trade liberalization. The results were impressive. The nominal exchange rate against the dollar stabilized, monthly inflation rates dropped from more than 50 percent in late 1994 to low single digits in the second half of 1995, and GDP started to recover in 1996.

4. Tight financial policies and structural reforms have continued, supported first by a stand-by arrangement with the Fund in 1996 and then by a three year arrangement under both the extended facility and the ESAF. The reform program has also been supported by a World Bank Structural Adjustment Credit.

B. Real Sector Developments

5. 1996 marked a turning point for the Azeri economy. Tight financial policies combined with large foreign direct investments linked to the oil developments brought about a nominal appreciation of the manat vis-à-vis the dollar of about 8 percent, which in turn helped to bring down annual inflation to 7 percent by end year. Output recovery was led by investments in the oil fields which contributed to sharp increases in activity in the construction and services sectors.

6. **The recovery in economic activity gained momentum in 1997**, with GDP growth at 5.8 percent, up from 1.3 percent in 1996 (Table 1). Fueled by a surge in foreign direct investment, construction and trade activities boomed, up 66 percent and 18 percent, respectively, from 1996 levels. However industrial output increased only marginally (less than 0.5 percent) (Table 17). In late 1997 the first new-oil production started to be exported. Agricultural output contracted, not only because of adverse weather conditions for cotton, but also because of disruption following the dismantling of collective farms during 1997, although a few cash crops and livestock production recorded significant increases (Table 16).

7. **During the first quarter of 1998 the pace of economic activity accelerated further**, to 8.5 percent on an annual basis, as the revival in economic activity spread to both agriculture and industry. There are signs that the food-processing and other light industries are leading the recovery in industrial output, while electricity production and oil products output also increased. Crude oil extraction was 7 percent higher than a year earlier, and production was ahead of expectations, unaffected by the sharp decline in oil prices in early 1998.

Table 1: Output Developments
(Percentage change on a year earlier)

	1995	1996	1997	1998 Q1
Real GDP	-11.8	1.3	5.8	8.5
of which:				
oil	-6.0	-1.6	0.1	...
non-oil	-14.3	1.8	8.1	...

Sources: Azerbaijan State Committee on Statistics

8. The recovery in economic activity has not yet been translated into a significant increase in **overall employment**, which remained roughly unchanged between 1996 and 1997 (Table 20). The decline in **industrial employment** continued in favor not only of trade and services but also of **agricultural employment**, reflecting a surge in the number of private farmers as a result of land reform. The **unemployment rate** is estimated to have remained constant at about 19 percent.

9. Annual **consumer price inflation** declined to 0.4 percent at end-1997 from 6.7 percent at end-1996, reflecting in part a continued nominal appreciation of the manat during 1997 (5 percent). Average consumer price inflation declined from 20 percent during 1996 to 4 percent during 1997, as the stabilization program succeeded in reigning in price increases from the near-hyper-inflationary levels experienced in 1994 and early 1995. This decline occurred despite substantial increases in energy and other utility tariffs in April and

October 1997. However, substantial falls in food prices during the summer months dominated movements in the consumer price index, as their weight in the index is close to 70 percent (Table 22). During the first three months of 1998 the level of consumer prices increased by 2.4 percent, but in the 12 months to end-March 1998 the increase was only 0.3 percent, reflecting the price declines last summer.

10. Economic recovery combined with nominal exchange rate appreciation has led to substantial increases in **dollar wages**, though they remain low compared with wages in most competitor countries (Figure 1, Table 18). Average monthly dollar wages increased by 54 percent in 1997 over 1996, to about US\$31. Dollar wages rose steadily through 1997, and in the first four months of 1998 they averaged US\$41, over 50 percent higher than a year earlier.

C. Monetary and Banking Developments

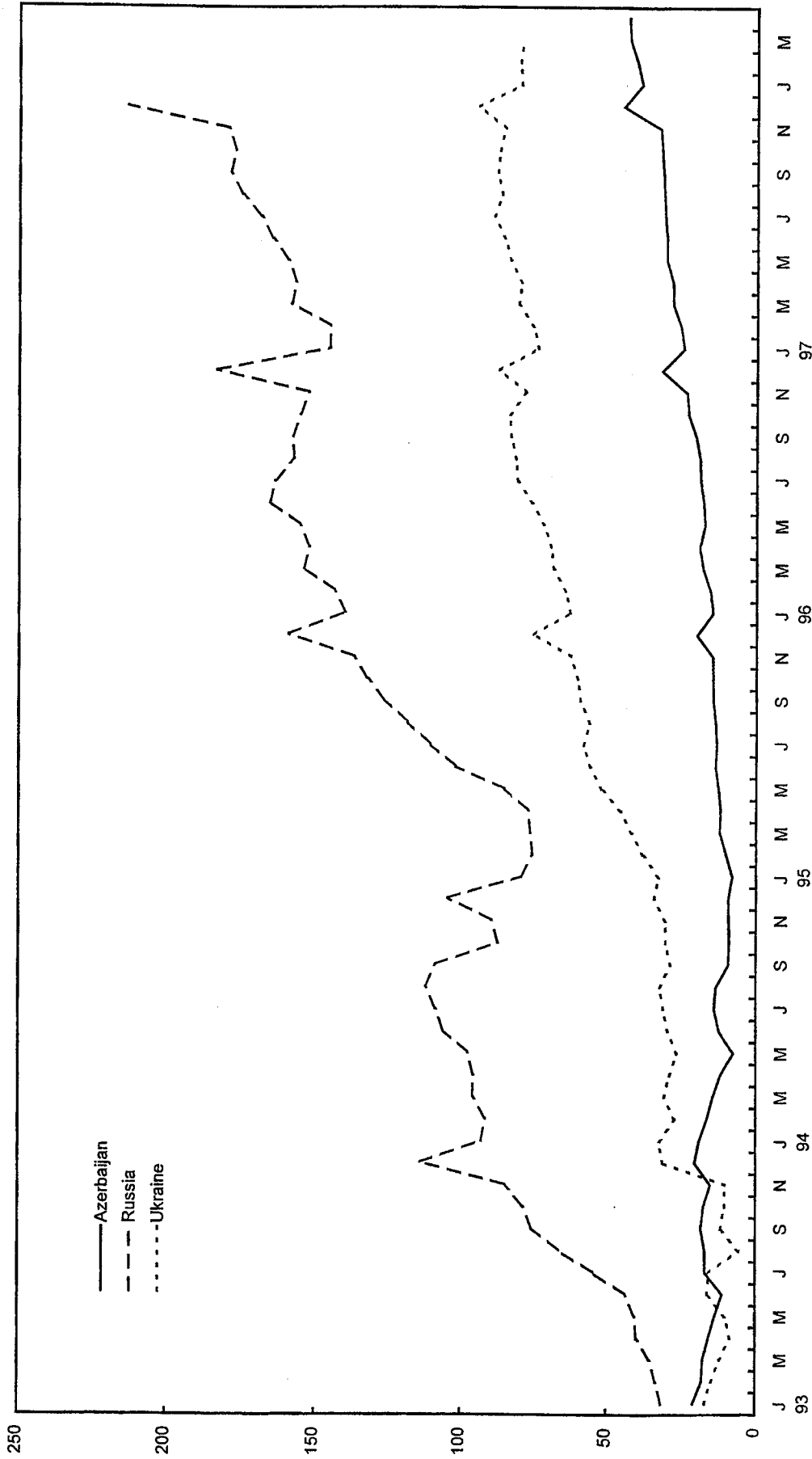
11. **The monetary regime has changed significantly** since the hyperinflation witnessed between 1993-95, when manat reserve money grew by a cumulative 1700 percent and manat broad money by 1300 percent (Table 25). During 1996, manat reserve money growth was only 34 percent and manat broad money grew by 26 percent (Figure 2). The manat money multiplier declined, reflecting a deterioration of the financial position of the banking sector. Indications are that as the pursuit of prudent financial policies has continued, the velocity of manat broad money has also tended to decline.¹

12. **Monetary aggregates grew more rapidly during 1997** than originally envisaged. Manat reserve money grew by 35 percent, almost twice the rate expected, as the central bank chose not to fully offset larger capital and financial flows from abroad, given the strength of the manat and good inflation performance. Net international reserves (NIR) therefore also rose rapidly, reaching about 4 months of imports. Net domestic assets of the central bank were slightly lower than expected, despite the fact that liquidity problems in the banking system led to higher-than-envisaged credit to banks, as the general government made considerably less recourse than expected to central bank financing. Similarly, the annual rate of manat broad money growth was just over twice that targeted by the authorities, reflecting developments in manat reserve money. The manat multiplier has remained low, at close to 1, reflecting persistent structural problems in the banking system and the limited degree of bank intermediation.

13. Despite constraints imposed on the lending activity of the state-owned banks, the growth of **credit to the private sector during 1997** was greater than envisaged, at 8 percent. Private banks have clearly taken opportunities to raise their lending activity, including to consumers, but there remained a general sense of caution in credit extension, in part because

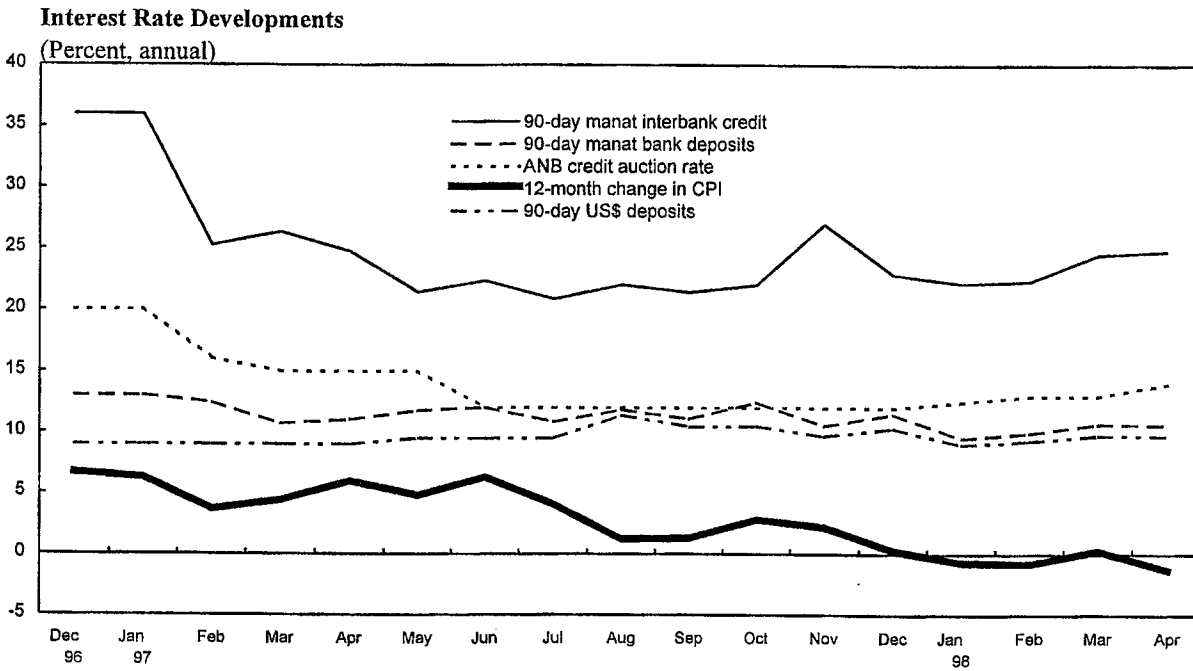
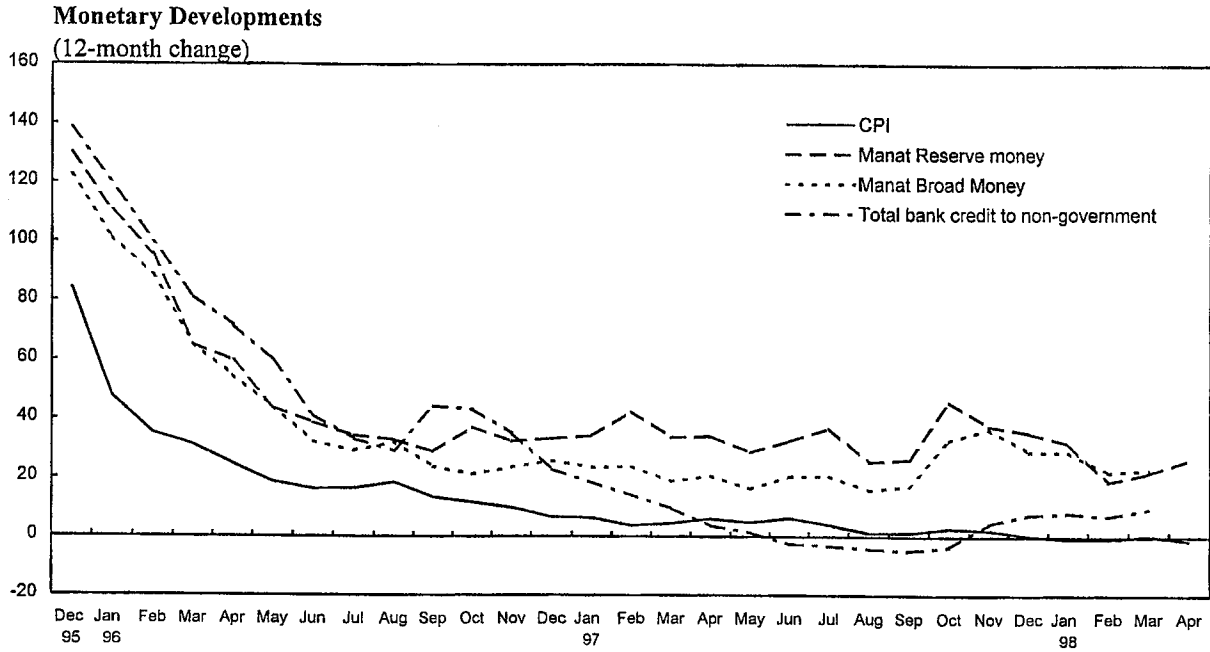
¹Assessment of trends in velocity is made problematic by methodological weaknesses in the quarterly estimates of nominal GDP.

Figure 1. Average Monthly Wages, 1993-98
(In US dollars)



Source: National authorities.

Figure 2. Azerbaijan: Monetary Indicators, 1995-98
(In percent per annum)



Source: Azeri authorities.

some measures to reduce the risk of lending to enterprises were only introduced with delays and are taking time to have their effect (e.g., the bankruptcy law and the law on collateral).

14. **During the first quarter of 1998**, monetary conditions have tightened. Manat reserve money declined by 9 percent, as external inflows abated in part because foreign exchange proceeds from oil-related activities diminished. The National Bank intervened moderately to support the manat, and NIR declined by US\$22 billion. General government continued to make lower than envisaged recourse to central bank finance, in fact accumulating net deposits. This pattern was also reflected at the level of the whole banking system. Manat broad money fell more sharply, as the multiplier declined during the first quarter rather than increasing as envisaged.

15. During 1997 and early 1998, the degree of **dollarization** in the economy increased very slightly. Foreign currency deposits are about 25 percent of broad money, still considerably less than the 60 percent recorded in 1994. Nevertheless, the relative attractiveness of foreign currency deposits has risen as the differential between rates on manat and foreign currency deposits at Azeri banks has declined from 4 percentage points to less than 1 percentage point (Tables 23 and 24).

16. Consistent with monetary and inflation developments, **nominal interest rates** declined during 1997, but began to rise during early 1998 as monetary conditions tightened. With inflation continuing to subside, real interest rates have remained substantially positive and are currently above 20 percent on bank credits.

17. Lax financial policies had resulted in a 95 percent depreciation of the nominal **exchange rate** during 1994 (Table 27). With the adoption of more prudent policies, the exchange rate was broadly stable during 1995 as confidence in the currency grew. The nominal rate subsequently appreciated by 8 percent in 1996 and by a further 5 percent in 1997 as the monetary authorities continued their policy of limited intervention in the foreign exchange market. This policy has been maintained during 1998 with the exchange rate appreciating by a modest amount, despite the adverse impact on the balance of payments of lower oil prices.

18. The average monthly **volume of foreign exchange operations** through the Baku Interbank Currency Exchange (BICEX) remained relatively stable during the first nine months of 1997 at about US\$65 million, but declined to about US\$36 million after the opening of the Organized Interbank Currency Exchange (OICEX) in September 1997

(Figure 3).² Thus, during the final four months of 1997, US\$145 million was traded on BICEX while US\$227 million was traded on OICEX. Monthly volumes of trading on BICEX in 1998 are averaging about US\$26 million, while they are about US\$45 million on OICEX.

19. In the **banking sector**, supervision was tightened when new prudential regulations were introduced in June 1997.³ The new prudential ratios reflect many recommendations from Fund technical assistance missions and the supervisory regime now incorporates most elements of best international practice.⁴ Among the changes, banks must now meet higher capital requirements.⁵ Partly as a result, the total number of banks declined from 136 at January 1, 1997 to 99 at January 1, 1998. However, the authorities raised the ratio on banks' instant liquidity from July 1, 1997, reducing banks' ability to engage in maturity transformation, a core banking activity. The ratio limiting exposure to a given borrower was reduced and several banks are having difficulties adjusting to this: several state-owned banks have excessive exposures to borrowers who are not servicing their loans; and certain private banks signed contracts giving customers term loans prior to the enactment of the new regulation, and are legally bound to allow the customers to draw down those loans until the contracts expire. Additional changes were also made to loan classification and provisions regulations (see Box 1).

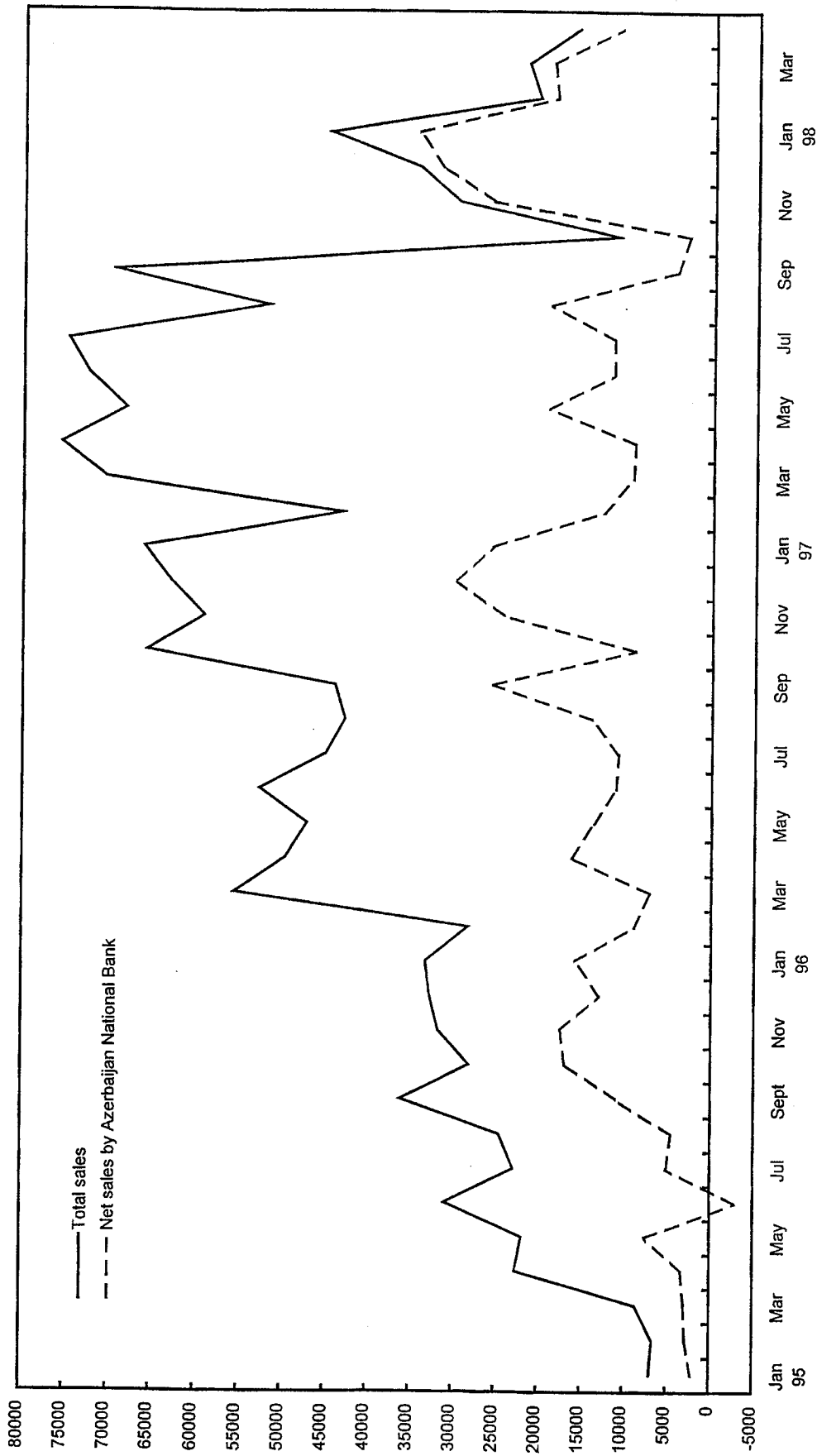
²Trading on BICEX is limited to member banks (about half of all licenced banks), and takes place in the mornings. Trading on OICEX occurs in the afternoons and is open to all banks with foreign exchange licences, and can be conducted at lower cost. Further details are contained in EBS/97/229, page 23.

³New licencing procedures had been introduced in November 1996.

⁴More details are contained in Chapter II.

⁵For existing banks, the level was changed four times from US\$300,000 at January 1, 1997, to US\$1 million at January 1, 1998, and is due to move to US\$1.25 million on July 1, 1998, and to US\$1.5 million by January 1, 1999. For new banks, minimum capital was raised from US\$1.25 million to US\$5 million as of January 1, 1998.

Figure 3. Azerbaijan: BICEX Auctions, 1995-98
(In thousands of US dollars)



Source: Azeri authorities.

Box 1. New Loan Classification and Provisioning Regulations

Since September 1997, banks have been subject to new regulations on loan classification and provisioning that are consistent with tax laws on the deductibility of loan loss provisions. The regulations stipulate a scale of provisions based on loan types, any associated collateral, and the time period when payments become overdue. Implementation of this regulation needs to be checked both by bank audits and by the central bank, through on-site inspections, including examining whether collateral has been properly secured and registered, and whether government guarantees have been formally issued. Given the potential problems associated with a rapid implementation of the provisioning rules, the new requirements will be phased in gradually: a 40 percent rate by end-1997, 75 percent by end-1998, and 100 percent by end-1999. In this way, the real situation of the banks will be fully reflected in the ratios only at end-1999. Changes are still needed in the fiscal treatment of loan loss provisioning. The ministry of finance does not view this as a normal banking expense, and until recently, loan loss provisions were not deductible at all. However, from June 1997 banks have been allowed to deduct 20 percent of required loan loss provisions as a normal business expense for tax purposes. As yet, the authorities have not accepted that specific loan loss provisions be fully deductible.

D. Public Finances

20. Tight fiscal policy has been an important part of macroeconomic stabilization and recovery in Azerbaijan. Large fiscal deficits developed during 1992-94, when general government revenues declined from 51 percent of GDP to 34 percent of GDP, as important revenue sources such as the compulsory foreign exchange surrender requirement were removed, while expenditures remained high reflecting the costs of the conflict over Nagorno-Karabakh. Initial efforts to contain the deficit focused on compressing expenditures but more recently have also included attempts to raise additional revenues. The cash **fiscal deficit** fell from a high of over 15 percent of GDP in 1993 to under 2 percent of GDP in 1997 (see Table 2). However, tight expenditure controls resulted in arrears, and while wage and pension arrears were nearly eliminated in 1997, arrears for goods and services— especially energy and water—expanded. On a commitments basis, the deficit was about 3 percent of GDP in 1997.

Table 2: Fiscal Deficits and Financing
(In percent of GDP)

	1992	1993	1994	1995	1996	1997
Overall deficit	2.7	-15.3	-12.1	-4.9	-2.8	-1.7
Domestic financing, net	...	15.3	12.1	0.3	-0.2	-0.4
Foreign financing, net	...	0.0	0.0	4.6	3.0	2.1

Sources: Ministry of Finance; and Fund staff estimates.

21. Prior to 1995, central bank credit provided the bulk of **financing**. Since 1995, however, the deficit has been exclusively foreign financed, and the government has accumulated domestic assets. Foreign financing has included receipt of oil signature bonuses held in a government account at the national bank (1 percent of GDP in 1996 and about 1½ percent of GDP in 1997). Foreign financing from the World Bank (Structural Adjustment Credit) increased from about 0.5 percent of GDP in 1996 to nearly 1 percent in 1997.

Table 3: Fiscal Revenue Trends
(In percent of GDP)

	1992	1993	1994	1995	1996	1997
Total	51.2	40.5	33.8	17.6	17.6	19.7
of which:						
Corporate profits tax	6.4	8.5	5.2	3.8	4.3	2.9
Individual income tax	1.9	2.4	1.5	1.1	1.6	2.2
Social security contributions	10.4	9.5	4.2	2.3	2.3	2.5
VAT	8.1	8.1	3.3	1.7	3.4	4.3
Excises	3.7	4.0	2.0	0.8	1.5	1.4
Customs revenue	0.0	0.8	0.7	0.6	0.8	1.5
Royalties	0.0	0.0	0.0	0.0	0.3	2.2
Other taxes and revenue	20.7	7.3	16.9	7.2	3.4	2.7

Sources: Ministry of Finance; and Fund staff estimates.

22. **Fiscal revenue** reached a low of 17½ percent of GDP in 1995, but has since made some recovery (see Table 3). The slump in **indirect taxes** (VAT, excises, and customs duties) is being reversed, partly through measures adopted in 1996 to broaden the VAT tax base by removing exemptions, and lower the duty free threshold on imported goods for personal use from US\$5,000 to US\$1,000. In addition, measures introduced in 1997 included further reductions in the duty free threshold, higher gasoline excises, a new 3 percent turnover tax, and a 5 percent customs duty on raw materials and capital inputs. **Direct taxes** have become the most important source of revenue. Revenue from these sources has increased recently as economic activity has rebounded and average wages have increased. However, these developments also reflect a major change in the profits tax in September 1996 that allowed deduction of wages from the tax base, thus reducing what was in effect an excess wage tax. **Royalties** on oil production were only introduced at the end of 1995, and are now making a significant contribution to revenue, in part due to a change in their administration (shifting the tax liability downstream from the exploration companies to the state oil company, SOCAR's, production associations). **Other revenues**, consisting of land and property taxes, various other local taxes and non-tax revenues including grants from the European Union and profits from the central bank, have declined in importance during the period 1995-97.

23. Revenue performance has benefited from several improvements in **tax administration** in 1997, including (i) creation of a large tax payers unit; (ii) the

strengthening of the State Tax Inspectorate (STI) by increasing the number of auditors and improving enforcement procedures; and (iii) improvements in the administration of excise taxes for alcohol and tobacco. A major improvement in tax administration was achieved by abolishing the system of enforced tax compliance through automatic debiting of enterprises' settlement accounts in banks. This system contributed to low tax collections and discouraged transparency since enterprises avoided taxes by conducting transactions outside the banking system. Tax collections have improved by introducing taxpayer identification numbers and moving to a source-based system in which enterprises make regular tax payments.

Furthermore, a new law that forgives penalties on tax arrears accrued before January 1997, so long as taxpayers stay up to date with current taxes, has greatly improved collections of the profit tax and royalties. As a rule, however, tax collection rates are low (perhaps no more than 50 percent for some taxes), partly due to widespread inter-enterprise arrears. A new law in 1997 gave the STI permission to collect tax arrears from debtors of the taxpayer, but so far it has not been used.

24. **Expenditure (including net lending)** as a percentage of GDP was halved in 1995 compared to 1994, and reduced further in 1996 before making a slight recovery in 1997 (Table 4). The amount spent on wages and salaries and goods and services was broadly stable during 1994-96, but rose sharply in 1997, while subsidies and net lending have declined. Defense expenditures fell in 1996 and have since stabilized at just over 2 percent of GDP. Expenditures for education and health have remained broadly stable, but social safety net expenditure has increased. Subsidies declined sharply in 1997, reflecting the **elimination of subsidized communal services** (utilities and rent) for certain sections of the population, but were offset by the introduction of a compensation package that included a 30 percent increase in teachers' wages (one of the primary groups benefiting from free communal services) in July 1997 and additional cash allowances to targeted groups (administered by the Social Protection Fund). In August 1997, core government employees also received a 30 percent increase in salaries.

Table 4: Fiscal Expenditure Trends
(In percent of GDP)

	1992	1993	1994	1995	1996	1997
Total	48.4	55.9	45.9	22.4	20.4	21.4
of which:						
Wages and salaries	...	...	4.6	3.7	3.5	4.6
Purchases of goods and services	7.5	10.4	6.4	6.9	6.9	7.6
Transfers to households	11.9	16.5	8.6	5.1	6.4	6.2
Subsidies	11.2	4.6	5.4	2.2	2.1	0.7
Capital investment	0.8	3.1	0.9	0.7	0.5	1.3
Net lending	...	...	...	3.8	0.6	0.6
Other	...	...	...	0.1	0.4	0.3
Memorandum item:						
Military expenditure	...	...	...	4.2	2.2	2.3
Education expenditure	...	...	...	4.5	3.7	4.2
Health expenditure	...	...	...	2.1	1.4	1.6
Social Safety Net 1/	...	...	...	5.3	6.0	6.1

Sources: Ministry of Finance; and Fund staff estimates.

1/ Social Protection Fund plus other social security expenditure.

25. Despite the practice of giving large wage increases (20 to 40 percent) annually since 1995, public sector wages remain low relative to those in other BRO countries, and relative to the private sector. According to the recent survey of government employment and pay (including central and local government employment), the average public sector wage is only about two-thirds of the national average. While wages are low, government employment is very large, and many government employees probably hold multiple positions. Total employment in the central and local governments is 565,000 (excluding the Ministry of Defense) and the estimated employment in public enterprises is 898,000 bringing total public sector employment to about 1.46 million or fifty percent of the estimated total employment in the formal sector (2.9 million).⁶

26. Despite higher spending on goods and services in recent years, this area remains significantly underbudgeted, as is evident by expanding **budgetary arrears** for goods and

⁶Other measures of the relative size of government in 1997 indicate that general government expenditures plus investment outlays of public enterprises were 27 percent of GDP (manat 4.1 billion), and this measure less transfers to households, less interest payments was about 21 percent of GDP (manat 3.2 billion).

services, particularly for public utilities—water, gas, and electricity—in 1997.⁷ Overall **capital expenditure** (capital investment plus net lending) has declined since 1995 even though there have been new foreign project loans and investment in public infrastructure including water supply, irrigation, and roads.

27. The authorities introduced measures in 1997 to strengthen the **social safety net** by increasing pensions for those who had retired before 1993 to bring pensions eroded by high inflation closer to those of more recent pensioners. In addition, the retirement age is being increased gradually (6 months each year for both men and women) to 61 (from 59) for men and 56 (from 54) for women by the year 2000. Working pensions were halved with the intent of reducing expenditures, but the effect was to encourage more workers to resign to collect their full pension, which raised expenditures for regular pensions. Despite these various changes, transfers to households (mainly expenditures by the Social Protection Fund (SPF)) remained constant in 1996-97 (Table 24).⁸

28. A major development in **public expenditure management** in 1997 was the establishment of regional treasuries, the consolidation of government operations into a single treasury account and the closure of all manat bank accounts of budgetary institutions. These improvements are expected to improve expenditure control and reduce the risk of mismanagement of government funds (see Box 2).

⁷Arrears for these items rose from 3 percent of GDP at end-1996 to 3.9 percent at end-1997.

⁸SPF expenditures in 1996 included payments to cover pension arrears.

Box 2. The Treasury Project

The treasury project in Azerbaijan made only halting progress during 1995-96. However, with the installation of a Fund resident advisor in 1996, progress improved markedly and most of the critical tasks in the work plan were completed during 1997. This involved bringing over 5,000 republican and local government budget institutions under the treasury payment system, closing nearly 8,400 budgetary and extrabudgetary bank accounts, and transferring these to a single treasury account at the central bank. Administration is now handled by a central treasury at the ministry of finance and 85 field treasury offices.

The project is now being enlarged and government banking arrangements will be further consolidated during the period April 1998-March 1999. The main tasks and envisaged timing are:

- Stabilizing and strengthening payment and accounting operations in: (i) field treasuries (May-July 1998); (ii) central treasury (May-September 1998)
- Improving form and content of treasury reports (July-September 1998)
- Expanding treasury coverage, including closure of foreign currency bank accounts of budget institutions (July-December 1998)
- Installing cash management and financial planning disciplines, including creation of financial planning division within the central treasury, and coordination with the public debt division (June 1998-March 1999)
- Installing expenditure control at the commitment stage (September 1998-March 1999)
- Computerization of treasury operations (July 1998-March 1999)

E. External Sector

29. Over the last few years, the external current account deficit has widened considerably. Reflecting mainly developments in the oil sector, it increased from 9 percent of GDP in 1994 to 26 percent of GDP in 1996 (see Table 5). With the signature of "the contract of the century" with AIOC in 1994, increased oil-related imports of goods and services caused a sharp deterioration in the current account. Non-oil imports increased by 16 percent between 1994 and 1996 owing mainly to a rise in shuttle trade (Table 28). Over the same period, total exports grew by only 8 percent despite a doubling of petroleum products exports, as there was a sharp decline in the export of traditional products such as agricultural, metal, and machinery and equipment. An increase in the deficit on services was also mainly associated with rising payments for oil sector development.

30. Capital inflows, particularly oil sector foreign direct investment, increased substantially between 1994 and 1996. Following the signature of the production sharing agreement with AIOC, oil-related capital inflows moved from zero in 1994 to about US\$½ billion in 1996, and the deficit in the overall balance of payments declined slightly. This improvement in the capital account combined with Fund purchases, some debt rescheduling and arrears accumulation permitted the central bank to increase its foreign

reserves from almost zero in 1994 to about US\$215 million by end-1996, the equivalent of eight weeks of imports.⁹

Table 5: Balance of Payments
(In percent of GDP)

	1994	1995	1996	1997
Current account	-9.3	-13.2	-25.5	-23.7
Trade balance	-12.5	-11.4	-17.3	-14.6
Exports, of which:	52.1	28.1	24.8	20.9
Oil (crude and products)	15.8	10.6	12.6	11.3
Imports, of which:	64.6	39.5	42.0	35.7
Oil Sector	0.0	1.2	6.7	6.6
Services balance, of which:	-2.5	-5.8	-8.7	-9.9
Oil sector	0.0	-2.8	-5.2	-8.3
Capital inflows, of which:	4.1	13.2	23.2	26.1
Oil sector direct investment	0.0	10.4	15.3	21.9
Gross reserves				
(in millions of U.S. dollar)	2	119	214	467
In weeks of imports	0	5	8	16

31. Azerbaijan's **balance of payments in 1997** was again dominated by oil sector activities. The **current account** deficit widened to US\$915 million (24 percent of GDP), US\$100 million higher than 1996, mainly on account of movements in goods and services that are oil-sector related. Total **exports** increased by only 2.5 percent in US dollar terms, while the export of crude oil and refined petroleum products rose by 8 percent.

32. Total **imports** increased by about 3 percent in 1997. Imports related to oil sector development rose by more than 20 percent, but other imports declined slightly (by about

⁹The arrears, mainly to Russia, were of a technical nature as discussions were going on to settle the issue of mutual debt. An agreement was reached in 1997 canceling all outstanding mutual claims with Russia.

1 percent). The fall in non-oil imports is puzzling given the pick up in economic activity, though it could be attributed in part to under reporting.¹⁰

33. The **services account deficit** increased by more than US\$100 million to US\$384 million in 1997 and was also dominated by oil sector activities. Receipts more than doubled from the 1996 level, mainly on account of an increase in travel, transportation, and construction services. Most of these are related directly to, or represent spill over effects of, the oil sector. Business travel, for example, increased by sixfold (from US\$21 million in 1996 to US\$126 million in 1997) almost entirely due to the substantial increase in oil-related business travel to Azerbaijan. The sizable increase in receipts was more than offset by an increase in payments, mainly by oil companies, particularly the Azerbaijan International Oil Company (AIOC), for services related to exploration, development, and oil extraction. There was also an increase in payments associated with personal travel (which increased by US\$73 million), consistent with an increase in shuttle trade reported by the central bank.

34. **Net capital inflows** rose strongly in 1997 to about US\$1 billion, an increase of US\$270 million over 1996, with oil sector foreign direct investments representing 85 percent of total capital movements, including US\$64 million in oil bonus payments (some of which related to the signature of six new production sharing agreements during the year). Non-oil direct investment also rose by over 40 percent to US\$248 million, reportedly to the construction and service sectors. Medium-and long-term net official flows increased by US\$30 million, mainly reflecting larger disbursements of project loans from multilateral institutions (World Bank and the EBRD). In addition, there was a strong reversal in trade credit and short-term capital movements, which were highly negative in 1997, more than offsetting the previous year's inflow.

35. The **overall balance of payments** turned from a small deficit in 1996 to a surplus in 1997 as net capital inflows more than financed the increase in the current account deficit. This, together with purchases from the Fund, allowed a considerable build up of gross official foreign reserves, which more than doubled to US\$467 million (about 4 months of imports).

36. Preliminary estimates of **balance payment developments during the first quarter of 1998** indicate that the current account deficit widened compared to the same period in 1997, reflecting a deterioration in both the trade and services balances.¹¹ The value of oil exports declined considerably, due to both the decline in world prices of crude oil and refined petroleum products, and to the decision of the state oil company, SOCAR, to halt shipments

¹⁰Customs data do not include "shuttle trade", which consists mainly of consumer goods imports by individual businessmen who charter airplanes to such places as Dubai or Istanbul. However, the central bank supplements the customs data with its own estimates of shuttle trade, although the accuracy of these estimates is uncertain.

¹¹The services account data may be subject to later downward revision.

of products temporarily, in the hope that prices would soon recover. In addition, cotton exports fell sharply after the large increase in 1997, reflecting in part adverse weather conditions as well as an apparent shift to the production of other crops following the liberalization of the agriculture sector. Oil sector imports rose only slightly but other imports, particularly of food items, seem to have increased. The higher services account deficit was mainly due to an increase in service payments by oil companies.

37. For the first quarter of 1998, the **overall balance** is estimated to have shifted into a small deficit, as larger oil-sector capital inflows were not sufficient to finance the larger current account deficit. As a result, the gross foreign reserves declined by US\$16 million, reducing the import coverage to slightly less than 4 months.

F. Structural Reforms

38. Azerbaijan started to implement economic reforms relatively late, as the conflict with Armenia together with political instability impeded significant progress until 1995. Thus, it decided to compress over a relatively short time period reforms that other transition economies had implemented over a longer period. Important successes have been achieved. The trade and foreign exchange regimes had been completely liberalized; privatization has proceeded quickly; a banking sector restructuring plan is being implemented (see Chapter II); and several laws have been drafted to clarify the legal framework for economic and commercial activity.

39. The **exchange rate** was unified and the differentiated surrender requirements at below market prices were abolished in 1995. Both **domestic and foreign trade regimes** have been substantially liberalized with the abolition of the state order system, export and import quotas, licensing requirements, and ex-ante export registration schemes. External tariff rates have been simplified with little dispersion. There are three tariff rates: (i) 15 percent for most items; (ii) 5 percent for intermediate goods; and (iii) zero for investment goods. State-owned trading companies involved both in exports and imports, including the cotton monopoly, have been either privatized or liquidated.

40. The **privatization process** has proceeded at a quick pace, with 40-60 enterprises being sold each month through the auction process. Moreover, the State Property Committee has started the case-by-case privatization of large and valuable enterprises for which strategic investors will be sought. Within just 10 months, about 95 percent of the population received vouchers and a system of voucher auctions was put in place. Around 450 medium size enterprises were privatized through the voucher auctions by end 1997. In addition, more than 13,000 small enterprises were sold.

41. In the **agricultural sector**, fundamental policy changes were introduced in 1997. The state order system was abolished and producer prices were liberalized. State companies operating in the wheat and cotton sectors were either privatized or liquidated. The State

Wheat Reserve Agency was not allowed to purchase domestic wheat to stabilize domestic prices. Parliament approved a law on land reform in July 1996, which clarified the land privatization process. More than 28,000 private farmers had registered as legal entities by end-1997.

II. RECENT DEVELOPMENTS IN THE FINANCIAL SECTOR: REMOVING OBSTACLES TO FINANCIAL DEEPENING

A. Introduction

42. Azerbaijan has made remarkable progress with macroeconomic stabilization, and the pursuance of prudent monetary policies by the Azerbaijan National Bank (ANB) has helped reduce financial imbalances. Consequently, inflation has abated rapidly, interest rates are positive in real terms, and the exchange rate has appreciated steadily since mid-1995.

43. As true market conditions take hold **weaknesses in the banking sector** have been revealed (mainly in the form of liquidity problems, mismatches between funding costs and returns on lending, and large amounts of bad loans) which are only slowly being resolved. This slowness is placing a brake on financial sector development, and economic performance.

44. Beyond simple banking activity, **development of other financial markets** has been hampered by a combination of constraints by the authorities (e.g., favoring nationally-owned banks over foreign-owned institutions, favoring banks rather than nonbank financial institutions, irregular timing of treasury bill auctions, and distortions to market signals), and the absence of the appropriate legislative framework.¹² Both sets of obstacles need to be removed.

45. **Payment system bottlenecks** still exist in key areas, in both domestic currency transactions and in the foreign exchange market. Delays and unconsolidated accounts require banks to hold large amounts of excess reserves. Overcoming these problems will require a clear and determined effort by the authorities.

46. All of these problems have contributed to the **lack of financial deepening** and also have made it more difficult for the authorities to move towards their goal of being able to use indirect instruments of monetary policy. The following sections outline several of the main problems in the financial system, indicate what more needs to be done, and the authorities' plans in the short-to-medium term.

¹²The major nonbank financial institutions are 55 insurance companies; but securities trading houses are also developing as corporate securities are being quoted and traded through the Baku interbank currency exchange (BICEX).

B. The Nature of Banking Activity

47. Azerbaijan's banking system has too many institutions, and is weak and unbalanced (Table 6). The number of banks has declined significantly in recent years, but the structure of the system has changed very little (Table 7). The scale of activity by the state-owned banks has been limited by their need for restructuring (see section C), but they still continue to dominate the banking system although their share of bank business is declining. Whereas they accounted for 97 percent of manat deposits as of January 1, 1997, they accounted for about 88 percent by January 1, 1998, implying a four-fold increase in the business of private banks during this period. Similarly, private banks' credit extension doubled during this period, while only one of the state banks increased credit by any significant amount (about 20 percent) and the others saw credit extension decline or stagnate.¹³ This growth by private banks is important at a time when banks continue to report difficulties in finding creditworthy lending opportunities and are reluctant to lend without sizeable collateral requirements. Banks' risks in lending remain high because of the absence until recently of a modern bankruptcy law, the absence of clear definitions and registration of collateral, and the legal preference given to paying enterprises' wage and tax arrears before dealing with overdue loans. Banks have also had to deal with other impediments that tend to sap public confidence and thus discourage deposits, such as sweeping powers given to the police and tax authorities with regard to access to bank assets and customer details.¹⁴

Table 6. Azerbaijan: Indicators of Banking Sector Performance, 1993-97
(In percent, end-period)

	1993	1994	1995	1996	1997
State-owned banks' share of total assets	78	82	81	83	70
Total assets as percent of GDP	215	90	20	26	24
Total loans as percent of GDP	41	25	9	10	10
Credit to private sector as percent of GDP	23	14	5	5	6
Nonbanks' deposits as percent of GDP	4	2	1	1	2
Nonperforming loans (as percent of total loans)	27	16	22	20	20
Provisions for loans losses (as percent of nonperforming loans)	...	...	...	12	53
Average lending spread (deposit-lending rate)	40	35	20	20	10

Sources: Azerbaijan National Bank; and Fund staff estimates.

¹³Analysis of credit developments is hampered because the current accounting system does not permit an identification of credit by economic sector. A new chart of accounts for commercial banks is currently being introduced.

¹⁴These powers have been reduced recently in conjunction with the closing of settlement accounts.

Table 7. Azerbaijan: Size and Structure of the Banking System
(Position on January 1)

	1995	1996	1997	1998
Total number of banks	210	180	136	99
of which:				
state-owned	4	4	4	4
majority foreign-owned	6	11	13	13

48. However, **many of the private banks are weak**, in part because, until recently, the bank licensing process in Azerbaijan did not follow a precise set of rules. Consequently, a number of unsound institutions were granted banking licenses. The problems caused by these banks have contributed to the low level of public confidence in the banking system. In an effort to overcome this, the ANB instituted new procedures in late 1996 that involve detailed documentation, including information to assess the financial situation of the founders of the bank, as well as the professional skills of key management officials.¹⁵ Bank licensing regulations and procedures are now largely sound, but could still be improved by ensuring that (i) new banks have a basic system of internal controls from the outset, including using the principle that significant financial control is vested in at least two individuals; (ii) applicants submit a business plan for the next three years; and (iii) in the case of foreign-owned banks and branches, the home country supervisory authority can effectively supervise these banks on a consolidated basis.

49. **Many of the domestic private banks are essentially vehicles for financing particular enterprises** and thus provide a limited banking service and do little to mobilize deposits.¹⁶ Nevertheless, these banks face a variety of institutional problems. The licensing regulations limit the number of branches a new bank may open, based on its level of authorized capital, as follows:

¹⁵A license would be refused for lack of experience, weak financial situation of the founders, or criminal records for the members of the Board.

¹⁶It is unclear how profitable such business is and thus if banks have much incentive to lend to new small customers.

<u>Statutory Capital</u>	<u>Maximum Number of Branches</u>
US\$1.25 million	15
US\$1.25-2.5 million	30
US\$2.5-5 million	50
more than US\$5 million	no limitation

The authorities' rationale for this rule is to limit the risk for the customers if a bank goes bankrupt. However, this arrangement gives advantages to "old", mainly state-owned, banks which created a network before the regulation was implemented. Furthermore, supervisory tools have been improved, and can now be used to manage these risks without the need for such restrictions. Thus, since a network is an important way to channel financing and banking services beyond the capital, the removal of this regulation could invigorate banking activity. However, only efficient, adequately capitalized, and well organized banks with strong internal controls should be granted the freedom to open branch networks.

50. **Foreign-owned banks face additional obstacles.** In particular, foreign-owned banks must seek approval for an increase in statutory capital, and the banking law allows the central bank to set a limit (30 percent) on foreign capital in the banking system.¹⁷ Once the limit is met, licensing of new banks with participation of foreign investment as well as branches of foreign banks is stopped. The actual ratio is currently close to 20 percent. Several foreign-owned banks have had their requests for capital increases denied or the increases permitted were far below the amount requested. In addition, if neither the director nor one of the deputies of a proposed bank is an Azeri citizen, the license can be refused. Furthermore, the licensing regulation also requires that foreigners seek the ANB's permission to buy issues of new share capital of banks in Azerbaijan. The authorities argue that these restrictions protect domestic banks, which still suffer from a lack of banking skills, and from a generally poor financial situation. However, international experience has shown that increasing foreign presence brings broad gains in terms of improved banking services, increased confidence in the banking system, more efficient mobilization of savings, and probably improved returns on banking investment. These developments in turn could stimulate domestic growth, and help add resilience to the domestic economy. Furthermore, as has been revealed in many other countries, the strong and able domestic banks will find their niche and survive, and the only price they will pay will be an enforced improvement in their efficiency and customer orientation.

51. There are **clear indications that banks suffer a lack of trust.** Cash transactions predominate, currency remains close to three-quarters of manat broad money, and the level of

¹⁷This effectively places a maximum and a minimum capital requirement on foreign-owned banks.

manat deposits has remained virtually unchanged over the past year.¹⁸ The manat money multiplier has tended to decline and is close to 1. The significance of foreign currency deposits (about 25 percent of broad money) has increased slightly, in part because interest rates on manat deposits have declined over the past year and a half and now are little higher than those paid on foreign currency deposits.

C. Progress with Restructuring the State-owned Banks

52. An incipient crisis for the state-owned banks surfaced in late 1995 when a severe liquidity shortage for the Savings Bank exposed a more general problem of a mismatch between these banks' funding costs and the returns on their lending activities. In response to this problem, the ANB initially developed rehabilitation plans for each of the state-owned banks, which were formalized in September 1996 and focused on loan recovery and measures to improve profitability.¹⁹ The plans foresaw liquidation if a bank could not establish profitability or failed to meet zero capital adequacy by mid-1997. Three of the four banks did not meet this test, but Fund staff agreed with the authorities that in light of the progress made and the importance of these institutions in the payments system and for rural financing, that liquidation would be premature. The rehabilitation plans were therefore reformulated, in collaboration with the World Bank, with specific targets to be monitored in the context of the Structural Adjustment Credit. The first phase was an intensification of the original plans, with specific targets for loan recovery, branch closures, and staff reduction. Once this phase was successfully completed then consideration could be given to possible recapitalization and privatization.²⁰

53. **Rehabilitation and privatization of the state-owned banks has not occurred as quickly as previously expected.** All four banks have recently been audited by internationally reputable firms and their results have been mixed. International Bank has developed well and is in a good position to be privatized soon; if its privatization plan is endorsed by the authorities its sale could occur by end-1998. Savings Bank has made considerable progress in implementing its restructuring plan, and recorded only a small loss in 1997, with a profit recorded in the final quarter. With an appropriate solution to (i) the matter of its obligations to the central bank, the ministry of finance, and other government agencies and (ii) improvements in management and accounting systems, the prospects look good for this bank's privatization by mid-1999. The situation of Prominvestbank and Agroprombank

¹⁸Anecdotal evidence suggests that much business (including that related to external trade) bypasses banks to avoid scrutiny from the tax authorities.

¹⁹The resolution of the liquidity problems also involved loans and guarantees from the ministry of finance and the central bank, which have to be taken into consideration as future strategies for these banks are developed.

²⁰Further background details are contained in SM/96/301 and EBS/97/106.

remains unsatisfactory, with inadequate rates of loan collection, large losses, and administrative and management weaknesses still evident. In the near term, the operations of these banks may have to be reduced substantially while strategies for their future are developed, perhaps involving the help of foreign banks, and a more aggressive approach to dealing with their bad loans.

C. Banking Supervision Regime

54. The authorities are in the process of creating better order in the banking sector by applying stricter bank supervision. They introduced new bank licensing regulations in November 1996. **New prudential regulations** were introduced in June 1997 that are largely in accordance with international best practices (see Table 8). However, during the first quarter of 1998, about one-third of banks were not complying with prudential norms and most of these have had to face one of several sanctions, either fines (7 banks), higher required reserves (7 banks), or revocation of banking licence (10 banks).²¹

²¹A bank may have its licence revoked for being out of compliance with prudential regulations for three straight months, or for not submitting its prudential reports for two straight months. During 1997, 13 banks had their licences withdrawn for violating prudential regulations.

Table 8. Azerbaijan: Bank Prudential Ratios

	Previous Regulation (October 1996)	New Regulation (June 1997)	Comments
K1 (noncash part of statutory capital)	8%	10%	
K2 (capital adequacy ratio)	10%	10%	<ul style="list-style-type: none"> • Number of risk weights cut from seven to four consistent with Basle definitions • Loan loss provisioning phased in 1997-99
K3 (instant liquidity)	0.3	0.4	<ul style="list-style-type: none"> • Link with the level of the required reserves ended
K4 (current liquidity)	0.8	0.8	
K5 (long-term liquidity)	0.8	0.8	
K6 (large exposure ratio)	40%	25%	<ul style="list-style-type: none"> • Transitional regulation proposed by Fund
K7 (maximum large value credit exposure)	8 times	8 times	<ul style="list-style-type: none"> • Strengthened definition of a large value loan
K8 (maximum deposit ratio)	100%	200%	<ul style="list-style-type: none"> • Fund recommended 200-300% • Linked to K3
K9 (maximum exposure ratio per depositor)	100%; 30% as of January 1998	canceled	<ul style="list-style-type: none"> • Fund recommended cancellation
K10 (limits on equity holdings)	total 40% (10% each)	new K9: 40% (10% each)	
K11 (limits on loans extended to shareholders and associated individuals)	40%	new K10, 10%	<ul style="list-style-type: none"> • Definition of related individuals improved (more than 5% of statutory capital)
K12 (limits on loans extended to insiders)	total 10%; 3% for a single insider	new K11: total individuals 10%; 3% for a single insider; maximum 20% for both individuals and legal entities.	<ul style="list-style-type: none"> • Regulation of the level of interest rates applied to loans extended to insiders; • Complementary limit introduced

Source: Azerbaijan National Bank.

55. The central bank also continues to exercise regulatory influence through the application of **reserve requirements**. Since February 1997, a single 12 percent ratio has applied for manat and foreign currency deposits instead of differential ratios of 8 percent and 6 percent, respectively.²²

56. While the bank supervision principles are now good, implementation of them needs to be more forcefully and consistently applied. The central bank is improving its practices in this area by broadening staff training in on-site and off-site supervision, by giving management responsibility to a deputy governor, and planning to appoint a resident technical advisor in the near future.

D. Development of Financial Instruments

57. Little development of **new types of financial instruments** has occurred over the past three years.²³ Short-term **treasury bills** were introduced in late-1996, but while auctions are held periodically, volumes remain small, and the market's orderly development has been constrained by ministry of finance reluctance to borrow at market rates and a consequent reluctance by banks to participate in the market (see Box 3). Thus, secondary market activity remains insignificant and no basis exists for conducting open market operations. **Development of other securities markets** has also been sluggish, in part being hampered by weaknesses in (i) the legislative framework for securities issuance and trading, and (ii) the proper codification of types of collateral, both of which are now being addressed by the introduction of a new laws.

²²At that time, it was also mandated that required reserves on foreign currency deposits were to be held in foreign currency, although they may be lodged in manat in exceptional cases.

²³Some banks are known to have undertaken foreign exchange forward deals during the past year, and BICEX has facilities for futures trading, but information on such transactions is very limited.

Box 3: Development of the Treasury Bill Market

Treasury bills (T-bills) were introduced in Azerbaijan in September 1996, with an initial offering of one-month bills for manat 50 million. Since then, most auctions have been for one-month bills, but three-month bills have also been offered since June 1997. The outstanding stock of bills at end-April 1998 was manat 44 million (about 0.3 percent of GDP). There are now 19 primary dealers, all of which are commercial banks licensed in Azerbaijan, including 2 foreign-owned banks (which thus far have not been very active). The central bank has so far chosen not to licence any nonbank financial institutions as primary dealers. Bids from domestic or foreign nonbanks must therefore be placed through banks; at present, nonbank holdings of T-bills are negligible. Primary market operations have developed slowly, in part, because the authorities have tended to manage the market by cutting bids off at around 12 percent and thus selling less than the full amount offered, rather than selling the full amount at whatever would then be the prevailing price (indications are that if all bids were accepted, the "market" interest rate would be around 16 percent). This reflects the government's concern about potential high debt service costs, and the existence of cheaper financing options, either through the use of domestic arrears, oil signature bonus funds, or even central bank overdrafts. The secondary market is barely operational, in part due to the limited volume of bills and also the stickiness of prices.

The authorities have now undertaken to open fully the T-bills market, in particular (i) by conducting auctions according to a regular pre-announced schedule; (ii) by announcing well in advance the amount of T-bills that will be offered at each auction; (iii) by selling the total nominal amount offered at prices determined by the market; and (iv) by removing the participation fee of 1.2 percent per annum for primary dealers bidding in the auction.

E. Payments System Problems and reform

58. Azerbaijan still experiences severe payments system problems and substantial progress needs to be made with payments system reform. The current system remains slow and paper-based, and lacks circuits for the expeditious settlement of foreign exchange (and securities) transactions. The poor rate of progress appears in large part due to the absence of a strategic vision for the payments system. However the central bank is keenly aware of this shortcoming and has given high priority to reforming the system (see Box 4). In BICEX, frequent delays occur in payments to banks' foreign exchange correspondent accounts, after the manat leg of the transaction had been settled at the ANB. While the situation has apparently been improving, any delay in completing either leg of a foreign exchange transaction poses serious risks for the bank that has already paid its part. These risks would be eliminated by adopting a simultaneous payment-versus-payment (PVP) system for such transactions. Similarly, while the organized interbank foreign exchange market (OICEX) is well designed, is open to all banks with foreign exchange licenses, and has transparent and nondiscriminatory trading procedures, its operation is flawed by its lack of fixed settlement

procedures.²⁴ Banks must determine how to settle each transaction on a bilateral basis, which is inefficient, and concerns about settlement risk have also led some banks to avoid the OICEX altogether. Such caution is understandable. As with the BICEX, a PVP system would be an efficient way of overcoming this problem.

Box 4: The Payments System Project

The ANB started in late-1997 a 3-7 year project to develop a modern western-style payment system to meet Azerbaijan's current and future needs. As part of this effort, the ANB is seeking an approach that yields tangible short-term improvements, while avoiding making major investments in technology that would require replacement before the project's completion. A concrete strategy and clear timetable for the project are now being developed, in collaboration with Fund technical assistance. Highest priority is likely to be given to facilitating (i) efficient transfer of interbank funds, (ii) transactions in foreign exchange and securities markets, and (iii) effective execution of monetary operations. High priority has also been given to the adoption of delivery-versus-payment (DVP), and payment-versus-payment (PVP) settlement principles. Working groups (including banks) are now examining the detailed requirements of such systems, focusing on wholesale payments, low value payments, accounting and consolidation, legal matters, and technology and standards. In the coming months, the following should be achieved:

- a voluntary PVP system for banks when both parties to a foreign exchange trade have accounts in the ANB;
- initial steps for the introduction of a securities book-entry system needed both for the ANB to conduct open market operations and to create the basis for a secondary market in securities;
- the legal basis for secure electronic payments, and intra-day liquidity to banks against collateral; and
- an Interim Gross Settlement System (IGSS) should be developed based on currently available technology, and plans prepared for a Real Time Gross Settlement System (RTGS) with online access for banks.

Other short-term improvements will involve establishing a clearing house arrangement (whereby banks participating in the clearing can exchange directly packages of documents between themselves, and only the net of the payments be posted on the banks' central bank accounts), and the ability for banks to clear all of their own interbranch payments on their own books.

Other measures that will minimize the balances banks must hold at the ANB to clear payments, and simplify payment operations for both the ANB and commercial banks will include:

- allowing banks to use reserves for intra-day liquidity;
- introducing reserve averaging; and
- consolidating all ANB processing in Baku, once telecommunications facilities will support this, so that commercial banks may operate with a single ANB account, if possible.

The reduction in required clearing balances should help improve bank earnings directly by reducing the financial drag of holding these balances, and would also help to bring down interest rates. In addition, since some banks' lending operations may be constrained by capital adequacy requirements, the funds released to the banks are also likely to stimulate the development of securities markets.

²⁴ Much of the volume on the OICEX involves banks making foreign exchange sales/purchases between their own customers' accounts. Such trades should not be necessary, as banks should be free to undertake such foreign exchange trades without constraint or limit. (Banks are now permitted to sell up to US\$15,000 each day to customers without resorting to the OICEX.) The ANB contends that this rule is needed to allow the tracking of such trades. However, if such tracking is deemed essential, it would perhaps be more efficient to cover it by reporting requirements.

59. The envisaged payments reforms will have profound effects on the payment services that banks will be able to offer their clients; however, they will also require major changes in banks' back-office operations. There is thus a need for continuous communication and cooperation between the central bank and commercial banks as the strategy is developed and implemented. The project is ambitious and will need careful coordination by the central bank.²⁵

F. Future Prospects

60. **The authorities now have in place several elements of a banking sector reform program that can transform dramatically the effectiveness of Azerbaijan's banking system.** But strong commitment is needed, and implementation must occur without too many slippages. It is particularly important that the restructuring of the state banks proceeds quickly and that those that seem close to being ready for privatization (International Bank and Savings Bank) can implement such plans quickly and continue to develop new business. Delays in dealing with the problems of the other state banks (Prominvestbank and Agroprombank) are likely to involve higher fiscal costs, slow down payment system reforms, impede the development of monetary operations, create undue uncertainties, and perhaps sow the seeds of continuing problems. As recent studies for the World Economic Outlook have shown, early problem diagnosis and action lead to better success in recovering from banking sector problems.²⁶

61. Official resistance to the full development of banking and other financial markets—based on concerns about short-term costs or from a fear of competition from foreign-owned entities—appears to be lessening. An active treasury bill market will provide an important building block for other market developments. Many banks (and some nonbank financial institutions) have indicated their interest in greater involvement in this market, but the market requires much larger volumes. More orderly debt issuing and T-bill market practices will send a clear signal from the authorities that this and other markets will be allowed to develop. In addition, foreign-owned banks can provide much needed expertise from which the whole banking system can benefit, and removing impediments to the entry and development of such banks would be another strong signal of willingness to see market-based economic structures develop.

²⁵World Bank funding has been requested for hardware and system design.

²⁶See World Economic Outlook, May 1998, Box 6 ("Resolving Banking Sector Problems").

III. REAL EXCHANGE RATE APPRECIATION IN A RESOURCE-RICH COUNTRY.

A. Introduction

62. This chapter discusses the impact of the recent nominal appreciation of the manat on competitiveness, in an attempt to assess whether there is evidence in favor of a misalignment of the exchange rate. The chapter first discusses the role played by the exchange rate in macroeconomic stabilization; it then discusses the existing evidence in favor of and against a deterioration of the country's competitive position, using not only standard indicators of competitiveness but also the results of a simulation based on a neoclassical two sector growth model.

B. Inflation and the Nominal Appreciation of the Manat

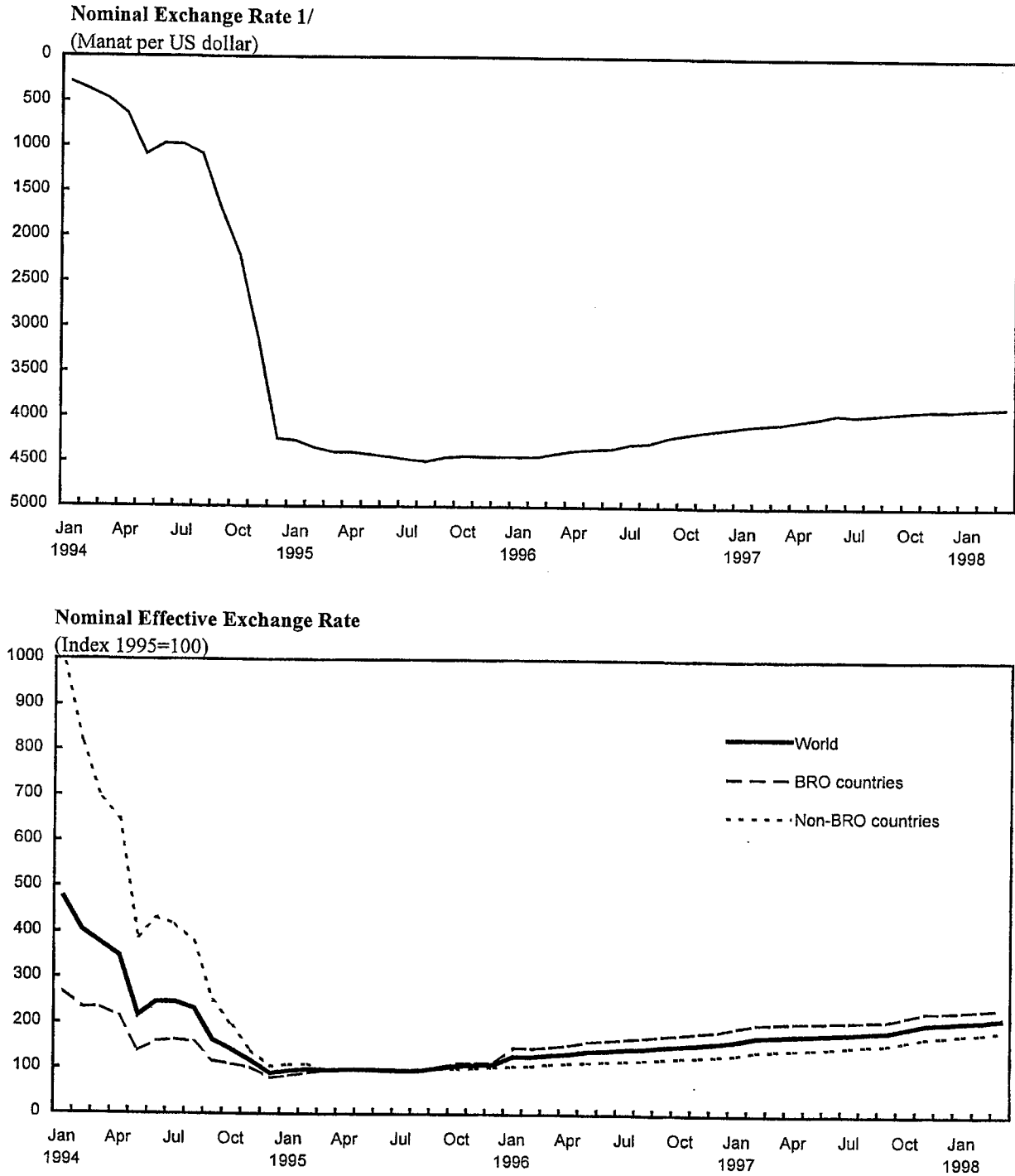
63. Nominal exchange rate appreciation (Figure 4) has been a key element of the macroeconomic stabilization in Azerbaijan.²⁷ Together with a switch in the monetary policy regime—which stopped monetizing fiscal deficits—nominal exchange rate appreciation built confidence in the manat and helped to curb inflation from the near hyper-inflation levels experienced during 1994 and early 1995. Average consumer price inflation dropped to 4 percent in 1997 from 411 percent in 1995. The extent of this inflation reduction was larger than in most other BRO countries, where, although often successful, the disinflation process left consumer prices increasing at moderate rates. In fact, Azerbaijan recorded both the lowest end-of-period and average inflation rates among the BRO countries in 1997.

64. The nominal appreciation of the manat has raised concerns about the country's external competitive position. Since the manat strengthened as the Azerbaijan National Bank offset strong capital inflows through market purchases of manats so as to achieve the monetary targets, one concern is that maintaining a strict monetary policy stance would bring about an excessive nominal appreciation, which could stifle growth in the non-oil sector and generate excessive dependence on the oil sector.

65. What follows tries to assess whether the manat appreciation has started to affect the country's competitive position. From a policy perspective one needs to assess whether the observed exchange rate appreciation is consistent with the fundamentals of the economy or it represents an overvaluation—defined as a short-term misalignment of the exchange rate induced by inappropriate fiscal and monetary policies. If one were to conclude that the exchange rate had overshoot its equilibrium level, one of the policy conclusions would be that monetary policy should be relaxed, perhaps by sterilizing to a lesser extent the capital inflows

²⁷The manat appreciated by 14 percent against the dollar between end-1995 and end-1997.

Figure 4. Azerbaijan: Exchange Rates, 1994-98



Sources: Azeri authorities; and Fund staff estimates.

1/ An upward movement indicates appreciation.

and accommodating partially the increased demand for manats.²⁸ Instead, if the observed exchange rate appreciation is in a sense an equilibrium result, policy could continue to sterilize capital inflows to achieve the money and inflation targets.

C. Assessing Competitiveness

66. The applied economic literature usually assesses the impact of trends in the exchange rate on competitiveness in four different ways. The first method compares the real exchange rate with its level in a base period in which the exchange rate is somehow thought to reflect equilibrium forces. The second method defines the exchange rate consistent with purchasing power parity as the relevant benchmark for comparison with the actual exchange rate level.²⁹ The third method specifies a behavioral macroeconomic model which includes policy variables and computes the equilibrium exchange rate as a function of time-series estimates of the model's structural parameters.³⁰ The fourth method uses estimates of a reduced-form function for the equilibrium dollar wages obtained from panel data for a cross-section of countries and compares the actual level of dollar wages with the predicted one. In this approach the dollar wage is seen as a proxy of the real effective exchange rate, thus deviations of the actual dollar wage levels from its predicted levels indicate either overvaluation or undervaluation of the exchange rate.³¹

67. All four of these approaches are difficult to use in the case of Azerbaijan. For the first method, no historical equilibrium benchmark can be defined, as relative prices before transition did not reflect market forces and because the consensus view is that the exchange rate was substantially undervalued in the early transition period.³² For the second method, no purchasing power parity-based exchange rate data are available. For the third method, reliable time-series of adequate length are missing. The fourth method provides some

²⁸This issue is discussed by Rosenberg, C. and Saavalainen, T. (1997) "How to Deal with Azerbaijan's Oil Boom? Policy Strategies in a Resource-Rich Transition Economy" IMF WP page 7.

²⁹These methods are described by Bayoumi et al. "The Robustness of Equilibrium Exchange Rate Calculations to Alternative Assumptions and Methodologies", in Williamson, John ed. (1994).

³⁰An example of this approach is provided by S. Edwards "Real and Monetary Determinants of Real Exchange Rate Behavior: Theory and Evidence from Developing Countries" in J. Williamson ed. (1994) Ch. 4.

³¹ This approach was developed by Halpern and Wyplosz "Exchange Rate Policies in Transition Economies: in Search of Equilibrium" IMF WP 1995.

³²See Rosenberg and Saavalainen (1997).

indications, but the parameter estimates have been obtained from a cross-section of countries which include a significant number of OECD and eastern European countries; in fact, when applied to Azerbaijan, the predicted equilibrium dollar wage implies an overvaluation which is too large to be taken seriously.³³

68. What follows discusses the impact of the recent exchange rate appreciation on competitiveness by: (i) examining a number of indicators, including trends in the real exchange rate, the relative dollar wage, export performance, and the growth performance of the non-oil economy; and (ii) developing a formal model for a resource-rich country which can be calibrated to the Azeri economy and simulated to examine the impact of either productivity shocks or improvements in the prospects for resource exploitation.

D. Real Exchange Rate Indexes and Indirect Indicators

69. Several indicators can be used to assess competitiveness, among them: (i) the CPI-based real effective exchange rate index (Figure 5); and (ii) indirect indicators, including, relative US dollar wage rates, trade balance developments, foreign investment and sectoral output trends.

The Real Effective Exchange Rate Index

70. Somewhat surprisingly, the CPI-based real effective exchange rate shows very little overall appreciation over the period 1995-1997. This index has increased by only 2 percent since January 1995 and by around 5 percent since January 1996. This reflects the better inflation performance in Azerbaijan than in its main trade partners (Figure 6).³⁴ The index shows a larger appreciation vis-à-vis the non-BRO countries than vis-à-vis the BRO, mainly on account of the larger inflation differential with the latter set of countries. The significant real appreciation recorded against the dollar since 1995 is somewhat misleading as an indicator of changes in competitive position (Figure 5) because the country's major trading partners remain Russia, Iran, Ukraine and Turkey.³⁵

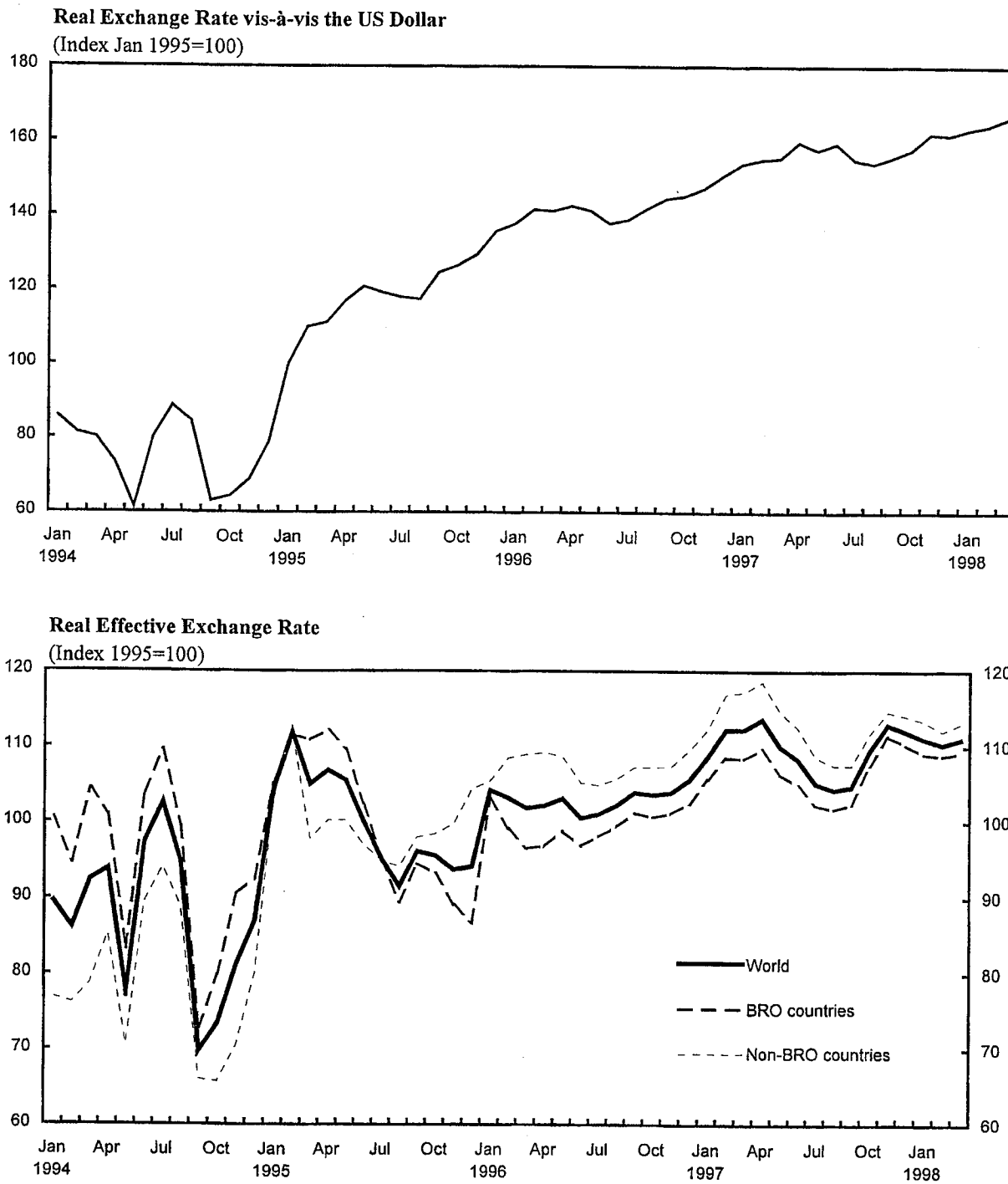
71. The nominal appreciation of the manat has translated into a modest real appreciation in 1996 and 1997, which has only offset the real depreciation that occurred during 1995, from

³³This method would suggest that the equilibrium dollar wage would be US\$3 in 1997, whereas actual wages were close to US\$30.

³⁴Overshooting models of the kind developed by Dornbush in "Expectations and Exchange rate Dynamics" *Journal of Political Economy* 1976 appear to overstate inflation inertia as the observed real appreciation in Azerbaijan is clearly smaller than the one predicted by this class of models. On this issue see Rosenberg and Saavalainen (1997).

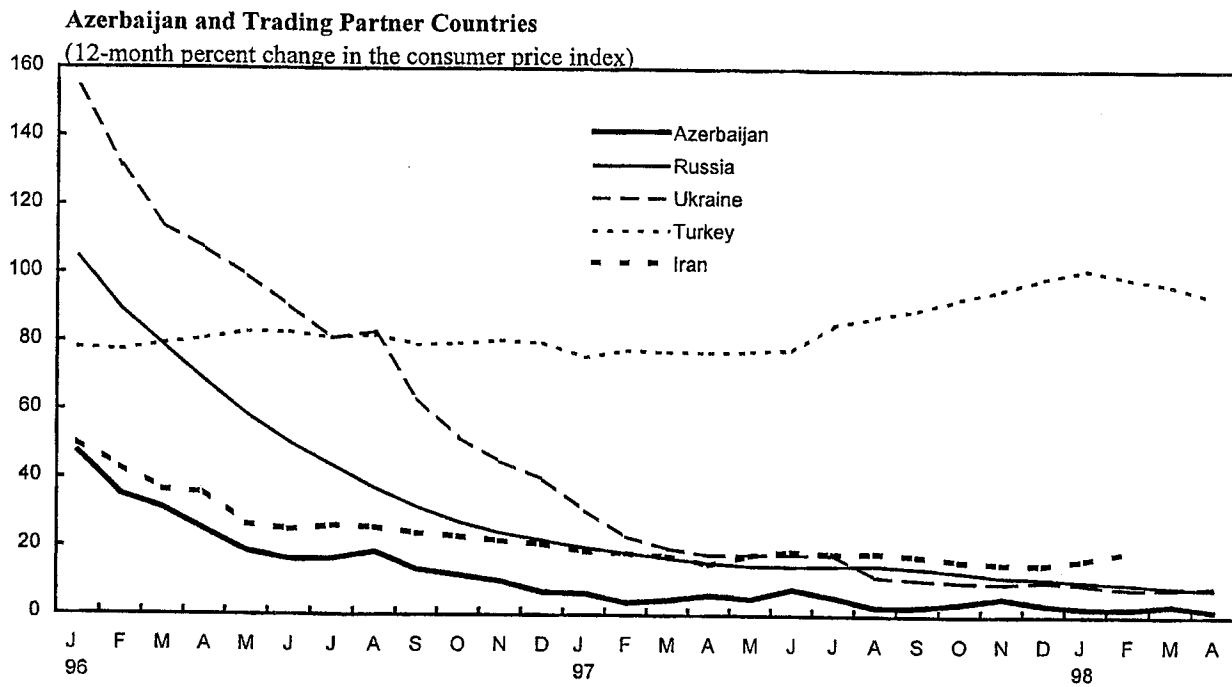
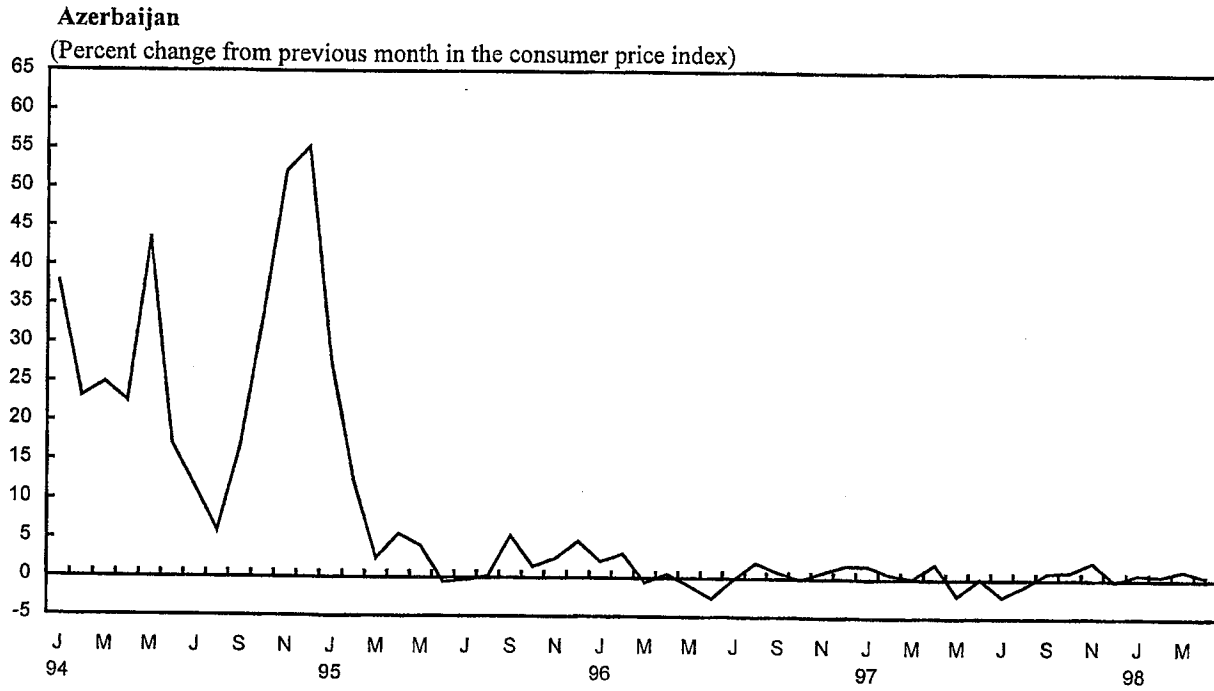
³⁵Less than 2.5 percent of the Azeri trade takes place with the US.

Figure 5. Azerbaijan: Real Exchange Rates, 1994-98



Source: Fund staff estimates.

Figure 6. Consumer Price Inflation, 1994-98



Sources: Azeri authorities; and Fund staff estimates.

a level which by no means can be considered overvalued, as it followed a sharp depreciation in 1993 and 1994. The small real exchange rate appreciation despite the significant nominal appreciation in 1996 and 1997 reflected the favorable impact on domestic prices of both strict financial policies and significant steps in trade liberalization, which were undertaken as a part of the Fund-supported economic reform program. Monetary policies sterilized the monetary impact of the oil-related capital inflows, while fiscal policy refrained from using the proceeds from oil-signature bonuses to finance expenditure increases.

Indirect Indicators of Competitiveness

72. The comparison of **dollar wages levels** with those in the country's major trade partners is favorable to Azerbaijan, with no apparent reduction in the gap between the average dollar wage in Azerbaijan and those in the competitor countries during the last two years (Figure 1). However, caution is needed in drawing conclusions about relative competitiveness from the comparison of dollar wage levels, since this indicator would need to be adjusted by productivity differences across countries, on which no data are available.

73. Other indirect indicators of competitiveness do not point to a worsening of the Azerbaijan relative competitive position as a result of the nominal appreciation of the manat since 1995. Excluding crude oil, **exports** grew at a rate similar to demand in their main markets during 1996-97, as illustrated by Table 9, which reports the growth of overall imports by Azerbaijan's major trade partners. Moreover, excluding the imports for oil developments, imports were flat in 1997. The **trade deficit** has been fairly stable, once the imports for oil sector developments have been netted out.³⁶ In fact, excluding the imports to the oil sector, the trade deficit as a percent of GDP declined from 10 percent to 8 percent of GDP between 1995 and 1997.

74. **Foreign direct investment** in Azerbaijan has surged since 1995 on account of the oil sector developments. This has little relation to exchange rate and competitiveness developments. However, foreign direct investment in the non-oil sector does not appear to have been hurt by a lack of competitiveness. The State Statistics Committee estimates that it increased from US\$30 million in 1995 to US\$250 million in 1997, although one has to acknowledge that competitiveness is only one of a number of factors affecting non-oil related foreign direct investments.

75. There are no apparent signs that the strength of the manat has had an adverse impact on the **growth of the non-oil economy**, which rose to over 8 percent in 1997. In fact, the recent growth recovery reflected mainly a revival of economic activity in construction and services (see Chapter I).

³⁶Imports linked to oil sector developments are not affected by competitiveness changes as they reflect long-term direct investment decisions.

Table 9. Indirect Competitiveness Indicators
(Annual change in U.S. dollar trade, in percent, unless otherwise stated)

	1995	1996	1997
I. Growth in the market for Azeri exports	19.8	10.6	5.9
II. Growth in Azeri exports, excluding crude oil	-0.3	16.0	0.1
III. Growth in imports, excluding the oil sector	9.5	21.6	-0.1
IV. Trade balance, excluding imports to the oil sector (in percent of GDP)	-10.2	-10.5	-8.0
V. Foreign direct investment, excluding the oil sector (in millions of US dollars)	30.0	174.0	248.0
VI. Non-oil output growth (percent)	-14.3	1.8	8.1

Sources: Azeri authorities; and IMF staff estimates.

E. A Simulation Approach

76. To assess whether the real exchange rate of the manat has overshoot its equilibrium level following the recent nominal appreciation, one can build a simple two-sector formal model and use it to simulate the impact of the increased oil-resources availability on equilibrium. Moreover, the model can provide indications of the extent of the real exchange rate appreciation which could arise from different rates of growth of productivity in the two economy's sectors. The model's structural parameters can be calibrated using national accounts information. We use a modified version of the analytical framework developed by Rebelo and Vegh to explain a number of stylized facts in exchange-rate based stabilizations.³⁷

The Model

77. This section illustrates the main features of the analytical framework. The model represents a small open economy with perfect international capital mobility and populated by a large number of identical households, which maximize their life-time utility over sequences of work effort and consumption of tradable and non tradable goods. The economy has the production structure of a specific-factors model (Mussa, 1974).³⁸ Labor is mobile between

³⁷Rebelo, S. and Vegh, Carlos "Real Effects of Exchange-Rate-Based Stabilization: An Analysis of Competing Theories", in NBER Macroeconomics Annual, 1995.

³⁸See Mussa M. (1974) "Tariffs and the Distribution of Income: the Importance of factor specificity, substitutability and intensity in the short and long run", Journal of Political

(continued...)

sectors and elastically supplied. The specific factors are capital and land, used in the production of tradables and non-tradables. Tradable goods can be used either for consumption or investment, which is subject to adjustment costs.³⁹ For simplicity, it is assumed that the households directly operate the economy's technology and sell their production in the goods market. Households can borrow and lend at an exogenously given real interest rate and face a budget constraint with slope determined by the relative price of tradables in terms of non tradables, i.e., the **real exchange rate**.

78. This model generates two important predictions on the behavior of the real exchange rate. The first is a version of the Balassa-Samuelson effect, which envisions real exchange rate appreciation as a result of **faster productivity growth in the production of tradables** than of non-tradable. An attractive feature of this modeling strategy is that the impact on the real exchange rate can be quantified by estimating parameters for the different values of the sector specific productivity shocks. The second is that an **increase in the economy's net wealth** —such as the one experienced by Azerbaijan following the signing of the *contract of the century*⁴⁰ — would also result in a real exchange rate appreciation. The wealth effect deriving from increased possibilities of exploitation of natural oil resources increases demand for consumption of both tradables and nontradables; however, the relative price of nontradables (i.e., the real exchange rate) has to increase in order to attract labor in the production of nontradables. Thus, in equilibrium, as a result of a positive wealth effect: the real exchange rate appreciates; consumption of tradable goods expands more than that of non tradables; and production of tradables grows less than consumption of tradables which leads to a widening of the trade balance, financed by the stream of income generated by the larger wealth. These effects are broadly consistent not only with the experience in Azerbaijan but also with the prominent features of other exchange-rate-based stabilizations.⁴¹

³⁸(...continued)
Economy 82.

³⁹Assuming adjustment costs in investment is not essential to the basic model's predictions, but avoids predicting excessive volatility in investment.

⁴⁰The expression *contract of the century* refers to the agreement between the Azeri state oil company (SOCAR) and foreign oil companies to establish a consortium (AIOC) to exploit oil resources in Azerbaijan. The parties reached agreement in September 1994.

⁴¹This is illustrated by Rebelo and Vegh (1995).

Calibrating the Model

79. The model produces detailed quantitative predictions of the path of the real exchange rate. However, for this purpose one needs to choose parameter values for both the production and demand side of the economy. The parameters have been chosen to try to replicate the values of some key ratios for the Azeri economy. This is certainly difficult for the Azeri economy, where substantial transformation is underway. Nevertheless, national accounts provide information on wage and profit shares, which have helped to calibrate the production functions for both tradables and non tradables. Slightly more difficult is the choice of the parameter values for the utility function. In this regard, the choice has been made to ensure that approximately half of total consumption expenditure is devoted to the purchase of nontradables.

The Results

80. Table 10 illustrates the main results of this exercise. The economy's responses have been studied with respect to two shocks. First, an increase in the economy's net foreign asset position resulting from the decision to develop the oil resources. This increase has been proxied by the present discounted value of the disbursements of oil signature bonuses received during 1995-1997.⁴² Second a favorable productivity shock in the production of tradables, which is assumed to grow by 10 percent more than in the production of non tradables. The table reports equilibrium responses for the real exchange rates for 12 quarters. **The model predicts larger exchange rate appreciation in response to both shocks than actually observed since 1995.**

⁴²This understates the increase in wealth, deriving from the possibility of exploiting the country's oil resources. However, the disbursements of oil signature bonuses represent an immediate and easily quantifiable impact on the country's net foreign asset position.

Table 10 . Azerbaijan: Simulation Results
(Relative price of non-tradables)

Periods	1995				1996				1997				1998
	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI	QII	QIII	QIV	QI
I. Higher productivity shock in tradables 1/	100	100	101	102	104	106	108	111	114	117	121	125	130
II. Higher net-foreign assets	100	102	105	107	109	112	114	116	118	120	122	124	126
III. Actual real effective exchange rate vis-à-vis the trading partners	100	95	92	90	97	96	99	101	107	103	105	107	106

Source: Staff simulations.

1/ Assumes annual productivity growth in tradables 10 percent higher than in nontradables.

F. Policy Implications

81. Caution is needed in drawing policy conclusions on the basis of this simple simulation. Nevertheless, the exercise underlines the fact that some real appreciation is unavoidable in response to the increase in the economy's net wealth associated with the development of the oil resources. Since the outlook for oil production and exploration points to a substantial and permanent increase in wealth, policies which attempt to counteract this real appreciation could produce adverse effects on the economy's resource allocation. For instance, such policies could slow down the economy's restructuring by maintaining inefficient enterprises, which would be better closed or restructured.

82. Both the competitiveness indicators and the results of the simulation suggest that there is little ground for considering the current level of the manat exchange rate as overvalued. So far, policies appear to have been successful in avoiding excessive pressure on the real exchange rate by sharply limiting the fiscal deficit, despite the availability of financing from oil bonuses, while sterilizing the large capital inflows to avoid inflationary pressures. Policies should continue to focus on preventing a serious misalignment by (i) maintaining the current cautious stance for both monetary and fiscal policies; and (ii) using part of the future oil revenues to build up foreign assets which would moderate pressures toward exchange rate appreciation, as discussed in Chapters IV and V. Attempts to engineer a real depreciation through an unexpected nominal depreciation would have at best short-lived effects, as the implied relaxation in monetary policy would have an adverse effect on inflation and eventually leave the real exchange rate level unchanged.

IV. VULNERABILITY TO EXTERNAL SHOCKS AND POLICY RESPONSES

A. Introduction

83. Azerbaijan's economy is increasingly becoming dependent on oil. Oil sector activities currently under way are concentrated on exploration and development of oil fields, and are financed by oil companies' foreign direct investment. Production, which has barely started, will increase considerably over the medium-term as oil exports are expected to rise steadily to reach close to 85 percent of total exports by 2005. At this time, the oil sector would contribute more than 50 percent of total budgetary revenues.⁴³ While the increase in the country's wealth brought about by oil resources is, of course, welcome, the increased dependency on oil will make the economy vulnerable to external shocks (most likely coming from a change in the oil price), and will significantly complicate economic management.

84. Despite the volatility of the oil price and the prospects for increasingly large oil-related current account fluctuations and their implications for the economy, Azerbaijan should be able to deal with such shocks by adopting appropriate flexible policy responses that would minimize the adverse impact on the economy. This chapter has two main objectives: to illustrate the sensitivity of the economy and in particular the external account to changes in the oil price; and explore possible policy responses that would enhance Azerbaijan's capacity to absorb potential oil shocks.

85. The chapter is organized as follows. By way of background, section B provides a brief overview of oil sector activities over the medium term. Section C illustrates the sensitivity of the external accounts to changes in the oil price by presenting a set of sensitivity analyses. Appropriate policy response measures that would provide a buffer to external shocks and reduce the vulnerability to oil price variability are discussed in section D.

B. An Overview of the Oil Sector

86. Given the uncertainty in oil exploration and the rapid pace at which the development of the oil sector is proceeding, estimates related to investment, exploration, and production remain at best indicative. Nonetheless, an understanding of this sector, based on discussions and information provided by oil companies operating in Azerbaijan, preliminary as it may be, is essential for analyzing the medium-term prospects and the sensitivity of the economy to changes in the oil price.

⁴³By way of comparison, the shares of oil exports in total exports in Kuwait, Oman, and Norway are 94 percent, 92 percent, and 45 percent, respectively. As for the share of oil revenue in total budgetary revenues, they are 73 percent, 78 percent, and 22 percent, respectively.

87. Azerbaijan's estimated oil reserves, located mostly offshore, are substantial at about 2 billion tons (15 billion barrels). By comparison, Nigeria's oil reserves are estimated at 2.8 billion tons, Oman's at less than 1 billion tons, and Kuwait's at 13 billion tons. According to oil sources, the Caspian Sea is considered one of the largest oil reservoirs in the world (after the Middle East), and Azerbaijan's share could well exceed present estimates.

88. Oil sector activities are governed by the existing nine production sharing agreements (PSAs) with various oil companies and consortia. It is estimated that oil-related foreign direct investment over 1998-2005 could be in the range of US\$10-15 billion. Although the terms of these PSAs are not the same, they do have a high degree of similarity: typically, oil bonuses are paid both on signature and at the time production reaches a certain level; production will be used first to fully recover operating expenditures; and when the value of production exceeds operating expenses, 50 percent of the excess will be used to recover capital expenditures with the remainder distributed as profit to shareholders according to specific formulas (which could be related, for instance, to the rate of return on investment).

89. The most important PSA, dubbed the "contract of the century", which was signed in 1994 with the Azerbaijan International Operating Company (AIOC)—an international oil consortium led by British Petroleum—gave AIOC the rights to develop three fields in the Caspian Sea: the first field (Chirag), known as "early oil", and the other two fields (Azeri and Guneshli) known as the "big oil". The early oil will be transported to the Black Sea through two pipelines, one through Russia (Northern route) to the Black Sea port of Novorossiysk, the other through Georgia (Western route) to the Black Sea port of Supsa. The export of early oil through the Northern route started in November 1997, while exports through the Western route are projected to start in mid-to-late 1999. As for the big oil, it is uncertain how it will be exported since the main export pipeline (MEP) route is still undecided. Among the options discussed, two would lead to a Turkish terminal on the Mediterranean Sea through Georgia or Russia, and the third through Iran, although the latter currently seems unlikely because of political factors. The construction of the MEP is tentatively expected to be completed by 2003.

90. As for the other production sharing agreements, the great majority of which were signed in 1997, they are different from AIOC in one important respect: while the AIOC was given the right to develop existing oil fields, the other oil consortia are searching for new fields and consequently their activities are riskier. Therefore, estimating production by these companies, which is not expected to start before 2002-2003 at the earliest, is highly uncertain.⁴⁴

91. Nevertheless, rough estimates indicate that production could increase fivefold between 1997 and 2005 (to more than 45 million tons compared to 9 million tons in 1997)

⁴⁴There are already indications that some drillings were not as successful as was originally envisaged.

with daily production of more than 900 thousand barrels, of which more than 750 thousand barrels could be available for export. On the basis of these estimates and the latest WEO oil price profile, oil export proceeds would be more than US\$4 billion by the year 2005. If reserve estimates remain unchanged, the time horizon for the depletion of oil resources would be about 40 years.

C. The Impact of Oil Price Shocks

92. Despite the still low level of oil production and oil exports, the recent decline in oil prices and the resulting change in the fiscal and balance of payments projections for 1998 highlight Azerbaijan's vulnerability to oil price fluctuations—the direct impact of this price change in 1998 is to reduce oil exports by 4 percent of GDP, and budgetary revenues by 1.5 percent of GDP. With the expected increase in both oil production and oil exports over the medium term, the impact of a given oil price change would significantly increase over time.

93. To illustrate the impact of changes in oil price on the external position over the medium term, three balance of payments scenarios corresponding to a baseline oil price, low price, and high oil price have been carried out. This exercise is highly illustrative and aims at isolating the impact of oil price changes on the medium term external outlook. However, since a sustained decline in the oil price is likely to lead to a discounting of the present value of oil resources and possibly to a nominal exchange rate depreciation, another scenario was carried out to illustrate the impact of such a depreciation on the current account through its effect on competitiveness and the trade balance. In principle, there could also be an impact on the level of foreign direct investment and imports to the oil sector, but given that oil companies' activities are constrained by the existing PSAs, any such impact is likely to be small over the relevant time horizon and is not considered here.

94. In view of the importance of the oil sector and its impact on general economic activity and the budget, a change in the oil price would most likely reverberate throughout the economy with further secondary effects on the external position. Since capturing the effects of such changes is beyond the scope of this chapter only the direct impact of the three oil price scenarios on oil exports and the current account is considered.

95. The three price scenarios are: a baseline price of US\$15 a barrel, a low price scenario of US\$12 a barrel, and a high price scenario of US\$18 a barrel, constant over the period 1999-2005. The choice of these prices, while arbitrary, will roughly illustrate the impact of the recent decline in the oil price relative to the previous baseline. In addition, for the low price scenario, the trade balance was allowed to respond to some presumed nominal exchange depreciation. The depreciation was built in gradually increasing from 2 percent in the year 2000 to more than 10 percent in 2005. At the same time, imports and exports are assumed to respond gradually to this depreciation implying larger long-term exchange rate elasticities. The response of exports to changes in the exchange rate is assumed to be higher

than that of imports, given the already low growth rate of imports relative to that of the nonoil sector.

96. As shown in Table 11, the impact of lower prices on oil exports rises steadily from US\$155 million in 1999 (2.7 percent of GDP) to US\$865 million (more than 5 percent of GDP) in 2005. The effects of a higher oil price on exports are symmetric on the assumption that a change in the price would not have any effects on oil production, export volumes, or transportation costs.

Table 11. Azerbaijan: Balance of Payments—Oil Scenarios 1/

	1999	2000	2001	2002	2003	2004	2005
Oil exports (in millions of U.S. dollars)							
Baseline	645	751	818	1326	2289	3401	4077
Low-price scenario	490	568	622	1024	1788	2674	3214
High-price scenario	801	935	1015	1628	2790	4128	4940
Current account (In percent of GDP)							
Baseline	-29.7	-32.5	-33.0	-27.1	-19.5	-10.3	-5.1
Low-price scenario	-32.4	-35.3	-35.5	-30.1	-23.6	-14.3	-9.0
with exchange rate effect 2/	-32.4	-35.1	-35.0	-29.3	-22.4	-12.6	-6.9
High-price scenario	-26.9	-29.8	-30.6	-24.0	-16.0	-6.4	-1.0

1/ The three scenarios are: baseline, low-price, and high-price, corresponding to US\$15, US\$12, and US\$18 a barrel respectively.

2/ It is assumed that a sustained decline in the oil price would lead to an exchange rate depreciation affecting the current account balance.

97. The decline in the oil price, without any exchange rate response, would widen the external current account deficit by 2.7 percent of GDP in 1999, increasing to about 4 percent in 2005 relative to the baseline scenario. The effects on the current account are not simply a reflection of the decline in oil exports because the decline in the price would also lead to lower profit repatriation by foreign oil companies, therefore reducing the negative impact on the current account by more than one percent of GDP by 2005. The impact of an equal increase in the oil price on the current account is almost symmetrical.

98. Taking into account the possible impact of the fall in oil price on the exchange rate and the trade balance, the deterioration in the current account deficit would be less by about 2 percent of GDP in 2005. Despite the purely illustrative nature of this scenario, it nevertheless shows that nominal exchange rate flexibility could reduce significantly the adverse effects of an oil price decline on the current account.

D. Policy Responses

99. Given the potential sensitivity of the external accounts to changes in the oil price, Azerbaijan should prepare itself to deal with exogenous shocks in a way that would reduce their adverse effects. Appropriate macroeconomic policies should be adopted and institutional mechanisms be put in place to shield the economy from the volatility of oil prices. Also, measures will need to be taken to reduce existing structural rigidities that hinder investment and growth in the non-oil economy.

100. Experience has shown that the ability of a country to cope with a shock depends more on how quickly and efficiently it reacts to the shock than on the magnitude of the shock itself. In principle, macroeconomic policies and their mix, as well as structural policies, can be used to a varying degree to respond to external shocks. However, in Azerbaijan, fiscal policy, exchange rate policy, and specific structural reforms will have to play the key role in responding to a negative shock.

Fiscal Policy

101. Over the medium and long term, significant, albeit volatile, oil revenues are expected to come in, increasing the dependency and vulnerability of Azerbaijan to oil shocks.⁴⁵ Generally, in such an environment, a substantial part of the oil revenues should be saved as there would be a need to restrain expenditures and accumulate assets to dampen excess demand pressure. For this reason, a formal institutional framework should be created to support the buildup of a financial cushion to address contingent liabilities over the medium term and to provide a buffer against short-term fluctuations of oil export prices. This could take the form of a **national oil reserve fund** (see Chapter V) to which resources could be transferred when the oil price is high, and from which resources would be drawn when the oil price is weak. In the latter case, core and essential public expenditures could be protected as well as the level of imports necessary to sustain a certain level of real growth. By acting as a shock absorber, this would help to insulate the fiscal revenue base and the economy from developments in the oil sector. Many oil-dependent countries have established such funds;

⁴⁵The government's interest in the oil sector takes several forms. First, it issues exploration and production licences and get signature bonuses. Second, through the state oil company—SOCAR—the government is involved in the exploitation, refining and distribution of petroleum products, and it imposes taxes and commands royalties on these activities. Third, the government would receive a large chunk of profit, expected to increase considerably over time, from the operations of oil companies particularly after capital costs are fully recovered, in addition to the government's direct financial interest in SOCAR.

some of them have proven to be more successful than others in their response to adverse exogenous shocks.⁴⁶

102. However, given the developmental stage of Azerbaijan and its needs for major infrastructure projects, saving most of the oil resources in an oil fund would be probably unrealistic and politically not feasible. Therefore, a balance should be sought between developmental, and macroeconomic considerations. To this end, and for the purpose of enforcing fiscal discipline and controlling expenditures, budget formulation should be based on very conservative oil prices, and oil revenues in excess of those budgeted could be saved in the oil fund. At the same time, annual budgets should be formulated with a view to improving the share of **capital spending on basic infrastructures and basic social services**. It would be desirable to show more restraint in public spending at the beginning of the oil boom so as to permit larger accumulation of assets, the return on which would be used for budgetary purposes.

103. These approaches will, however, need to be supported by **fiscal policy flexibility**. Given the likely occurrence of external shocks, and the possibility that oil price is below the one used in the budget, fiscal measures aimed at enhancing revenues and restraining public spending are essential in offsetting the effects of the shocks and reducing their impact on the external current account. But for these to be effective, flexibility in mobilizing revenue and cutting expenditures should be enhanced. This requires, for example, a broadening of the tax base (elimination of exemptions) so additional revenues could be raised, when needed, with smaller increases in the marginal tax rates. This could make adjustment less costly from an economic perspective as well as more feasible politically. On the expenditure side, flexibility requires, among other things, that the share of non-discretionary spending in the budget be reduced. In particular, interest payments on the public debt, and the wage bill should be kept under strict control. This would require for instance a comprehensive civil service reform strategy, and given that interest payments are a function of previous budget deficits, continued vigilance in the formulation and execution of fiscal policy.

104. Azerbaijan's fiscal policy would thus need to accomplish two objectives: stabilization in the short run and the preservation of oil wealth over the longer term. In the case of an upswing in the oil price, these two objectives are reinforcing, since there will be a need for fiscal tightening to increase public sector savings and dampen inflationary pressure, and to sterilize the impact of a surge in oil revenue on domestic demand by accumulating oil revenue in the form of foreign financial assets, thus containing the potential impact on the exchange rate. If on the other hand there is a sharp decline in the oil price well below the price used in the budget, previously accumulated financial assets could be drawn down to prevent a disorderly adjustment in government expenditures with its negative implications for confidence, investment and growth.

⁴⁶Examples of countries that established such funds are: Oman, Kuwait, Norway, Venezuela, and Nigeria (see Chapter V).

Exchange Rate Policy

105. Oil-dependent countries have adopted different exchange rate regimes and pursued different exchange rate policies when faced with exogenous shocks.⁴⁷ There are several factors that point in the direction that Azerbaijan should opt for flexibility in the management of the exchange rate, with an eye on competitiveness and taking into account the potential volatility in the external current account resulting from fluctuations in the oil price.

106. As a net exporter of oil, Azerbaijan will most likely be subject to future shocks stemming from changes in oil production and prices of a magnitude that could not be offset by restrictive fiscal policy alone. Negative shocks would need to be accommodated by letting the exchange rate depreciate so as to minimize the impact on the external position. This was illustrated by the sensitivity analysis (see section C) where a depreciation of the exchange rate following a fall in the oil price significantly reduced its negative impact on the external current account. In addition, given the relatively low level of foreign reserves in the short run, fixing or targeting the exchange rate within a narrow range in the presence of a negative shock is not a viable option.

107. However, in view of the importance of the non-oil economy, which is the main source of future employment, policies should continue to be geared at preventing an excessive loss of competitiveness resulting from an appreciation of the exchange rate associated with a rise in the price of oil. The saving of additional resources in an oil fund and the adoption of a tight fiscal policy would help in attaining this objective, although an upward revision to the present value of petroleum wealth could still lead to some real appreciation.

Structural Reforms

108. Structural policies aimed at reducing rigidity in the economy and creating an environment conducive to private sector investment and the diversification of the economic base are essential complements to macroeconomic policies, in making the economy more resilient to exogenous shocks and in achieving sustained growth over the medium term.

109. Structural reform measures generally take a longer time to put in place, and are unlikely to be used to overcome the negative impact of external shocks in the short run. Their importance is derived from their lasting impact on macroeconomic adjustment and stability,

⁴⁷Most oil producing countries in the Middle East have adopted a fixed exchange rate pegged to the U.S. dollar or a basket of currencies which were not adjusted even in the face of a severe oil price shock (except for a 10 percent devaluation in Oman in 1986 following the sharp fall in the price). Norway has pursued exchange rate stability within the context of the "Solidarity Alternative" where labor unions have agreed in return to moderate wage settlements.

reorienting private sector behavior, enhancing economic efficiency and growth prospects, and diversifying the export base. Following the significant progress already made in opening up the economy to the world, more work should be done to enhance the attractiveness of the country to foreign investors by adopting legal and judicial reforms that would protect property rights and improve transparency. In particular, a bold approach to governance should be adopted to allay the fears of private foreign (particularly non-oil) investors, and encourage domestic private investment. This would permit the non-oil sector to grow in a market friendly environment, and so reduce the dependency on oil.

E. Conclusions

110. The recent decline in the price of oil and its impact on the external current account and the budget highlights the potential vulnerability of the Azerbaijan's economy to negative oil shocks, a vulnerability that is expected to increase over the medium term with the increase in oil production and exports. The medium-term impact of oil price shocks was illustrated by three medium-term scenarios showing the impact of such shocks on oil exports, and the current account.

111. In view of the sensitivity of the external account to changes in the oil price, Azerbaijan should seek to increase the flexibility of the economy and enhance its ability to deal with potentially adverse exogenous shocks. Fiscal policy has a key role in the adjustment process. In the short run, tight fiscal policy supported by increased fiscal flexibility is crucial in mitigating the impact of a negative shock. In the longer run, creating an institutional mechanism that takes the form of a national oil fund would help to insulate the revenue base from the vagaries of large and unpredictable swings in oil price. Regarding exchange rate policy, it is recommended that flexibility in the management of the exchange rate should be adopted to help the external account and the economy adjust to changes in the terms of trade resulting mainly from fluctuations in the price of oil. In addition, structural policies aimed at enhancing the role of the non-oil sector diversifying the production and export base, and creating an investor-friendly environment where property and personal rights are protected by a good judicial system, should make the economy more resilient to adverse exogenous external shocks.

V. MANAGING OIL WEALTH IN AZERBAIJAN

112. The purpose of this chapter is to describe some of the major difficulties encountered by countries having large petroleum resources and to illustrate how these problems can be overcome through the creation of an oil fund. By drawing on the experiences of countries which have established some form of oil fund, it will outline the issues associated with its design, including determining its income sources, its asset management strategy, and rules for determining access to its resources. It concludes that Azerbaijan could avoid some of the long-term problems associated with the development of its petroleum resources by creating a well-designed oil fund in the near future.

A. Rationale for Creating an Oil Fund

113. Countries which have substantial oil resources face several common challenges. First, unbalanced growth could result from the exposure of non-oil export-oriented industries to competition from relatively cheaper imports as the exchange rate tends to appreciate. Also, wage and price pressures generated by the growth of the petroleum sector could hurt non-oil industries. A second major problem is that the economy's dependence on one product makes it extremely vulnerable to external shocks. Even a small change in the price of oil can have a large impact on the economy. Since government revenues tend to rely heavily on taxation of the oil sector, tax revenues can be quite volatile, making budgeting and efficient use of public resources more difficult. A third common issue is how to preserve and use the wealth generated by oil revenues, and relatedly, how to make the use of oil revenues more transparent. Most, if not all, of these issues are pertinent to the situation in Azerbaijan which expects to become a major petroleum exporter within the next decade.

114. Some countries have turned to the use of an oil fund to solve the above mentioned problems. The income for the oil fund derives from profit sharing, taxation of the oil sector, and interest earnings from the investment of these funds. By investing part of the oil wealth in foreign financial assets, it can protect the competitiveness of the non-oil economy by sterilizing oil revenue and relieving upward pressure on the real exchange rate. Furthermore, by investing in foreign financial assets, wealth is diversified and protected from any particular external shock. Moreover, the investment of oil resources provides intergenerational equity by preserving wealth for future generations.

115. This last point deserves particular emphasis because oil is a non-renewable resource. Exploitation of this asset differs from other revenue sources because it represents depletion of a national resource, a stock of wealth that should be managed carefully. Prudent policy suggests that such wealth should be invested to earn as high a return as possible while still maintaining a sufficient degree of liquidity. One of the primary reasons for the creation of oil investment funds in Norway, Oman, and Kuwait was the desire to create a store of wealth so that future generations could benefit from the proceeds of the nonrenewable oil reserves extracted in the current period. The Reserve Fund for Future Generations in Kuwait (see Box 5), in particular, has been very successful and made possible a quick recovery from the Gulf War.

116. Other countries whose economies are dependent on the extraction of natural resources other than oil have also had success with building reserves based on the wealth derived from that sector. A good example is Kiribati which has a Revenue Equalization Reserve Fund (RERF) that was established in 1956 based on the earnings from the sale of phosphates. It is to the credit of Kiribati's sound fiscal management that the RERF was able to grow without intervention from short-run fiscal considerations. Although it started from a low base, the value of the fund in 1996 was more than 4 times GDP. These assets are invested overseas and yield annual average earnings of more than 17 percent of GDP. The phosphates have since been depleted, but Kiribati is able to sustain a large trade imbalance

while having a favorable balance of payments due largely to transfers from these overseas investments.

Box 5. The Management of Oil Funds in Kuwait

The preservation of oil wealth has passed through various stages of development in Kuwait. A store of wealth was first created in 1960 with the General Reserve which consisted of all the state's investments which later included ownership of the Credit and Savings Bank, the Kuwait Fund for Arab Economic Development, many local development projects, and foreign assets. The law in 1960 stipulated that the General Reserve would be financed by budgetary surpluses.

In 1976, the Reserve Fund for Future Generations (RFFG) was created which consisted of 50 percent of the General Reserve at the time, 10 percent of annual budgetary revenues of the state plus the profit of these assets. The original idea for this second reserve fund was to provide a source of income when oil markets were depressed or for when crude oil was depleted. The assets of this fund are invested in the stocks of reputable international companies, first grade bonds, deposits in major currencies, and various economic investments under the supervision of economic and financial experts in Kuwait and first rate international financial consultants. The investment income from these funds is the primary source of national income after the oil industry.

In 1982, the Kuwait Investment Authority (KIA) was established to improve the quality of investment operations and processes. The KIA replaced the Ministry of Finance in managing and developing the financial reserves of the state, including the General Reserve and the Reserve Fund for Future Generations. The KIA's board of directors is headed by the minister of finance and other members include the minister of oil, the governor of the central bank, and others experienced in the field of finance and investment. The board chooses from its members the managing director to assume management responsibilities of the KIA. The board reviews and decides on the annual budget of KIA and its financial accounts before they are submitted to other authorized parties.

The need to rebuild after the Gulf War has led to a re-examination of the investment strategies followed by the KIA. Liquidity and risk have become more important concerns as the RFFG is used to finance fiscal deficits or make transfers to the State Treasury for liquidity needs. The RFFG is invested in global, diversified investments capable of achieving sufficiently high capital returns. For the General Reserve, the KIA is instructed to invest funds so as to achieve medium growth returns. The income generated is ultimately to be used to implement state economic and social policies for local and regional development. More recently the RFFG has been pursuing a privatization program.

Income from privatization, investment income from the General Reserve, the RFFG or dividends from government owned corporate entities are not treated as budgetary revenues. Since oil revenues make up 90 percent of budget revenue, the annual budget is made assuming a conservative price for oil to try to avoid the problem of unexpected revenue shortfalls.

117. Developing countries face a significant tradeoff, however, because developing and maintaining a stock of wealth implies less for current spending. Since their current needs are large, the decision to postpone expenditures is a difficult one. The use of oil wealth for investment in physical and social infrastructure can also have a high rate of return that will benefit future generations. On the other hand, the easy availability of oil wealth can discourage conservative expenditure policy. Domestic expenditures fueled by the oil revenue

can be inflationary, undercut competitiveness, and tend to create inefficiencies. This is especially true since countries with oil resources often tend to subsidize domestic oil prices. Rather than targeting worthwhile investments, these subsidies create inefficiencies in the domestic economy, and generally result in losses for the domestic oil companies that must be covered by the budget.⁴⁸

118. Particularly with respect to fiscal policy, Azerbaijan will need to address the susceptibility of revenues to the fluctuations of oil prices, and second, moderate the use of oil revenues for current expenditure and channel them to the most productive investments. The experience of other developed and developing countries that are dependent on oil resources suggests that these goals are difficult to reach. When oil prices dropped significantly after the Gulf war, Nigeria, Venezuela, and Mexico all fell victim to the resulting impact on their budgets. Both Venezuela and Mexico saw budget surpluses in the early 1990s become deficits in 1994 (and after) while a relatively small deficit in Nigeria in 1990 expanded to 18 percent of GDP in 1993. In Nigeria, the government resorted to credit from the national bank to finance the deficit. This expansionary fiscal policy was the primary determinant of subsequent inflation in Nigeria.

119. Other oil-rich economies such as Norway and Oman suffered greatly from the oil price shock of the early 1980s. Having large transfer programs and subsidies, both countries were slow to make adjustments, and both needed to finance large fiscal deficits that had a negative impact on their economies. This experience helped to galvanize support for a mechanism to insulate both fiscal revenue and the non-oil economy from developments in the oil sector. However, the oil funds developed in each of these countries vary considerably in terms of how they operate.

120. An oil fund can be designed as an accounting device which encourages fiscal discipline and provides transparency in the spending of oil revenue. Budgetary use of oil revenue should appear in the budget as an explicit transfer from the oil fund. Particularly if the operational rules on the use of oil funds are carefully designed, they can improve budgeting practices by preventing the government from overcommitting resources only to discover revenues are insufficient due to a decline in the oil sector's performance. The pattern of expansion during oil booms followed by deficits when prices contract has been a particular problem in countries whose economies are dependent on one key product. The more the oil resources are used for current expenditures, and the less they are stored as a stock of wealth, the greater the vulnerability of the budget, and indirectly, the economy, to oil price fluctuations. As discussed in section B, stabilization funds are one means of handling this vulnerability by smoothing out government expenditures over time.

⁴⁸ Both Nigeria and Venezuela set domestic oil prices far below the market value—a policy that proved to be unsustainable for both countries.

B. Managing the Oil Fund

121. At present in Azerbaijan, oil bonuses from the development of new oil fields⁴⁹—currently the main source of government revenue from oil production—are transferred to the central bank and held in a special government account. Since large foreign exchange inflows can lead to rapid monetary expansion, inflation, excessive real exchange rate appreciation, and unbalanced growth, only a portion of the oil bonus revenue is used to finance the budget deficit while the balance remains invested overseas and forms part of international reserves.

122. This method of earmarking revenue from oil signature bonuses for overseas investment and limiting their use to prevent overly expansionary fiscal policy is not very different from the establishment of an oil fund. However, the current arrangement may be viewed as deficient for several reasons. In particular, this account has no formal operating rules which may lead to problems in determining what income to allocate to the account, deciding how the funds are invested, and deciding how and when to spend these resources. Only the President can authorize the use of these funds, and ownership of the funds is not clearly specified.

Structure and Investment Strategy

123. Because the oil reserves are a non-renewable national asset, the government should clearly be owner of these assets to determine how best to use and invest them for the benefit of current and future generations. A board of directors consisting of senior officials from the ministry of finance, the central bank, the state oil company, and other interested ministries, should be in charge of determining the rules of operation of the oil fund, investment guidelines, and other issues associated with the management of the oil fund. The oil fund may be extra-budgetary, or it may form part of the budget.⁵⁰

124. An oil fund usually consists of assets invested overseas, with counterpart funds in an account in the central bank. Alternatively, a separate oil fund could be in charge of managing and investing these assets. Because the investment strategy for the oil fund is likely to be different from the short term, low risk investment strategy employed for foreign reserves, oil fund assets should not be included as part of international reserves. One task facing the authorities will be to determine investment guidelines covering the target return sought from

⁴⁹ Oil signature bonuses are paid at certain stages in the exploration and production of oil. In the future the government will receive substantial revenue from profit-sharing arrangements with the oil consortia.

⁵⁰ If the oil fund remains part of the budget, expenditures of the fund will be determined through the normal budgetary procedures whereas if the fund is off-budget, it will have a separate budget that should also have parliamentary approval.

the allocation of investments and acceptable risk to the investment portfolio. The optimal asset allocation policy depends on factors such as time horizon and liquidity needs, and the need to invest in assets that provide a degree of inflation protection. Azerbaijan has a long investment horizon with oil production lasting at least 40 years given current estimates of oil reserves and production rates.

125. Since one rationale for an oil fund is to help protect against the ebb and flow of oil revenue, some weight should be attached to investment in assets that are negatively correlated with the oil sector. Norway (see Box 6) has decided to invest a significant amount of its State Petroleum Fund in non-oil sector equities because most such businesses tend to be negatively correlated to developments in the oil sector. Finally, the authorities would have to determine whether to entrust the portfolio investment to the central bank or to external managers. For example, Norway is considering hiring an investment bank or securities firm to manage the equities portion of the investment portfolio of its State Petroleum Fund.

Box 6. Norway: State Petroleum Fund

In the initial stages of oil development, oil revenues were not treated as a unique and nonrenewable resource. Budgetary expenditures accelerated as public sector employment grew 70 percent from 1970-91 and social transfers expanded to reach 17 percent of GDP in the early 1990s. The oil boom was also associated with a worsening of the competitiveness of the non-oil economy as labor costs increased relative to Norway's trading partners. Finally, demographic trends and a pay-as-you-go National Insurance Scheme will lead to rapidly rising expenditures in the long term when oil reserves will be diminishing. These three concerns were addressed by creating an oil fund.

The State Petroleum Fund (SPF) was created in 1990 with the goal of increasing transparency in the utilization of oil revenues, protecting the non-oil economy, and facilitating decisions concerning what portion of revenues to invest for the benefit of future generations. By ensuring that fiscal and current account surpluses are matched by capital outflows, the stability of the exchange rate could be maintained, thus promoting the competitiveness of the non-oil economy. The SPF also promotes intergenerational equity by ensuring a stock of wealth for future generations. Because the SPF is financed by a budget surplus, the SPF remained dormant until 1996 while the government pursued expansionary fiscal policies. In 1996, a surplus equal to 1.3 percent of GDP was transferred to the SPF. In 1997, the surplus was about 6 percent of GDP, and in the future the surplus is expected to increase to 8 or 9 percent of GDP. Total resources in the SPF are expected to build up to about 40 percent of GDP.

Norway's State Petroleum Fund offers some important guidelines to consider in the choice and management of investment assets. At the present SPF funds are invested in low risk securities issued by foreign countries and highly rated institutions that yield an approximate rate of return of 4.7 percent. It was discovered, however, that lags between the accumulation of oil revenues and their transfer to the SPF substantially lowered the actual rate of return. Therefore, in 1998 procedures were adjusted so that oil revenue transfers to the SPF were made on a more frequent basis (quarterly). Most of these assets were invested in Europe, and one third of these were invested in other Scandinavian countries. In the future, in order to reduce risk, the geographical dispersion of investment will be widened while exposure in Europe will be decreased to about 50 percent of total investments.

A second strategy that is expected to both reduce risk and increase the rate of return will be to invest between 30 and 50 percent of SPF assets in equities. The rate of return on a portfolio containing both fixed-income securities and equities is likely to be higher than that of a portfolio of fixed-income instruments alone. On the other hand, equities markets are known to be more volatile than bond markets. This decision is based on the Norwegian view that the SPF will not be drawn down until well after 2010, giving them a long-term investment horizon that is less sensitive to short-term fluctuations in the equities market. In order to minimize risks, the SPF investments in any particular company cannot exceed 1 percent of its share capital. Furthermore, these investments will only be made in developed markets, but investments will be geographically dispersed: 40-60 percent in Europe, 20-40 percent in the United States and Canada, and 10-30 percent in Asia and Australia. A major risk-reducing benefit of investment in equities is that they, unlike bonds, tend to have a negative correlation with oil prices. Such investments help provide a cushion in the case of oil price shocks.

Sources of Oil Fund Resources

126. Rules for determining sources of revenue for the oil fund should be absolutely transparent and non-negotiable. There are two basic approaches to determining the sources of

finance for an oil fund. The first is to have all revenues accrue to the budget, and then transfer any budget surplus, or some other rule-based amount, to the fund. The second is to give the oil fund its own direct sources of revenues from the oil sector, usually from the profits of the state oil company. If the oil fund is an extra-budgetary fund, then these revenues may not enter into the general government budget. In the second case, the administration of the fund and the rules of access to the funds are particularly important because this off-budget design can lead to misuse of the funds.

127. Both techniques can have problems in implementation. Norway, which uses the first method, found it difficult to maintain a budget surplus in recessionary periods, which then delayed the building up of assets in its fund. Oman (see Box 7) is an example of the second approach where a certain percentage of total oil receipts were earmarked for the State General Reserve Fund (SGRF). The share of receipts allocated to the fund was frequently changed, however, leading the government recently to adopt a system that will provide income to the SGRF as long as the price of oil is above the reservation price of \$15 per barrel. The new scheme is expected to be more transparent, and should be easier to implement as it takes the price of oil into account, thus eliminating the need to make explicit changes in the allocation rule.

Box 7. Oman: State General Reserve Fund (SGRF)

Since Oman faces a much shorter horizon of proven reserves than other Gulf states, the State General Reserve Fund was created in 1980 in order to prepare for the future when oil reserves would be depleted. The original law specified that 15 percent of oil sales proceeds would be earmarked for the SGRF. In practice, however, the share of proceeds was changed on numerous occasions, and since the government followed expansionary fiscal policy, it often resorted to drawing down the SGRF. After the SGRF was built up to US\$4.3 billion (about 34 percent of GDP) by 1992, the use of SGRF assets for budget support caused total assets to decline to only US\$2.2 billion (14 percent) by 1995 where they have remained.

Recently Oman switched to a new strategy where any earnings up to \$15 per barrel accrue directly to the budget, the next \$2 per barrel earned is transferred to the SGRF, the next \$0.50 goes to a separate oil fund that makes investments in the oil sector only, and if the price goes above \$17.50 per barrel, the remainder is distributed to the budget. While this should provide for a more constant flow of income to the SGRF, the continued inability of the government to balance the budget means the stock will continue to decline. A clear accounting system for transactions between the SGRF and the budget is needed to provide greater transparency. It has been suggested that rather than supplementing budget revenues on an "as needed" basis, the SGRF should be allowed to acquire market-based treasury instruments while the budget would include the related interest payments.

SGRF assets are held mainly with foreign banks and institutions and a small part is held as foreign currency deposits with the domestic banking system. Oil receipts earmarked for the SGRF as well as income earned and realized capital gains from its investments are not consolidated with the official budget. Except for income earned on investments, the use of SGRF resources to finance the budget requires the approval of the Cabinet of Ministers on the recommendation of the Financial Affairs and Energy Resources Council.

128. With respect to stabilizing budget revenues, it may be prudent to expand the sources of financing for the oil fund by earmarking a portion of tax revenue received from the oil sector for the fund. This portion should not be a strict percentage, but should depend on economic circumstances. The first funding mechanism described above requires a fiscally conservative government with a will to contain expenditures despite access to oil revenue. For example, in Norway, the State Petroleum Fund will not accumulate resources unless a budgetary surplus is achieved.

129. Venezuela is in the planning stages of creating an oil fund for fiscal stabilization reasons. This fund will be financed by placing the difference between the average revenue from the oil sector and actual revenue from the oil sector in a given year in the fund. Thus, the fund would only increase if actual revenues are greater than average—when oil prices are relatively high. This funding mechanism encourages fiscal restraint from the authorities during high oil price periods by forcing them to only spend up to the “average” amount of oil revenue. A variant of this method might be used in Azerbaijan where the budget could be made by forecasting revenue based on the average price (or a conservative price) for oil. If the price is higher than average, the additional revenue would be earmarked for the oil fund.

Uses of Oil Fund Resources

130. The last issue is to consider how the oil fund resources are spent. Some countries have chosen to use fund resources to finance deficits while others have directed resources from these funds to specific public investments. Again, the rules for access to the funds must be explicit and transparent. These rules can be devised so that the oil fund functions as a type of stabilization fund to mitigate the impact of price fluctuations in the oil sector.

131. Ideally, oil fund resources should be channeled to investment rather than current expenditure, and the investment should earn a rate of return at least as high as the oil fund would earn on its overseas investments. Such a practice helps to ensure that future generations benefit from the oil reserves through investments made in the present. Once an oil fund has been successfully established, these resources can be used for development projects, as for example, is done in Kuwait, Oman, and Nigeria.

132. Currently only a portion of the oil signature bonuses in Azerbaijan is used to finance the deficit. Determining the amount of funds to draw on to finance the deficit will be a key issue in the future. A similar practice is used in Norway where funds from the State Petroleum Fund (SPF) can be used to finance what is called the “non-oil budget deficit.” However, no such deficit is envisaged in Norway for the short term; rather, resources in the SPF are expected to build up to almost 40 percent of GDP. Since fiscal responsibility is not thought to be a problem, Norway has no rules or procedures regarding the use of funds from the SPF, but earmarking the oil funds to any specific expenditure is forbidden. The prohibiting of earmarking is strongly encouraged for Azerbaijan, as earmarking would distort future decision making and make it difficult to limit spending in the favored sector.

133. An oil fund can be designed to be a stabilization fund—a fund that has strict rules for accumulation and use of the funds so that government spending is constrained in periods of upturns, but also relieved from the need to make a large adjustment when the price of the resource falls. Thus far, most oil funds have not been designed as stabilization funds, but instead function mainly as a means to build a stock of wealth. The new measures adopted by Oman were accompanied by regulations on the use of the SGRF resources, which would as a result be a type of stabilization fund. Venezuela (see Box 8) is the one petroleum-producing country that has proposed to create an oil fund explicitly for stabilization purposes.

134. Stabilization funds have been established by other countries with important natural resources to avoid the ebbs and flows of the revenues derived from the exploitation of this resource. In periods of downturns in the price of this resource, the government is forced to find other revenues, cut spending, or borrow, which then has a negative impact on the overall economy. These countries have created stabilization funds that are used to smooth out government expenditure and moderate the effects of price shocks on the economy. An example of a stabilization fund that has functioned well is the Copper Stabilization Fund in Chile which was created in 1987 to protect revenues from the price fluctuations of copper.

Box 8. Venezuela: Petroleum Stabilization Fund

Currently in Venezuela, revenue from oil royalties and taxes goes directly into the budget. The payment of taxes from the oil sector is very transparent. Each year the state oil company produces a budget and calculates tax liabilities given the estimated price for oil. Then a schedule of payments is worked out with the government so that the government has reliable revenues. As the price changes during the year, the tax liability is recalculated and the tax payments are adjusted. Despite the transparent mechanism for collection of revenues from the oil sector, the management of the revenue has not been as successful. Due to lack of fiscal restraint in the past, in part due to generous price subsidies for domestic oil, expenditures increased when oil prices were high, but when the price fell, the deficit expanded. The impact of the price volatility was very unhealthy for the non-oil economy.

In 1997, a law to create a stabilization fund with oil revenues was submitted to Parliament, but has not yet been passed. This fund would have specific rules of access to moderate expenditures during high revenue periods, but permit access during low revenue recessionary periods. The difference between average revenue and actual revenue would be placed in the oil fund (when the actual exceeds the average). During periods of low prices, the actual falls below average. The government could still ask for the “average” level of spending based on “average” revenues, and draw resources from the fund. There are no limits on borrowing, if the Government decides to spend more than the “average” revenue from oil permits.

135. Transparency in the rules of operation are the core of a well-functioning oil fund. This applies in particular to the rules that determine the timing and purposes for drawing down the oil fund. If the rules are too lax, then the fund will not serve the purposes of its design to store wealth or to stabilize the budget. Nigeria (see Box 9) experienced problems with the transparent use of off-budget oil funds that were dedicated for various types of investment in the oil sector and other priority development projects. The extrabudgetary outlays from these funds grew as a percent of GDP from 4 percent in 1990 to 12 percent in 1994 when they accounted for one third of total federal government expenditures. Meanwhile, the fiscal position was deteriorating due primarily to a worsening of the terms of trade. In 1995, the government elected to close the off-budget dedicated accounts and began depositing the total amount of the state oil company proceeds in an off-shore account (at the Federal Reserve Bank of New York). The government's share of specific operating costs for the oil industry are then deducted from this account. This new process improved both the budget coverage and transparency of oil revenue collection.

Box 9. Nigeria: The Petroleum Trust Fund

Before 1995 Nigeria had various types of off-budget dedicated funds that were financed by oil revenues and used for development projects and oil sector investments. Expenditures from these funds grew from 4.1 percent of GDP in 1990 to 11.5 percent of GDP in 1993—more than one third of the federal budget. During the same time span, the federal government budget went from a deficit of 2.9 percent of GDP to over 18 percent of GDP.

In 1995 these funds were closed, and the Petroleum Trust Fund was created. This fund is financed from the revenue from the sale of domestic petroleum products, and the PTF makes transfers to the federation account, the Petroleum Special Trust Fund, and to the Nigerian National Petroleum Corporation which produced domestic petroleum products. From the average price of domestic petroleum products of 11 naira per liter, 2.4 are transferred to the federal government for compensation for the cost of the crude oil, while the NNPC receives 2 per liter for the cost of refining and storing the product, and the retailers receive 1.3 per liter which they take directly at the pump rather than receiving a transfer.

The Petroleum Special Trust Fund (PSTF) receives 5.3 naira per liter which is used for extrabudgetary capital projects. This fund was created to utilize the gains made from more than tripling the domestic price of gasoline in 1995. Before 1995, the domestic price of gasoline was set so low that the NNPC always had losses. The PSTF was built up in 1995 and 1996, and has had an annual balance just under 2 percent of GDP in both 1996 and 1997. These balances are held in the form of treasury bills and deposits in the commercial banking system. A small portion of PSTF expenditure is for recurrent costs (wages and overhead), but the majority consists of investments in statutorily mandated areas including health, education, water, infrastructure, food storage and security. Since this is an extrabudgetary fund, it serves as an extension of the federal government capital budget.

C. Key Conclusions

136. Although the majority of the wealth from the oil sector in Azerbaijan will not accrue to the budget until early in the next century, it would be prudent to begin now to consider establishing institutional arrangements that would preserve and invest this wealth wisely. The analysis above suggests that part of Azerbaijan's oil income should be invested in an oil fund with the following general characteristics:

Structure of the oil fund

- The Government of Azerbaijan should be the indisputable owner of the resources in the oil fund.
- The oil fund should be kept as a separate account in the ANB, not part of foreign reserves.
- The Ministry of Finance should play a central role in managing the oil fund.

Management of oil fund assets: allocation issues

- Funds should be invested in foreign financial assets, and clear rules should be devised for managing these assets.
- The investment portfolio could be managed by the ANB, but it may be preferable to hire an international firm.

Sources of funds

- Azerbaijan should consider creating a oil fund that is financed from oil signature bonuses at present, but in the future would be financed from profit sharing and possibly a portion of tax revenues derived from the oil sector.
- Income from investing the funds in foreign financial assets should accrue to the oil fund, and the assets of the fund should clearly belong to the government for future expenditures.

Use of oil fund resources

- Strict rules need to be established to determine the drawdown rate of the oil fund in order to prevent its depletion to finance imprudently large deficits.

- Azerbaijan should consider the establishment of an oil fund that functions as a stabilization fund to provide a cushion from price changes in the oil sector.
- Oil fund resources should be directed toward investment—especially infrastructure investment—that can achieve a rate of return comparable to the rate of return of the oil fund investment portfolio.
- Oil fund resources should not be earmarked for any type of expenditure.

Table 12. Azerbaijan: Gross Domestic Product by Sector of Origin, 1991-97

	1991 1/	1992 1/	1993	1994	1995	1996	1997
(In billions of manats)							
Gross domestic product	2.7	24.1	157.1	1,873.4	10,669.0	13,663.2	15,352.2
Industry	0.6	7.1	39.1	382.2	2,913.0	3,533.0	3,812.9
Agriculture	0.8	6.2	42.2	603.9	2,680.0	3,376.2	3,077.9
Construction	0.2	1.7	11.4	136.6	397.0	1,271.9	2,114.3
Transportation	0.1	1.1	10.4	207.1	1,748.0	1,224.8	1,536.0
Other	1.0	8.0	54.0	543.6	2,931.0	4,257.3	4,811.1
(In percent of GDP)							
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Industry	23.6	29.4	25.0	20.4	27.3	25.8	24.8
Agriculture	30.4	25.9	26.9	32.2	25.1	24.7	20.0
Construction	6.2	7.2	7.3	7.3	3.7	9.3	13.8
Transportation	5.6	4.5	6.6	11.0	16.4	9.0	10.0
Other	34.2	33.0	34.2	29.1	27.5	31.2	31.4
(Real percentage changes)							
Gross domestic product	-0.7	-22.6	-23.1	-19.7	-11.8	1.3	5.8
Oil and gas	...	...	...	-6.7	-6.0	-1.6	0.1
Non-oil	...	...	...	-22.0	-14.3	1.8	8.1
Non-oil industry	...	...	...	-24.7	-21.4	-6.7	0.3
Agriculture	...	...	...	-13.0	-6.8	3.0	-6.9
Construction	...	...	...	-36.0	9.0	11.0	66.1
Transportation	...	...	...	-12.4	-35.5	-22.0	-6.9
Other	...	...	...	-19.6	-5.3	1.8	17.3

Sources: Azerbaijan State Committee on Statistics; and Fund staff estimates.

1/ 1991 and 1992 rubles converted into manats at an exchange rate of 1 manat to 10 rubles.

Table 13. Azerbaijan: Gross Domestic Product by Final Use, 1991-97

	1991	1992	1993	1994	1995	1996	1997
	(In billions of manats)						
Gross domestic product	2.7	24.1	157.1	1,873.4	10,669.0	13,663.2	15,352.2
Final consumption	1.9	19.7	150.4	1,872.6	10,364.0	13,622.0	13,872.3
Households	1.4	15.4	103.1	1,432.1	8,999.0	11,980.0	12,043.6
Government	0.5	4.3	47.3	440.5	1,365.0	1,642.0	1,828.7
Gross fixed capital formation	0.3	5.2	32.9	492.0	1,669.0	3,976.8	5,800.2
Change in inventories	-0.2	-5.4	1.3	-205.1	868.0	-14.7	70.7
Net exports	0.1	7.6	-29.1	-286.1	-2,232.0	-4,234.4	-4,203.6
Exports of goods and nonfactor services	1.2	20.8	90.2	1,196.7	3,466.0	3,406.0	4,396.0
Imports of goods and nonfactor services	-1.1	-13.2	-119.3	-1,482.8	-5,698.0	-7,640.4	-8,599.6
Statistical discrepancies	0.6	-3.0	1.6	0.0	0.0	313.5	-187.4
	(In percent of GDP)						
Gross domestic product	100.0	100.0	100.0	100.1	100.0	100.0	100.0
Final consumption	70.2	81.6	95.8	100.0	97.2	99.7	90.3
Households	50.8	63.9	65.7	76.5	84.4	87.7	78.4
Government	19.4	17.7	30.1	23.5	12.8	12.0	11.9
Gross fixed capital formation	11.4	21.8	21.0	26.3	15.6	29.1	37.8
Change in inventories	-8.4	-22.5	0.8	-10.9	8.1	-0.1	0.5
Net exports	4.5	31.6	-18.6	-15.3	-20.9	-31.0	-27.4
Exports of goods and nonfactor services	45.7	86.2	57.4	63.9	32.5	25.0	28.6
Imports of goods and nonfactor services	-41.2	-54.6	-76.0	-79.2	-53.4	-56.0	-56.0
Statistical discrepancies	22.3	-12.5	1.0	0.0	0.0	2.3	-1.2

Sources: Azerbaijan State Committee on Statistics; and Fund staff estimates.

Table 14. Azerbaijan: Energy Production, 1990-97

	1990	1991	1992	1993	1994	1995	1996	1997
Oil and gas condensate (mln tons)	12.5	11.7	11.1	10.3	9.6	9.2	9.1	9.1
Gas (bln m3)	9.9	8.6	7.9	6.8	6.4	6.6	6.3	6.0
Refined oil (mln tons)	16.3	15.8	11.9	10.0	9.4	8.9	8.7	8.6
Gasoline (mln tons)	2.0	1.8	1.2	1.2	1.3	1.0	1.0	1.1
Mazut (mln tons)	6.8	7.4	5.6	5.1	4.1	4.4	4.0	3.8
Kerosine (mln tons)	1.3	1.2	0.5	0.5	0.6	0.6	0.7	0.7
Diesel (mln tons)	3.9	3.6	3.2	2.7	2.3	2.2	2.1	2.1
Lubricants (mln tons)	0.8	0.8	0.4	0.2	0.2	0.1	0.1	0.1
Electricity (bln kwt/h)	23.2	23.4	19.8	19.1	17.6	17.0	17.0	16.8
Heating energy (mln Kcal)	23.1	22.1	16.8	15.2	12.0	9.9	5.0	3.3

Sources: Azerbaijan State Committee on Statistics, and Ministry of Economy.

Table 15. Azerbaijan: Crude Oil Production, 1980-97
(In thousands of metric tons)

	Offshore	Onshore	Total
1980	9,600	5,053	14,653
1981	9,371	4,703	14,074
1982	8,247	4,666	12,913
1983	8,409	4,286	12,695
1984	8,447	4,057	12,504
1985	9,233	3,909	13,142
1986	9,419	3,902	13,321
1987	10,069	3,734	13,803
1988	10,324	3,417	13,741
1989	10,136	3,023	13,159
1990	9,931	2,582	12,513
1991	9,492	2,249	11,741
1992	9,225	1,970	11,195
1993	8,321	1,974	10,295
1994	7,778	1,785	9,563
1995	7,440	1,760	9,200
1996	7,680	1,420	9,100
1997	7,500	1,600	9,100

Sources: Azerbaijan State Committee on Statistics, and State Oil Company of the Azerbaijan Republic.

Table 16. Azerbaijan: Agricultural Production by Major Crops, 1990-97

	1990	1991	1992	1993	1994	1995	1996	1997
	(In thousands of metric tons)							
Grains (mostly wheat)	1413.6	1346.4	1337.2	1147.9	1039.2	921.4	1018.3	1127.1
Cotton	542.9	539.7	336.3	284.5	283.7	274.1	274.4	124.6
Tobacco	52.9	57.5	52.3	44.9	21.0	11.7	11.2	15.1
Potatoes	185.1	179.9	156.0	152.2	150.0	155.5	214.6	223.4
Other vegetables	856.2	805.9	555.0	487.8	482.9	424.1	570.0	495.4
Grapes	1196.4	1125.6	607.0	411.3	313.8	308.7	275.0	145.3
Watermelons	67.5	62.0	50.1	46.9	44.9	41.9	52.1	73.5
Other fruits	367.4	498.3	400.9	346.4	323.4	324.4	321.2	330.9
Tea	30.7	26.6	22.6	24.0	19.4	9.4	3.0	1.6
	(Percentage changes)							
Grains (mostly wheat)	64.2	-4.8	-0.7	-14.2	-9.5	-11.3	10.5	10.7
Cotton	-6.7	-0.6	-37.7	-15.4	-0.3	-3.4	0.1	-54.6
Tobacco	9.8	8.7	-9.0	-14.1	-53.2	-44.3	-4.3	34.8
Potatoes	0.7	-2.8	-13.3	-2.4	-1.4	3.7	38.0	4.1
Other vegetables	-6.4	-5.9	-31.1	-12.1	-1.0	-12.2	34.4	-13.1
Grapes	13.2	-5.9	-46.1	-32.2	-23.7	-1.6	-10.9	-47.2
Watermelons	6.3	-8.1	-19.2	-6.4	-4.3	-6.7	24.3	41.1
Other fruits	-23.5	35.6	-19.5	-13.6	-6.6	0.3	-1.0	3.0
Tea	-6.1	-13.4	-15.0	5.7	-19.2	-51.5	-68.1	-46.7

Sources: Azerbaijan State Committee on Statistics, and Ministry of Agriculture.

Table 17. Azerbaijan: Production Indicators, 1993-97

	1993	1994	1995	1996	1997
(Index of real output; 1992 = 100)					
Total industry	80.3	60.4	47.5	44.3	44.4
Energy	89.0	82.8	76.1	74.4	73.2
Electricity	94.4	83.5	78.4	75.6	70.6
Oil and gas	86.2	80.4	75.6	74.4	74.5
Metallurgy	61.3	16.2	8.6	2.1	9.7
Machine building	85.6	46.1	25.0	20.5	20.4
Chemical and petro-chemical	72.3	43.8	37.2	46.5	33.4
Construction materials	65.8	45.9	17.0	16.3	15.6
Light industry	85.3	61.2	54.0	32.1	26.8
Textiles	88.0	58.1	53.4	31.8	27.4
Agroprocessing	72.7	47.0	25.8	16.8	15.7
Agriculture	84.6	73.6	68.6	70.7	65.8
Grains	85.8	77.7	68.9	76.2	84.3
Cotton	84.6	84.4	81.5	81.6	37.1
(Real percentage changes)					
Total industry	-19.7	-24.8	-21.4	-6.7	0.2
Energy	-11.0	-7.0	-8.0	-2.3	-1.6
Electricity	-5.6	-11.5	-6.1	-3.6	-6.6
Oil and gas	-13.8	-6.7	-6.0	-1.6	0.1
Metallurgy	-38.7	-73.6	-46.9	-75.6	361.9
Machine building	-14.4	-46.1	-45.8	-18.0	-0.5
Chemical and petro-chemical	-27.7	-39.4	-15.1	25.0	-28.2
Construction materials	-34.2	-30.2	-63.0	-4.1	-4.3
Light industry	-14.7	-28.3	-11.8	-40.6	-16.5
Textiles	-12.0	-34.0	-8.1	-40.4	-13.8
Agroprocessing	-27.3	-35.4	-45.1	-34.9	-6.5
Agriculture	-15.4	-13.0	-6.8	3.1	-6.9
Grains	-14.2	-9.4	-11.3	10.6	10.6
Cotton	-15.4	-0.2	-3.4	0.1	-54.5

Source: Azerbaijan State Committee on Statistics.

Table 18. Azerbaijan: Average Monthly Wages, 1994-97

	Average wage in manats	Average wage in U.S. dollars	Real wage index (1994=100)	Average wage percentage change	Real wage percentage change
1994 January	5,323	18.2	139.1	-6.1	-31.9
February	5,674	15.0	120.4	6.6	-13.4
March	6,777	14.2	115.2	19.4	-4.4
April	7,091	11.1	98.4	4.6	-14.6
May	7,898	7.2	76.5	11.4	-22.3
June	12,076	12.4	99.9	52.9	30.7
July	13,831	14.1	102.6	14.5	2.7
August	14,615	13.5	102.4	5.7	-0.2
September	16,020	9.5	96.3	9.6	-6.0
October	19,812	9.0	89.2	23.7	-7.4
November	28,676	9.2	84.9	44.7	-4.8
December	39,352	9.3	75.1	37.2	-11.6
Annual average	14,762	11.9	100.0	581.4	-61.5
1995 January	34,102	8.0	50.9	-13.3	-32.2
February	43,651	10.0	57.9	28.0	13.8
March	53,767	12.2	69.6	23.2	20.2
April	52,745	12.0	64.6	-1.9	-7.1
May	56,083	12.7	66.0	6.3	2.1
June	61,102	13.8	72.4	8.9	9.6
July	59,642	13.3	70.9	-2.4	-2.1
August	61,821	13.8	73.3	3.7	3.4
September	64,657	14.5	72.7	4.6	-0.8
October	64,657	14.6	71.7	0.0	-1.4
November	65,433	14.7	70.8	1.2	-1.3
December	88,954	20.0	91.9	35.9	29.8
Annual average	58,884	13.3	69.4	298.9	-30.6
1996 January	65,457	14.7	66.3	-26.4	-27.9
February	69,287	15.6	68.0	5.9	2.7
March	79,433	18.0	78.5	14.6	15.3
April	83,968	19.2	82.5	5.7	5.2
May	76,207	17.5	75.7	-9.2	-8.3
June	77,494	17.8	79.0	1.7	4.4
July	81,397	18.9	83.1	5.0	5.1
August	81,990	19.1	82.0	0.7	-1.2
September	86,058	20.4	85.4	5.0	4.1
October	95,992	23.0	95.4	11.5	11.7
November	97,961	23.6	96.6	2.1	1.2
December	131,401	31.9	127.3	34.1	31.9
Annual average	85,554	20.0	85.0	45.3	22.5
1997 January	100,604	24.6	95.9	-23.4	-24.7
February	104,429	25.6	98.9	3.8	3.2
March	114,665	28.3	108.5	9.8	9.7
April	114,293	28.4	106.0	-0.3	-2.3
May	121,720	30.4	115.3	6.5	8.8
June	119,046	30.1	114.2	-2.2	-1.0
July	119,489	30.1	117.2	0.4	2.6
August	122,177	30.9	120.8	2.2	3.1
September	122,941	31.2	120.5	0.6	-0.3
October	126,588	32.3	122.3	3.0	1.5
November	130,637	33.5	126.0	3.2	3.0
December	165,800	42.4	160.2	26.9	27.2
Annual average	121,866	30.7	117.2	42.4	37.9

Sources: Azerbaijan State Committee on Statistics; and Fund staff estimates.

1/ Average monthly wage deflated by monthly change of the consumer price index.

Table 19. Azerbaijan: Average Monthly Wages by Sector, 1990-97

	1990	1991	1992	1993	1994	1995	1996	1997
(Annual average, in manats)								
National economy 1/	19.5	31.8	270.3	2,184.7	15,325.3	62,467.4	89,370.1	141,643.4
Industry	21.9	40.0	388.3	3,109.2	21,009.0	95,556.7	146,171.7	194,643.1
Agriculture	16.4	26.1	146.6	1,120.4	8,310.6	33,548.9	37,774.1	35,734.1
Transportation	21.6	34.5	285.4	2,623.4	18,635.8	98,241.2	150,452.1	204,857.7
Communication	17.5	31.0	294.8	2,270.3	19,599.3	83,802.2	119,363.2	178,472.7
Construction	29.1	45.3	367.5	3,277.8	22,366.2	98,872.5	167,184.8	252,417.0
Trade	15.1	22.9	162.8	1,163.8	7,647.1	37,518.7	50,602.1	48,614.5
Hotel industry	14.1	24.6	162.7	1,640.1	11,206.1	49,206.3	75,135.0	88,366.2
Health and social services	13.2	22.7	240.6	1,294.0	9,982.6	26,303.6	46,884.3	51,736.7
Education	17.7	25.6	257.1	2,012.6	14,038.5	46,412.3	63,046.9	95,431.0
Culture	12.5	29.3	202.5	1,502.0	10,480.5	33,442.6	41,186.1	55,878.4
Banking and insurance	27.1	61.4	675.7	6,431.0	33,316.8	169,063.8	169,324.2	192,207.9
Government administration	25.9	37.4	345.2	3,478.1	10,134.2	57,514.8	69,280.7	89,630.5
(Annual percentage changes)								
National economy	8.9	63.1	750.0	708.3	601.5	307.6	43.1	58.5
Industry	4.8	82.6	870.8	700.7	575.7	354.8	53.0	33.2
Agriculture	17.1	59.1	461.7	664.3	641.8	303.7	12.6	-5.4
Transportation	6.9	59.7	727.2	819.2	610.4	427.2	53.1	36.2
Communication	8.7	77.1	851.0	670.1	763.3	327.6	42.4	49.5
Construction	5.1	55.7	711.3	791.9	582.4	342.1	69.1	51.0
Trade	13.5	51.7	610.9	614.9	557.1	390.6	34.9	-3.9
Hotel industry	11.9	74.5	561.4	908.1	583.3	339.1	52.7	17.6
Health and social services	7.3	72.0	959.9	437.8	671.5	163.5	78.2	10.3
Education	6.6	44.6	904.3	682.8	597.5	230.6	35.8	51.4
Culture	2.5	134.4	591.1	641.7	597.8	219.1	23.2	35.7
Banking and insurance	58.5	126.6	1000.5	851.8	418.1	407.4	0.2	13.5
Government administration	42.3	44.4	823.0	907.6	191.4	467.5	20.5	29.4

Sources: Azerbaijan State Committee on Statistics; and Fund staff estimates.

1/ Data may differ from the average for the year calculated on the basis of monthly wage data.

Table 20. Azerbaijan: Labor Market, 1992-97

	1992	1993	1994	1995	1996	1997
(In thousands of persons)						
Population	7,301	7,364	7,420	7,469	7,508	7565
Working age population	3,954	3,971	3,999	4,039	4,059	4127
Outside labor force	500	500	635	622	468	530
Labor force	3,454	3,471	3,364	3,417	3,591	3597
Total employment	2,922	2,917	2,851	2,837	2,895	2900
Industry	429	392	374	352	283	257
Government	603	642	653	599	568	564
Agriculture	1,009	940	895	870	918	964
Other	881	943	964	1,009	1,126	1115
Unemployment	532	554	513	580	696	696
Unemployment rate (in percent)	15.4	16.0	15.2	17.0	19.4	19.3
Registered unemployed	6	20	24	28	32	38
Benefit recipients	6	5	4	3	3	3
Pensioners	1,118	1,251	1,283	1,227	1,245	1206
(Percentage changes)						
Population	1.0	0.9	0.8	0.7	0.5	0.8
Working age population	0.5	0.4	0.7	1.0	0.5	1.7
Outside labor force	...	0.0	27.0	-2.0	-24.8	13.2
Labor force	...	0.5	-3.1	1.6	5.1	0.2
Total employment	-1.7	-0.2	-2.3	-0.5	2.0	0.2
Industry	-5.7	-8.6	-4.6	-5.9	-19.6	-9.2
Government	1.0	6.5	1.7	-8.3	-5.2	-0.8
Agriculture	...	-6.8	-4.8	-2.8	5.5	5.0
Other	...	7.0	2.2	4.7	11.6	-1.0
Unemployment	...	4.1	-7.4	13.1	20.0	0.0
Registered unemployed	...	204.7	21.0	19.9	13.1	18.8
Benefit recipients	...	-16.7	-20.0	-25.0	0.0	0.0
Pensioners	...	11.9	2.6	-4.4	1.5	-3.1

Sources: Azerbaijan State Committee on Statistics, Ministries of Labor and Finance; and Fund staff estimates.

Table 21. Azerbaijan: Consumer Price Index, 1994-97

	Index 1994=100	Percentage changes				
		In the month	Quarterly		Annual	
			In the quarter	Over the previous quarter	In the last twelve months	Over the previous twelve months
1994 January	23.3	37.8			1146.4	1135.1
February	28.7	23.1			1236.5	1163.8
March	35.9	24.9	111.9	152.7	1386.4	1217.6
April	43.9	22.5			1491.7	1280.2
May	63.0	43.3			1703.1	1371.6
June	73.7	17.0	105.4	105.4	1613.7	1425.8
July	82.1	11.5			1641.8	1471.7
August	87.0	5.9			1532.4	1487.7
September	101.4	16.6	37.7	49.8	1536.6	1501.9
October	135.4	33.5			1690.9	1540.7
November	205.9	52.1			1900.0	1615.7
December	319.6	55.2	215.1	144.3	1788.0	1664.4
1995 January	408.5	27.8			1651.0	1671.7
February	459.5	12.5			1500.2	1637.3
March	471.0	2.5	47.4	102.6	1213.2	1539.6
April	497.4	5.6			1032.1	1423.4
May	517.8	4.1			722.4	1243.0
June	514.7	-0.6	9.3	14.3	598.7	1089.5
July	513.2	-0.3			524.7	966.1
August	514.2	0.2			491.1	873.4
September	541.9	5.4	5.3	2.6	434.3	788.7
October	549.5	1.4			305.9	685.8
November	563.3	2.5			173.5	554.3
December	589.7	4.7	8.8	8.5	84.5	411.7
1996 January	602.1	2.1			47.4	299.6
February	620.8	3.1			35.1	222.2
March	617.1	-0.6	4.6	8.1	31.0	171.0
April	620.2	0.5			24.7	132.9
May	614.0	-1.0			18.6	104.2
June	598.0	-2.6	-3.1	-0.4	16.2	82.7
July	597.4	-0.1			16.4	66.1
August	609.3	2.0			18.5	52.9
September	614.2	0.8	2.7	-0.6	13.3	41.1
October	613.6	-0.1			11.7	31.7
November	618.5	0.8			9.8	24.6
December	628.0	1.5	2.2	2.1	6.5	19.7
1997 January	638.9	1.7			6.1	16.7
February	643.0	0.6			3.6	14.1
March	643.6	0.1	2.5	3.5	4.3	12.0
April	656.7	2.0			5.9	10.5
May	643.3	-2.1			4.8	9.4
June	635.4	-1.2	-1.3	0.5	6.3	8.6
July	621.2	-2.2			4.0	7.7
August	616.1	-0.8			1.1	6.3
September	621.7	0.9	-2.2	-3.9	1.2	5.3
October	630.2	1.4			2.7	4.6
November	631.7	0.2			2.1	4.0
December	630.4	-0.2	1.4	1.8	0.4	3.5

Source: Azerbaijan State Committee on Statistics.

Table 22. Azerbaijan: Breakdown of Consumer Price Index, 1995-97

	Total			Food items			Non-food items			Non-food goods			Services		
	Percentage change	Index Dec 94=100		Percentage change	Index Dec 94=100		Percentage change	Index Dec 94=100		Percentage change	Index Dec 94=100		Percentage change	Index Dec 94=100	
1995	27.8	127.8	133.8	33.8	110.9	10.9	115.7	15.7	115.7	5.7	105.7				
January	12.5	143.8	148.3	10.8	131.4	18.5	130.6	12.9	130.6	25.2	132.3				
February	2.5	147.4	152.1	2.6	134.4	2.3	134.8	3.2	134.8	1.2	133.9				
March	5.6	155.6	161.1	5.9	141.0	4.9	141.7	5.1	141.7	4.6	140.1				
April	4.1	162.0	168.6	4.7	144.1	2.2	144.9	2.3	144.9	2.1	143.0				
May	-0.6	161.0	166.0	-1.6	147.9	2.6	149.9	3.4	149.9	1.6	145.3				
June	-0.3	160.5	163.8	-1.3	152.3	3.0	155.1	3.5	155.1	2.4	148.8				
July	0.2	160.9	161.8	-1.2	159.0	4.4	159.8	3.0	159.8	6.0	157.7				
August	5.4	169.6	171.5	6.0	164.9	3.7	163.4	2.3	163.4	5.2	165.9				
September	1.4	171.9	174.3	1.6	166.5	1.0	165.7	1.4	165.7	0.6	166.9				
October	2.5	176.2	179.5	3.0	168.0	0.9	167.4	1.0	167.4	0.9	168.4				
November	4.7	184.5	190.5	6.1	168.7	0.4	168.4	0.6	168.4	0.1	168.6				
December	2.1	188.4	195.6	2.7	169.1	0.2	168.6	0.1	168.6	0.2	168.9				
1996	3.1	194.2	202.8	3.7	170.4	0.8	168.7	0.1	168.7	3.0	174.0				
January	-0.6	193.1	201.4	-0.7	170.4	0.0	168.9	0.1	168.9	0.0	174.0				
February	0.5	194.0	201.8	0.2	173.8	2.0	173.1	2.5	173.1	0.7	175.2				
March	-1	192.1	198.8	-1.5	175.0	0.7	174.7	0.9	174.7	0.2	175.6				
April	-2.6	187.1	192.0	-3.4	176.6	0.9	174.3	-0.2	174.3	2.9	180.7				
May	-0.1	186.9	182.8	-4.8	176.6	16.8	174.8	0.3	174.8	66.9	301.5				
June	2	190.6	187.0	2.3	176.4	1.0	176.4	0.9	176.4	1.2	305.1				
July	0.8	192.2	188.7	0.9	177.0	0.2	177.0	0.3	177.0	0.1	305.5				
August	-0.1	192.0	188.3	-0.2	177.3	0.4	177.3	0.2	177.3	0.7	307.6				
September	0.8	193.5	188.1	-0.1	177.8	3.9	177.0	0.2	177.0	12.0	344.5				
October	0.8	197.0	191.0	1.5	177.8	2.3	184.4	-0.2	177.0	-0.1	344.2				
November	1.7	197.0	195.4	2.3	184.4	0.0	184.2	-0.1	184.2	0.0	344.2				
December	1.7	200.4	196.9	2.3	184.2	0.0	184.2	0.0	184.2	0.0	344.2				
1997	0.6	201.6	201.8	0.8	197.1	0.1	184.2	0.0	184.2	0.0	344.2				
January	0.1	201.8	201.7	0.1	197.1	0.1	184.2	0.0	184.2	0.0	344.2				
February	2	205.8	201.7	2.3	195.8	1.2	183.7	0.0	184.2	0.3	345.2				
March	-2.1	201.5	195.8	-2.9	195.8	1.2	183.7	-0.3	183.7	4.8	361.8				
April	-1.2	199.1	192.3	-1.8	192.3	0.9	187.0	-0.6	187.0	0.0	361.8				
May	-2.2	194.7	187.1	-2.7	187.1	-0.5	185.9	-0.7	185.9	4.1	376.6				
June	-0.8	193.1	185.0	-1.1	185.0	0.0	184.6	0.0	184.6	0.0	376.6				
July	0.9	194.9	187.2	1.2	187.2	0.0	184.6	0.0	184.6	0.0	376.6				
August	1.4	197.6	189.7	1.3	189.7	1.5	184.6	0.0	184.6	4.7	394.3				
September	0.3	198.0	190.3	0.3	190.3	0.0	184.6	0.0	184.6	0.0	394.3				
October	-0.2	197.6	189.9	-0.2	189.9	0.0	184.6	0.0	184.6	0.0	394.3				
November															
December															

Source: Azerbaijan State Committee on Statistics.

Table 23. Azerbaijan: Consolidated Operations of the General Government, 1993-1997

	1993		1994		1995		1996		1997	
	Billions of Manats	Percent of GDP	Billions of Manats	Percent of GDP	Billions of Manats	Percent of GDP	Billions of Manats	Percent of GDP	Billions of Manats	Percent of GDP
Revenue	63.7	40.5	633.6	33.8	1,872.6	17.6	2,401.0	17.6	3,023.2	19.7
Individual income tax	3.7	2.4	27.8	1.5	116.9	1.1	213.0	1.6	331.1	2.2
Enterprise profits tax	13.3	8.5	97.5	5.2	408.7	3.8	586.0	4.3	443.6	2.9
Social security contributions	15.0	9.5	79.3	4.2	249.6	2.3	310.3	2.3	387.6	2.5
Value-added tax	12.7	8.1	62.7	3.3	176.1	1.7	467.6	3.4	654.2	4.3
Excise taxes	6.3	4.0	37.0	2.0	88.4	0.8	206.3	1.5	221.7	1.4
Royalties	0.0	0.0	0.0	0.0	0.0	0.0	41.6	0.3	341.9	2.2
Customs revenue	1.2	0.8	12.8	0.7	69.0	0.6	111.8	0.8	233.8	1.5
Other revenues	11.5	7.3	316.5	16.9	763.1	7.2	464.5	3.4	409.2	2.7
Foreign exchange revenue	7.2	4.6	251.6	13.4	317.2	3.0	0.0	0.0	0.0	0.0
Employment Fund revenue	0.0	0.0	1.9	0.1	6.0	0.1	6.9	0.1	14.2	0.1
Road Fund revenue	...	...	...	...	...	...	30.0	0.2	45.5	0.3
Other former Funds	...	...	...	...	...	...	15.5	0.1	29.9	0.2
Other revenue	4.3	2.7	63.0	3.4	252.4	2.4	288.5	2.1	251.8	1.6
Total expenditure (incl. net lending)	87.8	55.9	860.8	45.9	2,394.7	22.4	2,780.7	20.4	3,279.9	21.4
Wages and salaries	...	...	86.0	4.6	389.7	3.7	482.8	3.5	701.3	4.6
Purchases of goods and services	16.4	10.4	120.0	6.4	731.5	6.9	943.8	6.9	1,161.3	7.6
Interest payments	...	...	0.3	0.0	10.7	0.1	43.7	0.3	18.5	0.1
Transfers to households	26.0	16.5	161.4	8.6	538.8	5.1	872.3	6.4	958.8	6.2
Social Protection Fund	26.0	16.5	161.0	8.6	533.6	5.0	793.5	5.8	841.5	5.5
Pensions	12.7	8.1	73.5	3.9	194.5	1.8	366.2	2.7	421.4	2.7
Cash compensations	5.4	3.4	62.4	3.3	241.7	2.3	307.4	2.3	320.5	2.1
Other compensations and allowances	7.9	5.0	24.5	1.3	97.3	0.9	119.9	0.9	100.0	0.7
Employment Fund Expenditure (EF)	...	...	...	...	5.3	0.0	6.2	0.0	6.8	0.0
Disabled Persons' Fund Exp. (DFF)	...	...	...	...	0.0	0.0	14.9	0.1	18.4	0.1
Current transfers abroad	...	...	...	...	7.9	0.1	0.0	0.0	14.8	0.1
Subsidies	7.3	4.6	101.9	5.4	233.4	2.2	285.4	2.1	105.9	0.7
Capital investment	4.9	3.1	16.1	0.9	78.9	0.7	68.0	0.5	200.6	1.3
Other	...	...	...	...	0.0	0.0	1.7	0.0	2.0	0.0
Financial Balance	-24.1	-15.3	-227.2	-12.1	-119.0	-1.1	-295.7	-2.2	-165.2	-1.1
Lending minus repayment	...	...	...	...	403.8	3.8	83.0	0.6	91.5	0.6
Fiscal Balance	-24.1	-15.3	-227.2	-12.1	-522.8	-4.9	-378.7	-2.8	-256.7	-1.7
Available financing	24.0	15.3	227.0	12.1	523.0	4.9	379.1	2.8	256.9	1.7
Domestic	24.0	15.3	227.0	12.1	29.9	0.3	-32.2	-0.2	-61.0	-0.4
External	0.0	0.0	0.0	0.0	493.1	4.6	411.3	3.0	317.9	2.1
Memorandum Item:										
GDP (billions of manats)	157		1,873		10,669		13,663		15,352	

Sources: Ministry of Finance, State Tax Inspectorate, Azerbaijan National Bank; and Fund staff estimates.

Table 24. Azerbaijan: Social Protection Fund, 1993-1997

	1993	1994	1995	1996	1997
	(In billions of manats)				
Total revenue	26	160	534	787	842
Total payroll tax	19	104	317	387	563
o/w paid by non-budgetary agencies	15	79	250	310	388
Transfer from State Budget	5	48	174	299	279
EU grant	0	0	29	78	0
Other	1	8	13	23	0
Total expenditure	26	160	534	795	842
Pensions	13	74	195	366	421
Old age pensioners	...	...	159	290	348
Working pensioners	...	...	36	76	74
Child allowances	...	...	55	39	17
Maternity leave	...	...	7	9	6
Sanatorium vouchers	...	...	11	17	15
Sick leave	...	...	11	18	19
Funeral allowance	...	...	0	2	1
Compensation for elimination of communal services	...	...	...	...	25
Other compensations and allowances	5	62	244	309	323
Children under 16	...	...	138	169	167
Pensioners	...	...	99	131	141
War veterans	...	...	4	8	13
Other	8	25	13	36	18
Balance	0	-1	0	-8	1
	(In percent of GDP)				
Total revenue	16.4	8.5	5.0	5.8	5.5
Total payroll tax	12.1	5.5	3.0	2.8	3.7
o/w paid by non-budgetary agencies	9.6	4.2	2.3	2.3	2.5
Transfer from State Budget	3.4	2.6	1.6	2.2	1.8
EU grant	0.0	0.0	0.3	0.6	0.0
Other	0.9	0.4	0.1	0.2	0.0
Total expenditure	16.6	8.6	5.0	5.8	5.5
Pensions	8.1	3.9	1.8	2.7	2.7
Old age pensioners	...	...	1.5	2.1	2.3
Working pensioners	...	...	0.3	0.6	0.5
Child allowances	...	...	0.5	0.3	0.1
Maternity leave	...	...	0.1	0.1	0.0
Sanatorium vouchers	...	...	0.1	0.1	0.1
Sick leave	...	...	0.1	0.1	0.1
Funeral allowance	...	...	0.0	0.0	0.0
Compensation for elimination of communal services	...	...	0.0	0.0	0.2
Other compensations and allowances	3.4	3.3	2.3	2.3	2.1
Children under 16	...	...	1.3	1.2	1.1
Pensioners	...	...	0.9	1.0	0.9
War veterans	...	...	0.0	0.1	0.1
Other	5.0	1.3	0.1	0.3	0.1

Sources: Social Protection Fund; and Fund staff estimates.

Table 25. Azerbaijan: Balance Sheet of the Azerbaijan National Bank and Monetary Survey, 1993-97
(In billions of manats, end of period)

	1993	1994	1995	1996	1997
Balance Sheet of the Azerbaijan National Bank					
Net foreign assets	-1.0	4.5	244.6	264.9	858.2
Net international reserves (convertible)	0.1	3.8	81.1	187.1	779.1
Gross international reserves (convertible)	0.1	8.4	529.0	876.5	1,817.5
Foreign liabilities (convertible)	0.0	-4.6	-447.9	-689.5	-1,038.3
Other	-1.0	0.7	163.5	77.8	79.1
Net domestic assets	44.8	322.0	666.5	806.2	571.6
Domestic credit	44.0	335.7	784.5	853.0	781.5
Credit to general government (net; incl counterpart funds)	23.9	235.1	-114.2	82.3	-5.7
Claims on enterprises	0.1	1.0	8.5	8.9	8.4
Claims on banks	20.0	99.6	890.3	761.8	778.8
Other items (net)	0.8	-13.7	-118.0	-46.9	-209.9
Reserve money	43.5	323.1	906.4	1,066.8	1,422.3
Manat reserve money	43.5	323.1	742.2	991.3	1,339.3
Required reserves in foreign currencies	0.0	0.0	164.3	75.5	83.0
Other deposits	0.3	3.4	4.7	4.2	7.6
Monetary Survey					
Net foreign assets	3.4	398.7	676.3	593.9	1,233.3
Net international reserves of the ANB (convertible)	0.1	3.8	81.1	187.1	779.1
Net foreign assets of commercial banks (convertible)	5.2	378.7	591.3	396.1	450.0
Other	-1.8	16.1	3.8	10.7	4.2
Net domestic assets	82.9	649.4	623.3	951.2	830.3
Domestic credit	88.2	830.0	1,336.1	1,780.1	1,977.6
Credit to general government (net, incl. counterpart funds)	17.0	185.0	-199.9	-108.0	-53.5
Claims on enterprises and individuals	71.2	645.0	1,536.0	1,888.1	2,031.1
Other items (net)	-5.3	-180.6	-712.7	-828.8	-1,147.3
Broad money	86.3	1,048.1	1,299.6	1,545.1	2,063.7
Manat broad money	73.5	431.0	957.6	1,204.2	1,556.3
Currency outside banks	43.2	276.1	602.4	865.4	1,170.5
Manat deposits	30.4	154.9	355.2	338.7	385.8
Foreign currency deposits	12.8	617.0	342.0	340.9	507.4
Memorandum Items:					
Manat money multiplier (level)	1.7	1.3	1.3	1.2	1.2
Manat reserve money (annual percentage change)	1,136.1	642.8	129.7	33.6	35.1
Manat broad money (annual percentage change)	685.7	486.1	122.2	25.8	29.2
Broad money (annual percentage change)	821.2	1,114.2	24.0	18.9	33.6

Sources: Azerbaijan National Bank; and Fund staff estimates.

Table 26. Azerbaijan: Credit and Deposit Interest Rates, 1996-98
(In percent per annum)

	Average Interbank Credit Rates, Baku										Average bank deposit rates for customers (3 month)		ANB refinance rate (6 month)	Credit auction interest rate (6 month)
	7 days manats		30 days manats		90 days manats		180 days manats		90 days US dollars		manats	US dollars		
	IBOR 1/	WA 2/	IBOR	WA	IBOR	WA	IBOR	WA	IBOR	WA				
1996 Dec.	26.0	21.0	33.4	28.1	36.0	28.2	36.0	32.2	27.5	25.0	13.0	9.0	20.0	20.0
1997 Jan.	25.0	20.5	33.4	28.1	36.0	28.2	36.0	32.2	27.5	25.0	13.0	9.0	20.0	20.0
Feb.	25.0	20.3	24.8	20.9	25.3	19.8	26.5	20.4	19.3	15.8	12.4	9.0	16.0	16.0
Mar.	28.0	28.0	26.7	26.7	26.3	21.4	25.8	19.9	21.6	16.8	10.7	9.0	15.0	15.0
Apr.	28.0	22.0	27.0	22.8	24.8	18.6	23.6	19.1	24.0	15.3	11.0	9.0	15.0	15.0
May.	17.7	14.7	21.0	16.3	21.4	16.9	21.5	17.5	16.1	12.5	11.8	9.5	15.0	15.0
Jun.	19.6	16.0	21.4	17.8	22.3	17.5	23.0	18.0	16.8	14.2	12.0	9.5	12.0	12.0
Jul	22.6	17.6	21.3	17.0	20.9	16.2	20.1	16.0	16.6	13.4	10.8	9.5	12.0	12.0
Aug.	21.0	15.6	21.8	16.4	22.0	17.0	23.4	17.3	17.3	14.1	11.8	11.4	12.0	12.0
Sep.	15.5	12.8	18.2	14.2	21.4	14.9	21.1	17.4	16.0	12.5	11.1	10.4	12.0	12.0
Oct.	18.7	14.7	20.8	15.4	22.0	16.6	20.4	17.1	16.7	13.1	12.5	10.5	12.0	12.0
Nov.	24.0	17.7	24.5	17.4	27.0	18.7	23.6	18.9	17.8	15.1	10.5	9.7	12.0	12.0
Dec.	22.0	16.2	27.0	20.8	22.9	17.9	22.9	19.2	22.1	19.0	11.5	10.3	12.0	12.0
1998 Jan.	18.3	12.5	22.2	15.8	22.2	17.4	20.9	17.7	18.5	14.9	9.5	9.0	12.0	12.5
Feb.	18.5	12.8	21.4	16.4	22.3	16.5	21.0	16.8	20.0	16.1	10.0	9.3	12.0	13.0
Mar.	18.5	14.8	22.2	16.5	24.5	18.1	22.6	18.3	19.5	15.8	10.7	9.8	12.0	13.0
Apr.	18.5	12.8	23.8	15.8	24.8	17.6	23.2	18.8	19.1	15.6	10.6	9.8	12.0	14.0

Source: Baku Interbank Currency Exchange.

1/ IBOR: Interbank offer rate.

2/ WA: Represents weighted average of all bids and offers.

Table 27. Azerbaijan: Exchange Rates, 1994-98
(Manat per US dollar)

		Period average	End of period
1994	QI	382	505
	QII	901	1000
	QIII	1251	1900
	QIV	3196	4330
1995	QI	4334	4382
	QII	4419	4457
	QIII	4474	4435
	QIV	4439	4440
1996	QI	4429	4368
	QII	4355	4335
	QIII	4268	4215
	QIV	4151	4098
1997	QI	4076	4035
	QII	3993	3982
	QIII	3953	3930
	QIV	3910	3888
1998	QI	3883	3869

Sources: Azerbaijan authorities; and Fund staff estimates.

Table 28. Azerbaijan: Balance of Payments, 1994-97
(In millions of U.S. dollars, unless otherwise indicated)

	1994	1995	1996	1997
Current account	-121	-318	-811	-915
Trade Balance	-163	-275	-549	-566
Exports, of which:	682	680	789	808
Oil	207	257	402	434
Cotton	99	105	57	105
Imports, f.o.b.	-845	-955	-1,338	-1,375
of which: oil sector	0	-30	-213	-256
Services	-33	-140	-277	-384
Receipts	137	172	149	342
Payments	-170	-312	-426	-726
of which: oil sector	0	-68	-166	-321
Income	0	-13	-52	-9
Compensation of employees	0	-6	-16	-19
of which: oil consortiums	0	-9	-13	-19
interest payments on public external debt	-3	-7	-17	-7
investment income (net)	3	0	-19	17
of which: profit repatriation of oil consortiums	0	-7	0	0
Current transfers	75	111	67	46
Official	71	81	86	55
Private	4	29	-20	-10
Capital and financial account	54	318	739	1,008
Official medium- and long-term	54	87	-19	10
Disbursements	54	116	50	88
Project loans	54	14	19	53
Program loans	0	102	31	35
Amortization	0	-29	-70	-78
Direct and portfolio investment	22	282	661	1,093
Oil companies	0	252	487	845
Oil bonus (net) 1/	0	122	37	64
Other, net	0	130	450	781
Other	22	30	174	248
Banking system (net)	-22	-42	15	-5
Trade credit and other short term capital	0	-9	82	-90
Errors & omissions	-12	0	21	51
Overall balance	-79	0	-52	145
Financing	79	0	52	-145
Net foreign assets of the Central Bank(- increase)	-2	-16	-24	-145
Central bank gross reserves	-2	-117	-95	-253
IMF	0	101	71	108
Change in arrears 2/	81	-76	25	0
Rescheduling	0	92	51	0
Memorandum items:				
Gross reserves of the ANB				
In millions of dollars	2	119	214	467
In weeks of imports 3/	0	5	8	16
Current account in percent of GDP				
including oil sector development	-9.3	-13.2	-25.5	-23.7
excluding oil sector development 4/	-9.3	-9.1	-13.6	-8.8
External debt in percent of GDP	...	17.3	16.6	14.5
External debt service in terms of export of GNFS	...	7.9	9.7	7.4

Sources: Azerbaijan authorities; and Fund staff estimates.

1/ Contract signing bonuses paid to the Government by foreign oil companies.

2/ Debt service obligations to Russia. An agreement to cancel all outstanding mutual claims with Russia was reached in 1997.

3/ Imports of goods and non factor services, excluding oil sector operations.

4/ Excludes imports of goods and nonfactor services related to oil sector development.

Table 29. Registered Foreign Trade, 1993-97 1/
(In millions of US Dollars)

	1993	1994	1995	1996	1997
Exports	697	637	547	631	781
Food	97	64	39	29	55
Cotton	65	99	117	59	123
Oil products	198	207	282	395	452
Metal	162	105	18	6	15
Chemicals and petrochemicals 2/	44	33	34	48	41
Machines and equipment	66	93	46	48	41
Other	65	36	11	46	54
Imports 3/	849	778	668	961	794
Food	...	205	277	383	181
Natural gas	66	193	0	--	--
Metal	...	97	42	87	109
Chemicals and petrochemicals 2/	...	52	73	94	19
Machines and equipment	...	102	123	226	219
Other	...	129	153	174	206
Direction of Trade					
Export	697	637	547	631	781
C.I.S.	362	281	218	290	378
Russia	180	140	99	111	181
Ukraine	47	568	33	22	32
Other countries	136	83	86	157	165
Rest-of-World	335	356	329	341	403
Iran	193	242	163	226	190
Turkey	61	16	26	39	41
United Kingdom	3	62	49	13	1
Other countries	78	36	91	63	171
Imports	849	778	668	961	794
C.I.S.	441	498	228	340	351
Russia	125	118	88	158	152
Ukraine	153	86	34	94	86
Kazakstan	35	52	18	19	30
Turkmenistan	71	196	51	13	25
Other countries	57	47	37	54	58
Rest-of-World	408	280	440	621	443
Iran	42	67	80	66	49
Turkey	64	76	141	216	180
Other countries	302	137	219	359	214

Sources: Azerbaijan State Committee on Statistics.

1/ Figures are based on customs data and might be different from Table 28 which is based on central bank data.

2/ Including pharmaceutical products.

3/ Do not include data on shuttle trade.

Table 30. Azerbaijan: Energy Balance, 1991-97

	1991	1992	1993	1994	1995	1996	1997
Oil and products							
Production	11.7	11.1	10.3	9.6	9.2	9.1	9.1
Net volume of trade	4.2	3.5	1.4	1.8	2.2	2.4	2.9
Export	8.3	5.4	1.6	1.8	2.2	2.5	3.2
of which: crude	0.0	1.1	0.0	0.0	0.0	0.0	0.3
Import	-4.1	-1.9	-0.2	0.0	0.0	-0.1	-0.3
Domestic use	7.5	7.7	8.9	7.6	7.0	6.7	6.2
Natural gas							
Production (excluding losses) 1/	8.6	7.8	6.8	6.4	6.6	6.3	6.0
Net volume of trade	-8.2	-3.9	-2.5	-2.5	-0.5	0.0	0.0
Export	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import	-8.2	-3.9	2.5	-2.5	-0.5	0.0	0.0
Domestic use	16.8	11.7	9.3	8.7	7.1	6.3	6.0

Sources: Azerbaijan State Committee on Statistics.

1/ Production excludes vented gas.

