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SM/97/78

CONTAINS CONFIDENTIAL
INFORMATION

March 10, 1997

To: Members of the Executive Board

From: The Secretary

Subject: **Oman—Selected Issues**

The attached paper provides further background information to the staff report on the 1996 Article IV consultation discussions with Oman, which was circulated as SM/97/57 on February 24, 1997.

Mr. Mansur (ext. 37120) or Mr. Martey (ext. 36519) is available to answer technical or factual questions relating to this paper prior to the Board discussion.

Unless the Documents Preparation Section (ext. 36760) is otherwise notified, the document will be transmitted, in accordance with the procedures approved by the Executive Board and with the appropriate deletions, to the WTO Secretariat on Tuesday, March 18, 1997; and to the Food and Agriculture Organization (FAO) and the United Nations Development Programme (UNDP), following its consideration by the Executive Board.

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OMAN

Selected Issues

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Approved by the Middle Eastern Department

March 6, 1997

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I. INTRODUCTION

1.   With the steady increase in crude oil production and exports, and the surge in oil prices in the mid- and late 1970s, Oman embarked upon an economic development path that transformed it into a prosperous country. Prudent utilization of oil revenues to develop social and physical infrastructure—with substantial investments undertaken in health, transportation, electricity, and water and communication sectors—contributed to a rapid transformation of Oman's economic foundation and structure. Today, Oman boasts an impressive physical infrastructure, much improved socioeconomic conditions, and high standards of living.

2.   Over the last two decades Oman recorded one of the highest growth rates in the regional and global context. Oman also experienced persistent non-oil GDP growth, financial stability, confidence in the economy, and stable currency, despite severe external terms-of-trade shocks resulting from sharply lower crude oil export prices in the 1980s and early 1990s. The strong non-oil sector real growth averaged 8.2 percent over 1980–95. Domestic inflation, measured in terms of consumer price index, averaged 4.3 percent over the same period, supported by the fixed peg of the rial Omani to the U.S. dollar, open trade and payments systems, and prudent stance of monetary policy. Oman's economic gains and growing private sector confidence and participation in the economy have been reflected in the prosperity and well being of the Omani population in general.

3.   The impressive economic performance supported, in part, by an expansionary stance of fiscal policy—with the official budget deficit averaging about 8.5 percent of GDP during this period—however, had its costs. Financing of this unsustainably large fiscal deficit entailed substantial drawdown of foreign and domestic investments of the Stare General Reserve Fund (SGRF), loss of foreign exchange reserves of the monetary authority, as well as accumulation of sizable domestic and foreign debt. The decline in public sector saving coupled with Oman's low private sector propensity to save adversely affected the saving investment balance and increased the dependence of the economy to foreign savings and investments. Accordingly, the challenge facing the policy makers now is how to sustain the impressive economic performance of the last two decades over the medium term, while restoring and thereafter maintaining macroeconomic balance. This challenge, in turn, will require substantial fiscal consolidation—which is currently underway—supported by expenditure cuts and non-oil revenue efforts; strengthening of domestic saving (both public and private) mobilization; diversification of the economy out of its excessive dependence on the oil sector; and a push to increase factor productivity through structural reforms in the real and financial sectors, and investments in human resources.

4.   The Government of Oman recognizes that since the oil sector's potential is already being fully utilized, Oman's medium-term strategy should focus on the challenge of sustaining high rate of growth in the non-oil sector in order to improve per capita income and create jobs, while undertaking and sustaining serious fiscal consolidation over the medium term. The need to diversify the economy and build up SGRF reserves for future use is much more

pressing in the case of Oman than in other GCC countries given Oman's relatively short proven and commercially viable reserve horizon (16 years at the current rate of extraction). Accordingly, the government has formulated the Fifth Five-Year Plan (covering 1996–2000) which aims to: achieve a balanced government budget position by 2000; increase the share of private sector investment from 40 percent to 53 percent through increased role/participation of the private sector; mobilize substantially higher foreign investment; and create better employment opportunities for the growing number of Omani nationals entering the labor force. The challenge is not an easy one, but Oman's solid economic and physical infrastructure provide a solid foundation to build on.

5.   The purpose of this background study is to contribute to a better understanding of the developments in the Omani economy since 1980 and the policy challenges the government faces in the medium term. The study focuses on some central aspects of Oman's economic experience including the potential structural impediments to growth.

6.   Section II reviews the principal factors underlying Oman's impressive economic performance during 1980–95, highlights the central medium-term structural issues such as the savings-investment imbalance, factor productivity, and diversification of the production base. It finds that over the period under consideration (1) the subperiods characterized by real per capita income growth were associated with relatively high growth in investment; (2) the economy recorded negligible diversification in real terms as between the oil and non-oil sectors; (3) the savings-investment gap widened; and (4) economic growth was primarily linked to increased use of capital and labor while the total factor productivity was on average barely positive. The section concludes that sustaining real per capita income over the medium term would require forceful efforts aimed at improving the savings-investment balance coupled with a certain minimum rate of investment, raising factor productivity, and enhancing diversification of the economy.

7.   Section III reviews Oman's relative economic and financial position within the GCC. In particular, the section describes Oman's comparative dependence on oil, openness of the economy, monetary policy, regional trade, and shared issues vis-à-vis other GCC countries. The section observes that Oman's key economic developments and experiences have been similar to other GCC countries because of the fact that these economies are oil-dependent, maintain open and liberal exchange and trade systems, and have currencies that are effectively pegged to the U.S. dollar. The section concludes with indications of some of the central prospective challenges facing Oman over the medium term in the regional context.

8.   Section IV analyses the stance of central government fiscal policy and its impact on Oman's non-oil economic growth. Specifically, it reviews the fiscal developments in Oman since 1981; provides econometric evidence for a strong, albeit increasingly less important, correlation between fiscal policy and non-oil real GDP growth; and analyzes the sustainability of Oman's fiscal situation using a variety of indicators. It finds that the government's fiscal

adjustment strategy under the current Fifth Five-Year Plan would be appropriate in bringing about a sustainable fiscal situation, although some emphasis on non-oil revenue mobilization would be most desirable.

9.   Section V reviews developments in the institutional and regulatory framework governing Oman's financial system with a view to assessing the adequacy of the system with regard to domestic financial resource mobilization and intermediation and prospects for introducing indirect instruments of monetary policy. It examines the nature of financial deepening that has occurred in Oman since 1972 and reviews the role of the Central Bank in the process. It concludes that, notwithstanding considerable transformation of the financial system over the last two decades, more efficient financial mobilization and intermediation could be facilitated through further liberalization of the financial system, broader range of savings instruments, increased capitalization of the nonbank financial intermediaries, and completion of liberalization of interest rates.

10.   Section VI provides empirical evidence on the degree of monetary independence in Oman during the past ten years, analyzes the factors that influenced the degree of this independence, and examines the scope for such independence at present and in the immediate future. Past experience indicates that inefficiencies in the financial market, lack of sufficient instruments, and restricted foreign access to the domestic market contributed to a degree of monetary independence in Oman. The domestic interest rate did not follow closely changes in the U.S. rate and a spread was sustained and corresponded to developments in the Government's domestic financing needs. The analysis presented in this paper, however, indicates that, with the availability of more financial instruments, recent financial reform efforts, and increased globalization of financial markets, domestic financial intermediation has increased and the scope for monetary policy independence in Oman has substantially narrowed; its role in the future will primarily be limited to liquidity management, preferably through indirect monetary control instruments.

11.   Section VII examines how Oman responded to three distinct oil price-induced terms of trade cycles during 1980–95. It decomposes the policy responses into three components: import intensity, import compression, and non-oil export growth. The quantitative significance of these policy responses was small because the expansionary and counter cyclical stance of fiscal policy almost fully shielded the domestic economy from these external shocks during most of the period. The resulting lack of structural adjustment and the liquidation of SGRF investments, have accentuated Oman's vulnerability to future external shocks. The section concludes that since the government is committed to maintaining a fixed nominal exchange rate—which has served Oman well in the past—fiscal adjustment and reforms, labor market reforms to increase wage flexibility and public sector support for education and training to increase level of skills and productivity, and other real and financial sector structural policies would be key to achieve the required adjustment and diversification needed to make the economy less vulnerable to external shocks.

12.   The work summarized in this paper was conducted in the context of the 1996 Article IV consultation discussions between Oman and the IMF. While the views expressed in this paper are those of the authors, the analysis has benefitted from the close collaboration and discussion with the Oman authorities.

II. GROWTH AND THE SAVINGS-INVESTMENT BALANCE: PAST PERFORMANCE AND FUTURE CHALLENGES[1]

A. Introduction

Overview

13.   The economy of Oman experienced substantial economic growth and domestic price stability over the period 1980–95, when overall well-being of the population improved significantly. The economic performance was supported by liberal trade and payments systems and a stable currency, notwithstanding marked fluctuations in world oil prices. The performance of the economy was, however, not associated with any significant shift in the structure of the economy. Dependence on the oil sector remains overwhelming but the prospects for further growth of the oil sector has become limited. Moreover, the domestic savings-investment imbalance widened, contributing to a narrowing of the external resource balance surplus by more than half. Furthermore, as the real economic growth slowed in recent years and the population growth rate averaged about 5 percent per annum, per capita real GDP tended to decline during certain periods.

14.   This paper reviews the factors underlying Oman's overall economic performance during 1980–95, the savings-investment balances, factor productivity and the economic diversification experience. It examines the structural issues relating to these experiences and assesses the policy directions that would be needed to sustain real per capita GDP over the medium term. The paper concludes that Oman's economic performance has masked a number of structural weaknesses: the economy is facing a chronic and deteriorating savings investment balance; economic growth could be solely explained by increased investment and labor while factor productivity remained stagnant; and the structure of the economy did not change despite a significant shift in the relative price or terms of trade in favor of the non-oil sector over the last decade and a half. Given Oman's relatively high rate of population growth, sustaining real per capita income growth would require sustained growth in domestic investment, domestic savings, improvement in total factor productivity, and substantial foreign capital inflows, preferably private.

Structure of the economy

15.   Oman's productive and export bases are monocultural. Oil accounted for 31 percent of GDP and 95 percent of export receipts in 1967, the earliest date for which relevant data are available. Oil still accounted for 91 percent of export receipts in 1995, when the share of oil in real GDP stood at 35 percent. This monocultural structure essentially exposes the Omani economy to the vagaries of world oil price movements.

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[1]Prepared by Emmanuel K. Martey.

16.   Following the rapid increases in real GDP associated with the oil price boom of 1974–78, the growth in real per capita GDP decelerated subsequently and from 1986 became negative in some years. Fixed capital formation rose sharply through the mid 1970s. Domestic savings averaged 53 percent of GDP between 1967 and 1979, and the government accumulated large external reserves. The weakening of world oil prices in the 1980s has posed major macroeconomic challenges for the Omani authorities, as the domestic savings rate declined and per capita real GDP contracted in the face of weakening real GDP growth rates and quickened population expansion.

B.   Growth Performance and Sectoral Transformation

Aggregate supply

17.   The **overall** performance of the Omani economy has, over the one and half decades ended in 1995, alternated between sustainable and nonsustainable real per capita income growth rates; when sustainable growth is defined as a real growth rate of GDP that exceeds the population growth rate.[2] The expansion periods of 1981–85 and 1990–93, when the growth in per capita income was positive annually and overall growth averaged 14 percent and 7.3 percent, respectively, coincided with substantial expansion in volume of oil production (Table 1 and Chart 1). Similarly, the periods of slow, unsustainable growth in 1986–89 and 1994–95, when real per capita income declined and the overall GDP growth rate averaged 1.6 percent and 4.2 percent per annum, respectively, coincided with a slowdown of oil output. Throughout the fifteen years, the volume of oil production continued to expand, but the rate of expansion varied markedly.

18.   Statistical results indicate that the growth of the Omani economy was largely (over 70 percent) determined by the current rate of change in government real consumption expenditure, and the change in world price of Omani oil in the preceding year (Table 2 and Chart 2).[3] The dominant factor in the growth performance, the government consumption expenditure, was statistically significant at the 1 percent level with an elasticity of 0.65. The lagged oil price effect was low, presumably because its impact was mitigated through

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[2]Recently revised national accounts data start from 1980. Earlier series indicated a particularly strong growth of the economy, averaging 12.6 percent per annum during 1972–80.

[3]Another statistical estimate indicated that the current rate of oil output was also positively related to the overall growth performance, with an elasticity of 0.32.

Table 1. Growth Cycles, 1981-95

(Annual average growth: in percent)

High Growth Period

	Total GDP	Oil sector	Non-oil sector	Per capita real GDP
1981-85	14.1	12.3	15.1	8.2
1990-93	7.3	5.0	8.6	2.7

Low Growth Period

	Total GDP	Oil sector	Non-oil sector	Per capita real GDP
1986-89	1.6	6.3	-0.9	-3.8
1994-95	4.2	4.2	4.2	0.1

Sources: Data provided by the Omani authorities; and Fund staff estimates.

CHART 1
OMAN
GROWTH AND SECTORAL CONTRIBUTION TO REAL GDP, 1981-95
(In percent)

GROWTH RATES

☑ Real gross domestic product
— Oil sector
-- Non-oil sector

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SECTORAL SHARES

omn2b

Non-oil

Oil and gas

Wholesale and retail

Government

Manufacturing

Construction
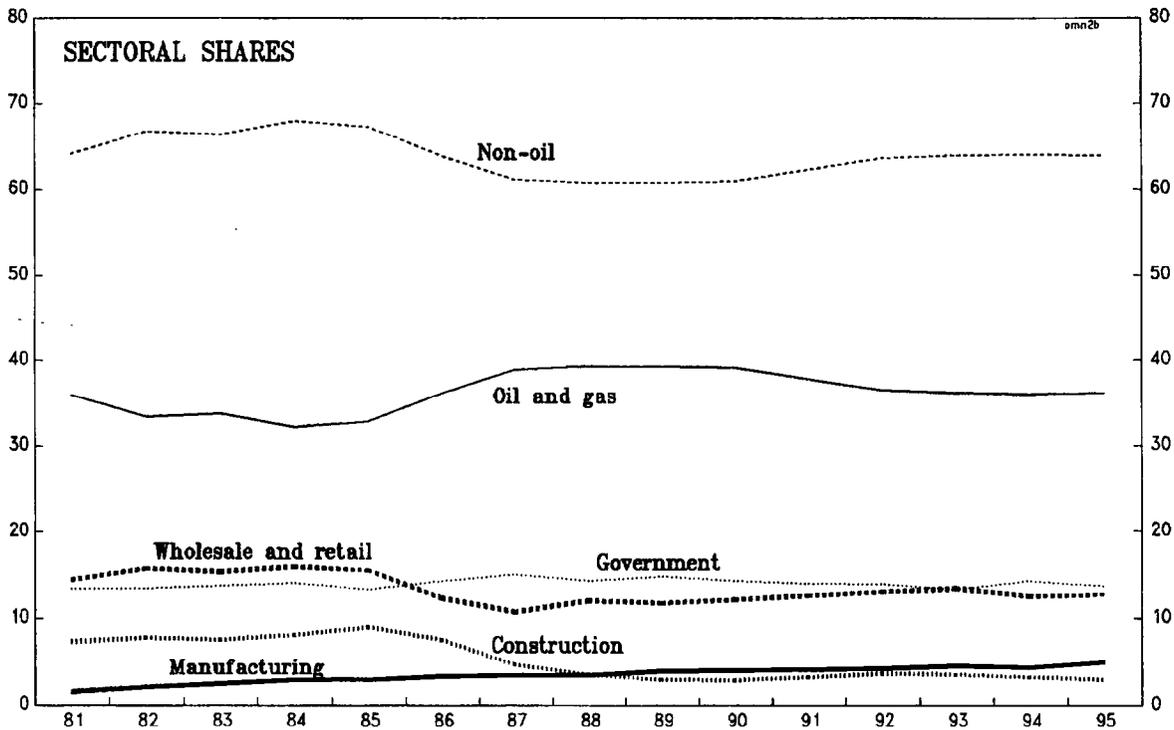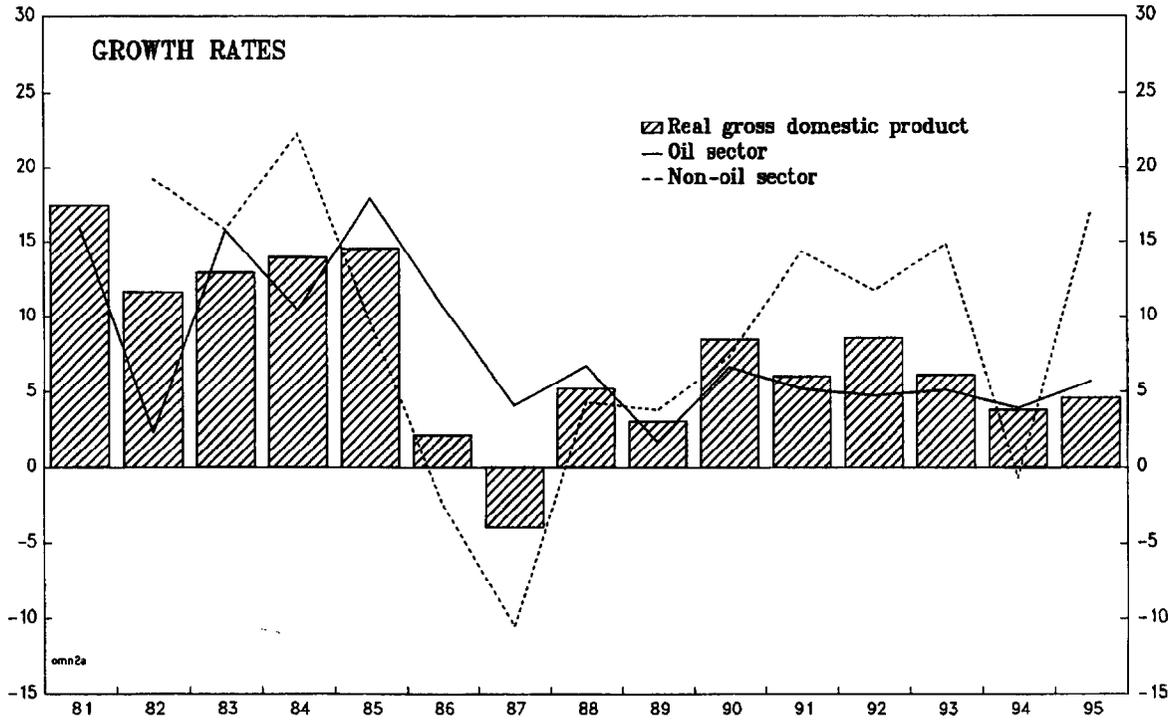
Source: Data provided by the Omani authorities.

Table 2. Oman: Selected Regression Results[1]

Independent Variable	Overall Real GDP Growth	Private Investment	Domestic Savings Ratio to GDP	Non-oil Real GDP Growth
Equations	(1)	(2)	(3)	(4)
Constant	1.80 (1.30)	63.44 (2.18)	17.70 (7.48)	2.17 (0.84)
COPI (-1)	0.09 (2.29)			
RGCE	0.65 (4.77)			0.94 (4.05)
BCPR		0.17 (4.91)		
DY			0.60 (2.91)	
RBY			0.72 (3.94)	
COYR (-1)				-0.31 (1.43)
R^2	0.72	0.65	0.76	0.60
$\bar{R}^2$	0.69	0.62	0.72	0.53
DW	2.21	1.15	0.69	2.18
SEE	2.96	2.67	4.03	4.79

Definition of variables: COPI= percentage change in export price of crude oil;
RGCE= percentage change in real government expenditure;
COYR=percentage change in oil sector real GDP; BCPR= banking system credit to the private sector;
DY= percentage change in real GDP; RBY= ratio of resource balance to GDP.

Sources: Data provided by the Omani authorities; and Fund staff estimates.

[1]Ordinary Least Squares estimates; t-statistics are given in parentheses.

CHART 2
OMAN
ACTUAL AND ESTIMATED GROWTH RATES, 1981-95
(In percent)

REAL GDP AND PER CAPITA INCOME GROWTH RATES

— Real GDP growth
▨ Real per capita income growth
-- Estimated real GDP growth, based on Equation 1 (table 2)

CAPITAL, LABOR CONTRIBUTIONS

Estimated growth rate, based
on contributions of capital and labor

Real GDP growth
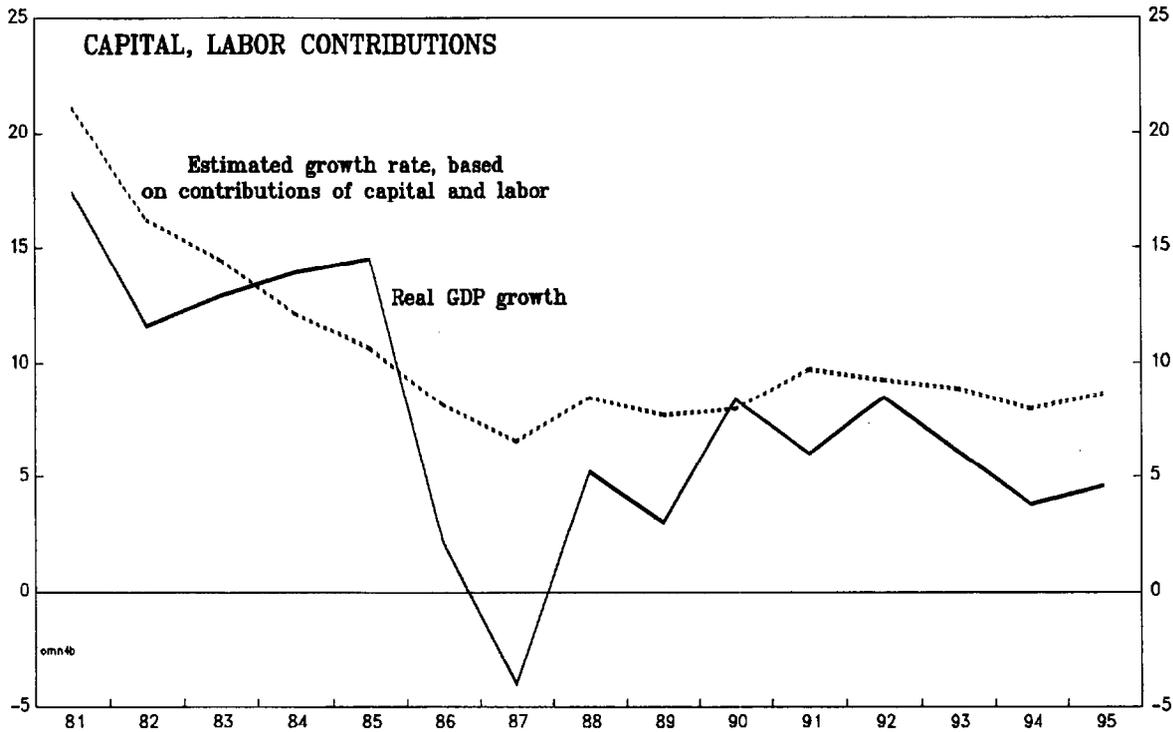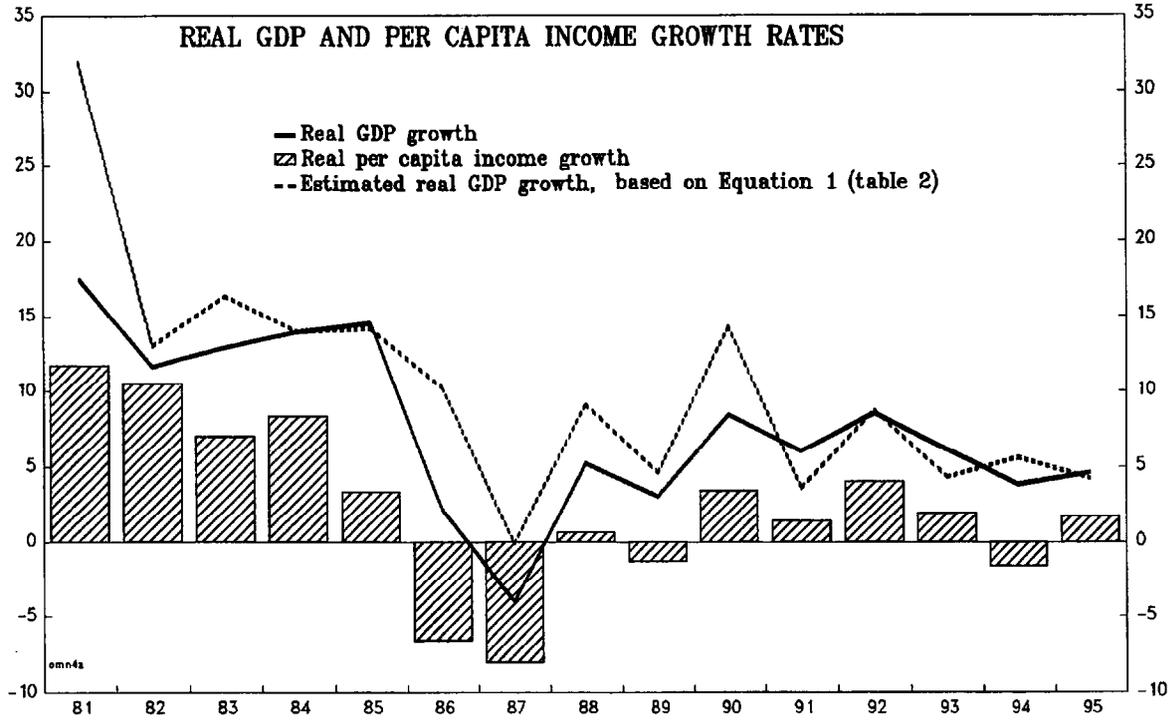
Sources: Data provided by the Omani authorities; and staff estimates.

drawdown and buildup of SGRF resources and expenditure reactions of the private sector in response to the preceding year's oil price developments. Over the period, the growth in **oil sector** real GDP decelerated steadily from an average 12.3 percent during 1981–85 to 6.3 percent during 1986–89, fell to 5 percent in 1990–93, and decelerated further to an average 4.3 percent during 1994–95.

19.   **Non-oil sector** performance has tended to be supported by developments in the oil sector. However, given the non-oil sector's relative size (over 60 percent of GDP), its performance tended to dominate the alternating cycle of the economy. Non-oil sector real GDP increased at an annual average rate of 15.1 percent during 1981–85, entailing a substantial increase in real per capita income as population increased at an annual rate of 5.4 percent during this period. The non-oil sector recorded no growth on average during the following four years, but picked up over the subsequent four years to an average 8.6 percent, before falling below the population growth rate beginning 1994. The period 1986–89 witnessed the collapse of the domestic construction boom of the earlier years; a factor that exacerbated the adverse impact of the substantial declines in oil prices in 1986 and 1988. The impact of the 1986 depreciation of the rial Omani on the non-oil sector was not immediately realizable. The impact of current year's oil sector operations on non-oil real GDP growth, though positive, was statistically not highly significant.

Use of resources

20.   In terms of use of resources, domestic aggregate demand rose markedly during the first half of the 1980s, and by mid-decade exceeded total GDP. At current prices, domestic aggregate demand increased from 77 percent of GDP in 1980 to over 92 percent by 1995. In particular, domestic final consumption rose almost steadily from one half to over three quarters of GDP by 1995, contributing to a depressing of the domestic savings rate. The ratio of total investment to GDP declined after the mid-1980s, as the ratio of public sector investment to GDP, which had reached a peak of one third of GDP in the early 1980s, declined substantially (Table 3). Private sector investment ranged between 3 percent and 7 percent during 1980–95, averaging 5.2 percent of GDP during this period compared with 19.2 percent for the public sector. In real terms, domestic absorption exceeded GDP from 1980 through 1986, and was at a minimum of 90 percent for the rest of the period.

21.   As indicated in Table 3, the periods during which Oman experienced positive real per capita income growth was associated with annual total investment growth exceeding 10 percent. Moreover, during these phases public investment dominated total investment in absolute terms and also expanded at annual rates ranging between 13–26 percent during periods of positive real per capita income growth. Furthermore, except for 1994–95, the annual growth of private investment exceeded 7 percent over the entire period. As such, because of the envisaged diminishing role of the public sector in the future, sustaining a positive real per capita income growth in the face of declining public investment, would call

Table 3. Growth, Savings, and Investment, 1981-95

(Average annual percentage change)

	Overall GDP Growth	Domestic Saving	National Saving	Domestic Investment		
				Total	Public	Private
1981-85	14.1	8.0	6.3	22.3	26.9	10.6
1986-89	1.6	1.7	15.2	-8.0	-11.8	7.7
1990-93	7.3	4.4	-1.0	13.1	13.6	13.1
1994-95	4.2	7.6	0.7	-3.5	-2.1	-7.3

Sources: Data provided by the Omani authorities; and Fund staff estimates.

for both commensurate substitution of private for public investment relative to GDP and additionally sustaining stronger momentum of private investment than that attained on average over the fifteen year period ended in 1995.

Sectoral transformation

22.   Notwithstanding the substantial growth of overall GDP (averaging 7 percent per annum) during the fifteen years ended in 1995, there was in real terms only a minimal transformation of the economy; in fact the share of the non-oil sector fell from 68 percent in 1982 to 64 percent in 1995 (Table 4 and Chart 1). A slight decline in the share of the oil sector during 1982–85, was followed by a considerable recovery, such that for the period 1980–95 as a whole, the relative share of the oil sector in total real GDP remained at 36 percent. Within the non-oil sector, the most significant improvement was recorded in manufacturing (whose share recorded a 4 percentage points increase to 5 percent), transport and communication (which rose by 1.4 percentage points to 6.5 percent), and public administration and defense (rising by 1 percentage point to 13.7 percent). Significant declines occurred in the relative shares of construction (by 5 percentage points to 3 percent), real estate and business (by 2.1 percentage points to 7.1 percent), and wholesale and retail trade (by about 1 percentage point to 12.7 percent). The large fall in the share of construction relative to GDP, reflected the cessation of the major construction activities in the public sector, primarily related to infrastructure.

23.   Relative stability in the composition of Oman's GDP was evidenced, notwithstanding considerable relative price shifts among the principal sectors. On average, the oil sector price level fell by one third over 1980–95 while the non-oil sector prices increased by about 60 percent over the same period. Reflecting the differential movements in oil and gas and non-oil prices, in favor of non-oil sector by about 80 percent over this period. The relative price shift was the largest in favor of manufacturing which was also reflected in the corresponding growth performance of the sector and its increased relative share. The dominance of the oil sector persisted despite the substantial shift in relative prices, and the pattern on resource abroad did not change substantially; with these relative price shifts, however, the sectoral shares at current prices tended to give a false impression that significant diversification of the economy was achieved during the period under consideration.

24.   Disparate developments in savings and investment underlie the cyclical real growth experience. Although total investment was for the most part maintained above 20 percent of GDP during 1980–95, the rates of changes in total investment was coterminous with the cyclical growth experience (Tables 3–6). The 1981–85 high growth period was associated with a rapid increase in public investment, averaging 27 percent annually. Thus, given the relatively small size of the private sector and its substantially slower investment growth of 11 percent per annum, the overall annual investment growth rate was over 22 percent.

Table 4. Oman: Sectoral Shares in Overall Real GDP and Relative Price Shifts, 1980-95

(In percent)

	Oil and Gas	Non-oil	Wholesale and Retail	Government	Manufacturing	Construction
Shares in total GDP						
1980	35.7	64.3	13.4	12.6	1.1	8.0
1981	35.9	64.1	14.4	13.4	1.5	7.4
1982	33.3	66.7	15.7	13.4	2.1	7.8
1983	33.7	66.3	15.3	13.7	2.5	7.6
1984	32.1	67.9	15.9	14.0	2.9	8.1
1985	32.8	67.2	15.5	13.3	3.0	9.0
1986	36.1	63.9	12.3	14.3	3.4	7.6
1987	38.9	61.1	10.7	15.0	3.5	4.8
1988	39.3	60.7	12.0	14.3	3.5	3.6
1989	39.3	60.7	11.7	14.8	4.0	3.0
1990	39.1	60.9	12.1	14.3	4.1	2.9
1991	37.8	62.2	12.6	14.0	4.2	3.3
1992	36.4	63.6	13.0	13.9	4.3	3.7
1993	36.1	63.9	13.4	13.3	4.6	3.6
1994	36.0	64.0	12.5	14.3	4.4	3.3
1995	36.1	63.9	12.7	13.7	5.0	3.0
Average	36.2	63.8	13.3	13.9	3.4	5.4

	Price Indices		Relative Price Shifts[1]
	Oil Sector	Non-oil Sector	
1980	100.0	100.0	100.0
1981	96.5	104.9	108.7
1982	96.2	111.5	115.9
1983	88.6	121.3	136.9
1984	89.2	123.5	138.5
1985	89.2	122.1	136.9
1986	65.2	153.1	234.8
1987	69.5	144.4	207.8
1988	74.0	136.0	183.8
1989	64.7	152.6	235.9
1990	72.0	139.8	194.2
1991	65.4	152.1	232.6
1992	66.1	151.5	229.2
1993	60.6	160.2	264.4
1994	59.8	161.5	270.1
1995	62.4	157.4	252.2
Average	76.2	137.0	179.8

Sources: Data provided by the Omani authorities; and Fund staff estimates.

[1]Non-oil sector, relative to oil sector.

Table 5. Oman: Savings-Investment and the Resource Balances, 1980-95

	Domestic Savings-Investment Gap (as percent of GDP)	National Savings-Investment Gap (as percent of total investment)	National Savings (as percent of GNP)	Resource Balance[1] (as percent of GDP)	National Savings-Investment Gap (as percent of of GDP)
1980	23.2	66.7	35.1	23.1	13.5
1981	18.6	34.6	39.0	25.1	9.7
1982	7.5	-3.5	31.0	14.3	-1.1
1983	8.2	-6.3	29.0	14.4	-1.9
1984	6.9	-13.0	26.6	12.0	-0.04
1985	6.3	-15.7	26.8	12.2	-4.9
1986	-7.5	-56.7	14.0	-1.5	-18.2
1987	14.8	33.8	25.5	18.2	6.4
1988	4.1	-44.0	11.5	8.7	-8.7
1989	8.8	-12.4	18.1	14.8	-0.02
1990	14.2	29.2	23.4	19.6	5.2
1991	2.8	-33.6	13.9	8.3	-6.9
1992	3.3	-42.4	13.2	9.2	-0.1
1993	-2.1	-62.1	9.5	5.0	-15.3
1994	2.3	-60.5	8.9	8.3	-0.1
1995	2.9	-58.8	8.8	8.7	-12.2
Averages					
1980-95	7.1	-15.3	20.9	12.5	-2.2
1980-85	11.8	10.5	31.3	16.9	2.6
1986-89	5.0	-19.8	17.3	10.0	-5.1
1990-93	4.5	-27.2	15.0	10.5	-4.3
1994-95	2.6	-59.6	8.8	8.5	-6.2

Sources: Data provided by the Omani authorities; and Fund staff estimates.

[1]Defined as exports of goods and non-factor services, less imports of goods and non-factor services.

Table 6. Oman: Savings and Investment Ratios and Changes, 1980-95

(In percent)

	Ratios to GDP				Percentage changes				
	Domestic Saving	Public Investment	Private Investment	Total Investment	Domestic Saving	Public Investment	Private Investment	Total Investment	National Savings
1980	43.4	14.5	5.7	20.2	...	...	...	...	...
1981	46.8	21.7	6.4	28.1	30.0	80.8	35.1	67.9	35.5
1982	39.1	26.5	5.2	31.6	-12.2	27.9	-15.0	18.2	-15.3
1983	38.6	24.6	5.7	30.4	4.4	-1.5	17.4	1.6	-1.3
1984	36.9	25.8	4.1	29.9	5.3	15.4	-20.8	8.6	0.8
1985	37.3	26.0	5.1	31.0	12.3	11.8	36.1	15.1	11.6
1986	24.6	27.1	5.0	32.1	-42.3	-8.5	-14.0	-9.4	-53.5
1987	33.8	15.7	3.3	19.0	45.1	-38.9	-29.6	-37.5	93.4
1988	23.8	15.7	4.0	19.7	-31.5	-3.1	18.1	0.6	-57.9
1989	28.9	14.5	5.6	20.1	35.5	3.4	56.4	14.2	78.7
1990	32.0	12.7	5.0	17.7	38.0	9.2	11.6	9.9	62.1
1991	23.3	15.4	5.2	20.6	-29.1	17.7	-0.7	12.5	-42.2
1992	25.5	17.3	4.9	22.2	20.0	23.3	4.9	18.7	3.0
1993	22.5	17.9	6.7	24.7	-11.4	4.1	36.6	11.3	-26.9
1994	24.0	16.0	5.7	21.7	10.1	-7.8	-11.7	-8.8	-4.8
1995	23.7	15.6	5.2	20.8	5.1	3.5	-2.9	1.8	6.1
Average	31.5	19.2	5.2	24.4	5.3	9.2	8.1	8.3	6.0
1980-85	40.3	23.2	5.4	28.6	8.0	26.9	10.6	22.3	6.3
1986-89	27.8	18.3	4.5	22.7	1.7	-11.8	7.7	-8.0	15.2
1990-93	25.8	15.8	5.5	21.3	4.4	13.6	13.1	13.1	-1.0
1994-95	23.8	15.8	5.5	21.3	7.6	-2.1	-7.3	-3.5	0.7

Sources: Data provided by the Omani authorities; and Fund staff estimates.

Similarly, the subsequent high real GDP growth period of 1990–93 was associated with an annual average investment growth of 13 percent. By contrast, the slow real GDP growth periods of 1986–89 and 1994–95 coincided with negative investment growths of 8 percent and 3.5 percent, respectively.

25. No statistically significant relationship was found between private and public investment. In fact, the relationship between the ratios of private and government investments to GDP appears negative. Domestic bank credit was, however, positively related to private investment as indicated in Table 2. In effect, a reduction in government investment (for example, through privatization) or an increased private sector participation—could be expected to lead to an increase in private investment, reinforced by appropriate bank credit.

26. The average domestic and national savings growth rates also were positive, at 8 percent and 6 percent, respectively, during 1980–85 (Tables 5 and 6). A similar experience emerged with respect to domestic savings during the 1990–93 period of positive real per capita GDP growth. By contrast, during the negative real per capita growth periods of 1986–89, the growth rate of domestic savings averaged only 2 percent. Although the growth rate of domestic savings picked up to 8 percent during the stagnant per capita income growth cycle of 1994–95, the growth of national savings stagnated, as migrant remittances rose. The growth in private investment was considerable during both the 1981–85 and 1990–93 periods, and correspondingly was low or negative during the slow growth periods of 1986–89 and 1994–95. The slow economic growth during 1994–95 was supported only by consumption outlays, as both public and private investment declined on average. Over the entire period 1980–95, public investment, at 19.2 percent of GDP, dominated total investment, compared with a modest level of 5.2 percent of GDP for the private sector.

27. As private consumption was positively related to government consumption, the latter constituted the venue by which government operations impacted overall economic developments during 1980–95. The importance of government operations is explained by the estimates in Table 2—with a high, statistically significant positive relationship.

C. Investment and Domestic and National Savings

Savings and investment

28. The extent of the contribution of national savings to the domestic investment effort is indirectly the mirror image of the extent of foreign savings required to meet the investment demand. The Omani authorities, as in the cases of other GCC countries, need to rely considerably on expatriate labor to execute the major infrastructure projects, besides the central role of such labor in private sector activities. As with other GCC countries, Oman's considerable reliance on foreign labor and the resulting outflow of migrant remittances, have important implications for the optimal magnitude of domestic savings. Efforts would need to be strengthened to encourage Omani nationals to participate in economic activity in order to allow for a higher proportion of the savings to be retained in the national economy. On this

basis, the ratio of migrant remittances to domestic savings, should fall in a dynamic overall GDP growth environment with considerable expansion in domestic savings, and simultaneously allow for increasing national savings.

29.   The positive differential between domestic savings and investment in relation to GDP declined virtually progressively from over 23 percent in 1980 to only 3 percent of GDP in 1995, as the ratio of domestic savings to GDP fell steadily from over 43 percent in 1980 to 24 percent in 1995 (Tables 5 and 6). Concurrently, the gap between national savings and investment was positive only during a quarter of the period, because of a precipitous decline in the ratio of national savings to GNP from 35 percent in 1980 to only 9 percent in 1995. The mounting gap was equivalent to 60 percent of domestic investment by 1995. Against the background of disappointing domestic national saving performance, past experience indicates that Oman needs to achieve an average increase of 10 percent in investment (or an investment ratio of 23–30 percent of GDP) to attain a desirable level of positive real per capita income growth. As indicated above, the policy implication is not to curtail expatriate remittances but to raise domestic and national savings through higher overall real GDP growth and increased employment and productivity of Omani nationals in economic activity.

30.   Analytically, in the Omani experience, the ratio of domestic savings to GDP is positively related to growth in real GDP and the relative size of the external resource surplus (Table 2).[4] As indicated in Table 2, the elasticities of the savings ratio to these variables are considerable. Moreover, these variables together explain more than three quarters of the domestic savings rate of Oman.

Resource balance

31.   Oman's external resource balance, although positive for virtually the whole of the period 1980–95, declined progressively from 23 percent in 1980 to less than 9 percent in 1995 (Table 5 and Chart 3). The development mirrored the evolution of the saving ratio. Thus, even excluding the impact of factor income transfers by expatriates, the resource balance surplus available toward debt service and to withstand the effects of unanticipated external shocks, such as the 1990 regional crisis or world oil price changes, diminished precipitously.

Five-Year Plan targets

32.   The Government of Oman has recognized the policy implications of the above developments in the formulation of their Fifth Five-Year Plan (FFYP). This section outlines the broad directions of the government's medium-term macroeconomic policies and indicates areas that would require further consideration.

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[4]The result empirically validates a theoretical postulate of Mohamed A. El-Erian and Manmohan S. Kumar (1996).

CHART 3
OMAN

SAVINGS, INVESTMENT, AND THE RESOURCE BALANCE, 1981-95

(In percent of GDP; unless otherwise indicated)
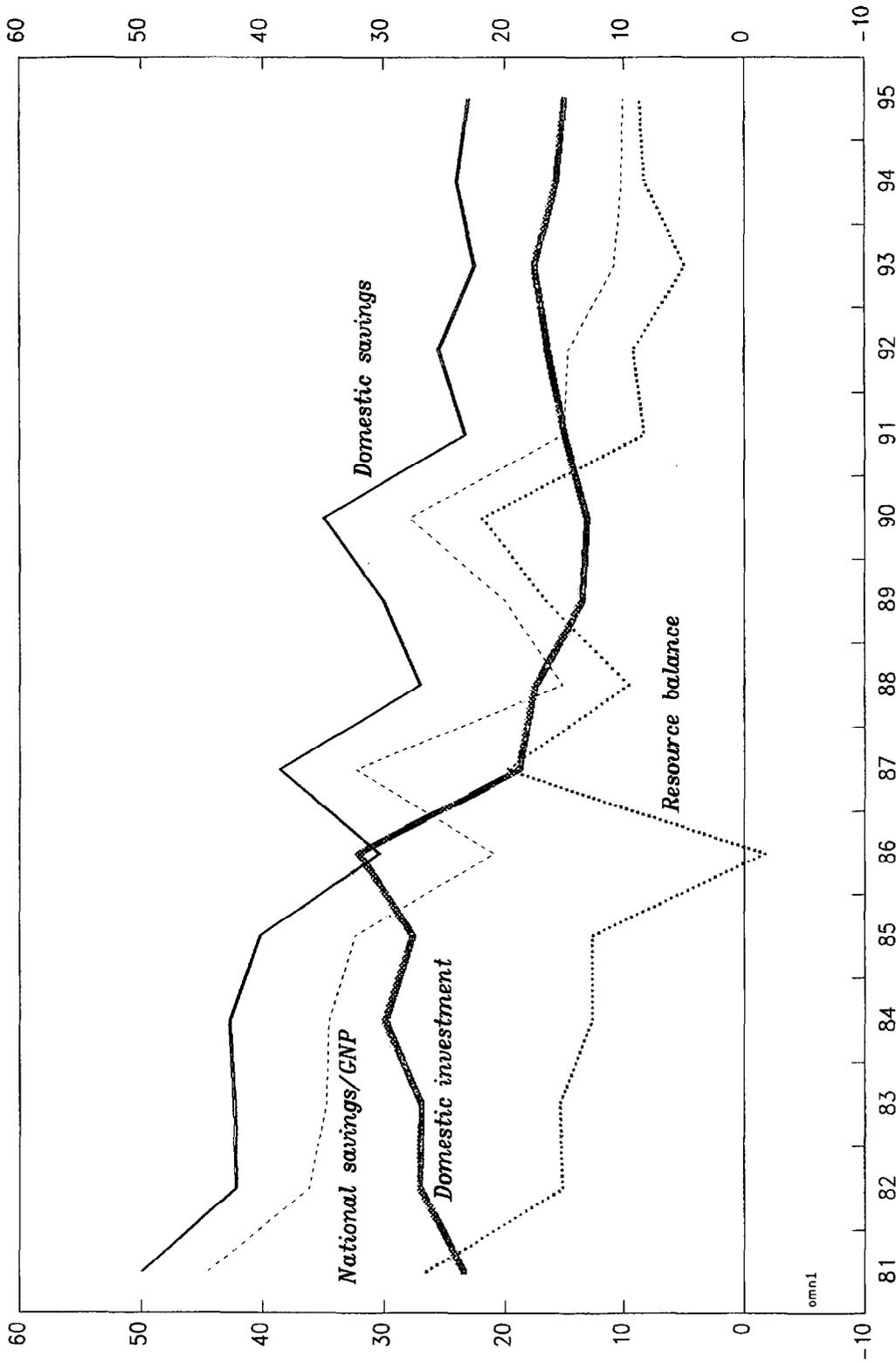
Source: Data provided by the Omani authorities.

33.   The FFYP projects an 85 percent increase in total investment over the plan period 1996–2000, with the relative share of investment in GDP increasing to 22.6 percent or slightly below the actual average for the 1980–95 period. Private sector investment is projected to rise to 53 percent of total investment from 40 percent during 1991–95, on the basis of a policy of encouraging domestic and foreign investment and reducing government participation in the productive sectors of the economy. In the event, the plan anticipates that the share of private sector investment would exceed that of the public sector over the plan period. The FFYP projects a gap between cumulative national savings and investment equivalent to 45.6 percent of the projected aggregate investment over the plan period compared with an average gap ratio of 15.3 percent during 1980–95, and a gap ratio of nearly 60 percent in 1995. As the authorities' anticipated the savings-investment gap over the plan period to be three times the recorded average for 1980–95, a massive foreign resource inflow would be needed to achieve even the modest 4.6 percent average increase in GDP targeted under the Plan. Furthermore, the targeted increase in the share of private savings in total domestic investment to 53 percent would require major policy incentives, including a removal of the existing discriminatory tax dispensations against foreign investment in Oman.

D. Total Factor Productivity and the Policy Environment

Total factor productivity

34.   In assessing the factors in growth, an analysis was made of total factor productivity following Fischer (1993). A production function of the form $Yt = F(Kt, Lt, At)$ is assumed; where K is capital, L is labor, and A is the overall efficiency factor, termed total factor productivity (TFP) or the Solow residual.[5] Assuming constant returns to scale, in which the shares of capital and labor are imposed at 0.4 and 0.6, respectively, the estimates of TFP are presented in Table 7.[6]

35.   The estimated Solow residuals indicate that on average factor productivity had no contribution to Oman's growth performance during 1980–95. In essence, the overall average real growth of 7.3 percent that occurred during the period was more than accounted for by the substantial capital accumulation and expansion in labor force, particularly during 1981–85 and 1990–93 (Table 7 and Chart 2).

36.   The results indicate that Oman's impressive economic growth performance was primarily due to higher investment and increased absorption of labor—to a large extent due to increasing participation of expatriate labor. This analysis also demonstrates that in the future

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[5]TFP is derived as real GDP growth, less 0.4 times the growth in capital accumulation, less 0.6 times the labor force growth.

[6]This is a familiar assumption for developing countries, see Fischer (op cit); Chopra et al (1995); Kochlan et al. (1996); and Maciejewski and Mansur (1996).

Table 7. Oman: Contributions to Economic Growth, 1981-95

(In percent)

	GDP Growth	Contributions of		Solow Residual[1]
		Capital	Labor	
1981-85	14.1	6.1	9.2	-1.2
1990-93	7.3	4.4	9.0	-6.1
1986-89	1.6	-6.0	-0.1	7.7
1994-95	4.2	-1.8	6.9	-0.9

Sources: Data provided by the Omani authorities; and Fund staff estimates.

[1]Total factor productivity.

Oman needs to depend on increased labor productivity and efficiency of capital to achieve higher growth with lower investment and to permit a steady increase in real wages (particularly for Omani nationals). The significant productivity gains reached during 1986–89, related to improved terms of trade, were quickly dissipated subsequently and, except for 1993–94, the productivity losses were particularly severe after the regional crisis of 1990. The contribution of capital appears central, as real per capita income growth was negative during both subperiods when capital accumulation was negative; the major contribution of labor is also worth noting, particularly since the bulk of non-public sector labor is expatriate. Although the improved total factor productivity during 1986–89 was associated with a significant increase in crude oil prices, it is conceivable that both capital and labor were more efficiently utilized in a period of relative scarcity.

Policy environment

37. Recent developments in the growth literature have emphasized that economic environment and public policies influence the rate of economic growth.[7] Fischer (1991 and 1993) extended the notion that governments can influence growth by creating a stable macroeconomic framework. As found by Cashin (1995) for OECD countries, and McDermott (1996) in the case of Jordan, Oman's growth performance was also favorably influenced by its macroeconomic environment. As shown in Table 8 and Chart 3, periods of low fiscal deficits coincided with high growth rates of real GDP, while high fiscal deficits were associated with low real GDP growth rates. Similarly, the ratio of money to GDP was lower (income velocity was high) in periods of positive real per capita income growth than in periods of negative per capita income growth. Given the economy's openness, and the liberal exchange rate and trade systems, Oman's inflation rate was low throughout the period; and, given the modest variation in the inflation rates, the relationship between growth and inflation was tenuous. Thus periods of negative inflation coincided with both high growth and low growth. This phenomenon is broadly in line with Fischer's observation regarding the possibility of "a range of inflation rates in which variations in inflation have very little effect on growth."[8]

E. Prospective Challenges

38. **Overall**: The above analysis indicates that: (i) periods of growth in real per capita income were associated with relatively high growth in investment that maintained aggregate demand; (ii) the economy recorded negligible diversification in real terms as between the oil and non-oil sector's importance in the economy; (iii) factor productivity had little contribution to economic growth; and (iv) the national saving-investment gap deteriorated steadily and the maintenance of aggregate demand entailed liquidation of official financial investments. The analysis also demonstrates that stable macroeconomic environment contributed favorably to

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[7]See Barro (1990); Barro and Sala-I-Martin (1992).

[8]Fischer, op cit.

Table 8. Oman: Growth and the Macroeconomic Environment, 1981-95

(In percent)

	Real GDP Growth	Inflation	Fiscal Balance[1] % of GDP	Broad Money to GDP	Terms of Trade
High Growth Periods					
1981-85	14.1	-2.9	-1.9	21.3	-2.8
1990-93	7.3	4.2	-1.5	27.1	-1.9
Low Growth Periods					
1986-89	1.6	3.1	-5.9	28.8	13.5
1994-95	4.2	-1.0	-5.0	28.5	-0.4

Sources: Data provided by the Omani authorities; and Fund staff estimates.

[1] Fiscal balance refers to the consolidated central government operations and operations of the SGRF, Oil Fund, and Contingency Fund operations.

Oman's growth performance. The challenge for the period ahead resides essentially in sustaining positive real per capita income, within the framework of continued macroeconomic stability and a diversified economy capable of averting the vulnerability to which a monoculture (oil-dependent) economy is exposed. So far the impact of fluctuations in oil export prices have been tempered by drawdown of accumulated foreign assets to sustain aggregate demand. But the horizon for drawdown, without adverse consequences for exchange rate stability, is limited. Given the vulnerability of the oil sector to external factors beyond Oman's control, the authorities are faced with the challenge of sustaining overall economic growth through accelerating the growth of the non-oil sector and diversifying its composition.

39.   The review of Oman's growth performance since 1980 presented above indicates that a sustained increase in per capita income would be contingent on: (1) effective mobilization of national savings to allow for higher levels of investment and to reduce the savings-investment gap; (2) efforts to enhance factor productivity through structural reforms and human resource development; and (3) implementation of an economic diversification strategy.

40.   **Savings-investment balance**: The rate of increase in investment required to preserve and increase real per capita income would need to derive from: (1) increased domestic saving, both public and private; (2) stepped-up capital inflows, preferably private; and (3) increased total factor productivity, emanating from improvements in both labor and capital productivity. The officially recognized increasing gap between saving and investment under the FFYP presents the challenge of mobilization of domestic and foreign saving to fill this gap as basis for sustained growth in real per capita income. While instruments to directly raise private savings have proven largely ineffective, structural reform measures could have a large indirect impact on private savings, mainly through increased allocative efficiency and higher total factor productivity growth. Efforts to raise private savings shall, in particular, focus on financial liberalization including development of long-term savings instruments (pension funds and life insurance), mutual funds, and liberalizing interest rates on consumer loans. Policies that improve the productivity of investment would also be essential. Finally, while the substitution of expatriate labor by nationals may lower the existing divergence between domestic and national saving, it should not be achieved at the expense of reduced productivity and output, which could lead to a lower level of domestic and national savings.

41.   **Factor productivity**: The capacity to improve substantially total factor productivity would seem to present the greatest challenge for the period ahead. This implies maximizing the growth potential of available factors of production. An improvement in the productivity of labor would be needed as complementing factor in raising aggregate potential real output and also to support the government's objective to increase Omani nationals' employment prospects. The authorities have rightly emphasized this aspect through substantially higher allocations for human resource development under the FFYP. Increasing the productivity of both public and private sector investments would require accelerating structural reforms in the

economy and encouraging foreign investment and technology into all major sectors of the economy.

42. **Diversification**: Attaining the sustained diversification of the economy together with a diversified export base, that proved elusive during 1980–95, would require strategies that emphasize the comparative advantages of Oman. Downstream industries in the petroleum sector would need to be complemented by sectors that promote activities that are cyclically opposite to that of the petroleum sector (see Section VII for more on the diversification issue).

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III. OMAN IN THE REGIONAL PERSPECTIVE[9]

A. Background

43.   Oman, a member of the Cooperation Council of the Arab States of the Gulf (GCC),[10] is structurally identical to the other states of the GCC. All are oil-dependent, open, economies, with liberal exchange and trade systems and currencies that are effectively pegged to the U.S. dollar. Given their mono-cultural export orientation, these economies have been subjected to identical experiences in terms of the impact of changes in world oil prices. The economies vary regarding the extent of dependence on known oil and natural gas resources. Oman's dependence on the oil sector, in respect of the share of oil in total GDP, government revenues, and export receipts exceed those for the GCC as a whole and Oman's excessive dependence on the oil sector even compared with the GCC average have not changed significantly over the past six years (Chart 4).

B. Macroeconomic Developments and Shared Issues

44.   In recent years, Oman's overall economic growth has been in line with that of the GCC as a whole. During 1991–95 total real GDP of Oman and in GCC countries generally decelerated; Oman's GDP expanded at an annual average rate of 5.8 percent compared with 5.5 percent for the GCC (Table 9). While the share of the non-oil sector in total GDP varied considerably among the GCC countries, the average rates of expansion of the non-oil sectors tended to be identical.

45.   As in other GCC countries, Oman's total real GDP growth performance during 1991–95 was supported by substantial domestic investments. The ratio of domestic investment to GDP averaged about 16 percent in Oman and 22 percent for the GCC. Similarly, the ratio of domestic savings to GDP in Oman averaged 24 percent compared with 27 percent for the GCC as a whole. Moreover, as in the case of all GCC countries, Oman's national savings were significantly lower than domestic savings, reflecting the substantial outflow of remittances associated with the large number of expatriates in the GCC countries. However, the domestic savings experience among the GCC countries varied sharply from 37 percent in the U.A.E. to 17 percent in Kuwait (after the regional crisis of 1991).[11]

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[9]Prepared by Emmanuel K. Martey.

[10]The GCC comprises Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

[11]For further information on the developments in savings and investment in Oman see Chapter II.

CHART 4
OMAN
COMPARATIVE OIL DEPENDENCY PROFILE AND OPENESS
(In percent)

Government Oil Receipts/ Total Government Revenue

Oman

GCC

omn5a

1991 1992 1993 1994 1995

Oil Export Receipts/ Total Export Receipts

Oman

GCC

omn5b

1991 1992 1993 1994 1995

Government Oil Revenue/GDP

Oman

GCC

omn5c

1991 1992 1993 1994 1995

External Openess 1/

Oman

GCC 2/

omn5d

1991 1992 1993 1994 1995
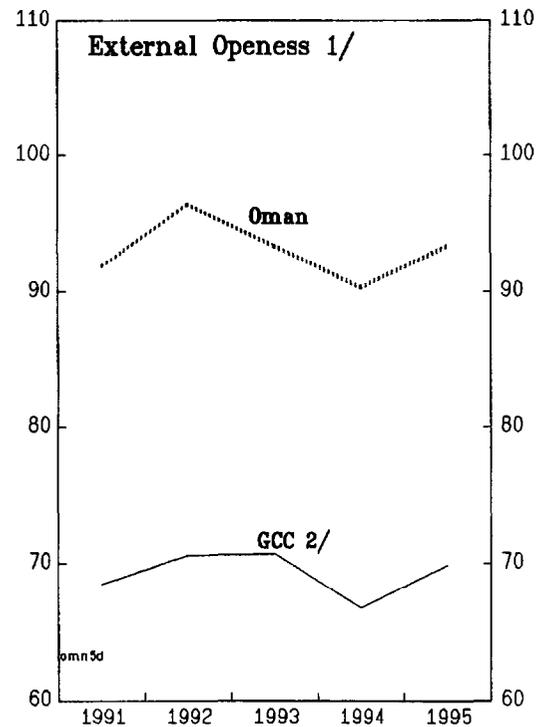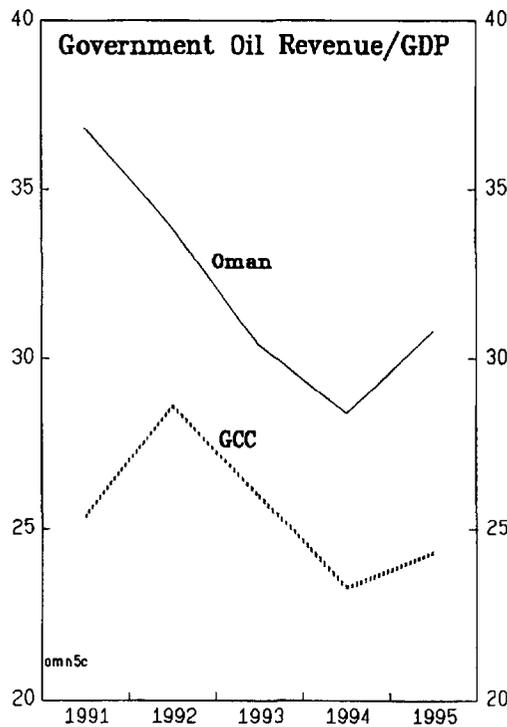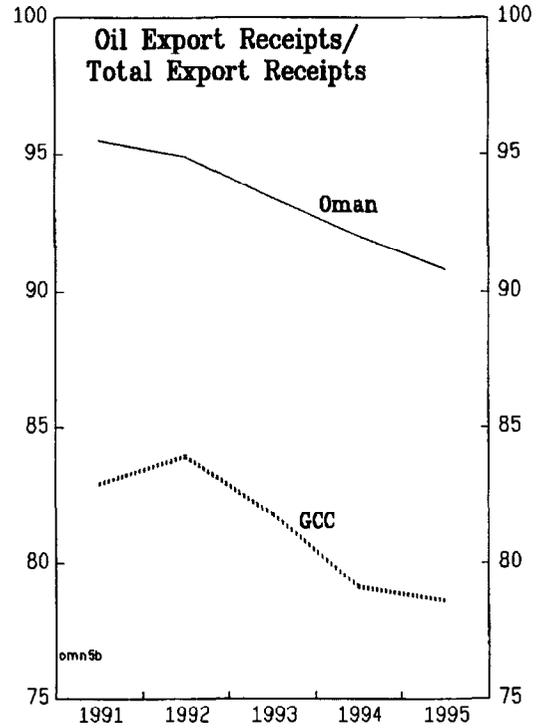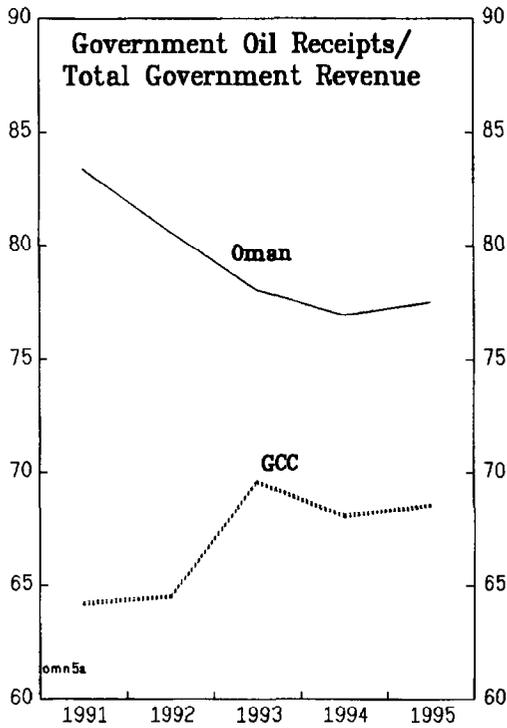
Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Defined as ratio of value of exports plus imports to GDP.
2/ Ratios varied markedly from an average of 60 percent in Saudi Arabia to 164 percent in Bahrain.

Table 9. Oman: Comparative Selective Indicators, 1991—95
(Average, in percent)

	Oman	GCC
Real GDP growth	5.8	5.5
Inflation rate (CPI)	0.9	2.4
Ratios to GDP		
Gross domestic investment	15.9	21.8
Gross domestic savings	23.8	27.1
Overall fiscal deficit (−)	−9.6	−11.0 1/
External current account deficit (−)	−4.3	−14.7 2/
Openess of economy	69.3	93.1

Sources: Data provided by the national authorities; and Fund staff estimates.

1/ Average deficit equals 8.1 percent when the year of the regional conflict (1991) is excluded from the data from Kuwait and the U.A.E.
2/ Average deficit equals 7.6 percent when 1991 deficits for Kuwait, Saudi Arabia, and the U.A.E. are excluded.

46.   Monetary policy in Oman, as in other GCC economies, has been passive, given the exchange rate arrangements, the liberal trade and payments systems, and openness of these economies. The GCC economies vary in their degree of progress toward use of indirect instruments of monetary policy. Unlike most other GCC economies, Oman maintains some quantitative credit and interest rate ceilings; such ceilings had existed in many other GCC countries until fairly recently. While Oman's financial system is not as deepened as that of Bahrain, Oman has a highly capitalized and active formal stock exchange. The stock exchange in the U.A.E., on the other hand, is not yet formalized.

47.   During 1991–95, Oman's external current account deficit was on average the lowest in the GCC. At 4.3 percent of GDP, Oman's average external current account deficit contrasted with the substantially larger 14.7 percent average ratio for the GCC countries during this period. Even excluding the 1991 exceptionally high current account deficits of Kuwait, Saudi Arabia, and the U.A.E. associated with the regional crisis, the GCC-wide average deficit was still 7.6 percent of GDP. In general the economies with higher fiscal deficits tended to register higher external current account deficits.

48.   An important feature of the GCC economies is their degree of openness, as measured by the ratio of total trade (exports plus imports) to GDP. Although Oman's economy is quite open, it is not the most open within the GCC. The degree of openness of the GCC economies ranged, on average, from 60 percent in Saudi Arabia to 164 percent in Bahrain, with Oman's openness at 69 percent. Notwithstanding this regionwide openness, intraregional trade is low, when transit trade is excluded. This development is largely explained by the similarities in comparative natural resource endowments and the relatively (to the oil sectors) small sizes of the non-oil sectors. Including transit trade, Oman's participation in regional trade is considerable, albeit, predominantly concentrated in trade with the U.A.E. (Table 10). About two thirds of Oman's regional non-oil exports go to the U.A.E. and over 80 percent of non-oil imports emanate from the U.A.E. Moreover, the U.A.E. accounts for about one half of Oman's global exports and about 24–30 percent of imports. Oman's non-oil imports from non-GCC countries were about three times its imports from the GCC. However, Oman's non-oil exports to GCC countries tended to exceed such exports to non-GCC countries.

49.   Given the openness of the GCC economies, their experiences regarding the impact of external factors, including world oil prices, interest rates, as well as regional political crises, have been identical. The upsurge in world oil prices during 1974–80 led to sharp improvements in both the overall fiscal and balance of payments positions of Oman and the other GCC countries. Similarly, the subsequent weakening of oil prices during 1982–95 contributed to a weakening of both the internal and external balances of Oman as well as those of the other GCC economies. In contrast to fiscal and balance of payments surpluses equivalent to 10 percent of GDP and 3 percent of GDP, respectively, during 1974–80, the GCC economies recorded substantial deficits during the ensuing years; the deficits during 1992–94 alone equaled the surplus during 1975–80 in relation to GDP. Reflecting the favorable impact of world oil prices, Oman's overall balance of payments surplus during 1974–80 averaged 4.3 percent of GDP and the fiscal deficit averaged 3.0 percent of GDP, notwithstanding

Table 10. Oman: Regional Trade, 1993—95

	Non—oil Exports			Non—oil Imports		
	1993	1994	1995	1993	1994	1995
	(In millions of rials Omani)					
Bahrain	1.95	2.28	2.94	27.16	5.30	7.35
Kuwait	2.76	4.47	6.17	3.23	3.24	3.69
Qatar	1.33	1.76	2.01	3.12	2.26	5.92
Saudi Arabia	12.13	15.00	16.45	33.74	37.36	62.18
U.A.E.	39.41	46.62	51.17	443.69	438.10	389.24
Other GCC	57.58	70.14	78.74	510.94	486.26	468.18
Global	73.65	91.32	114.98	1,581.80	1,505.30	1,633.60
	(In percent of regional trade)					
Bahrain	3.4	3.3	3.7	5.3	1.1	1.6
Kuwait	4.8	6.4	7.8	0.6	0.7	0.8
Qatar	2.3	2.5	2.6	0.6	0.5	1.2
Saudi Arabia	21.1	21.4	20.9	6.6	7.7	13.3
U.A.E.	68.4	66.5	65.0	86.8	90.1	83.1
Non—regional	27.9	30.2	48.0	209.6	209.6	248.9

Sources: Data provided by the Omani authorities; and Fund staff estimates.

relatively high levels of government expenditures, primarily related to major infrastructural projects. In contrast, during 1991–95, Oman's overall fiscal deficit averaged 9.6 percent of GDP and the balance of payments deficit was equivalent to 2 percent of GDP, notwithstanding a leveling off of total government expenditure. The GCC fiscal deficit averaged 11 percent; excluding the exceptional Kuwaiti experience of 1991, the fiscal deficit for the GCC countries averaged 8.1 percent.

50.   Despite the considerable fiscal deficits of the GCC economies, domestic inflation remained low as the exchange systems permitted externalization of potential domestic demand pressures through drawdown of external reserves. Oman's domestic inflation during 1991–95 averaged less than 1 percent per annum, while the inflation for the GCC as a whole averaged only 2.4 percent for annum.

C. Regional Cooperation

51.   The cooperation objectives of the GCC are both political and economic. The GCC framework comprises the Commission for Settlement of Disputes, the Ministerial Council (of Foreign Ministers), and the Secretariat General, all of which operate under policy directions of the Supreme Council (the highest authority, comprising the heads of member states of the GCC countries).

52.   The GCC's Unified Economic Agreement, ratified in 1982, aims, among others, to achieve free trade among the members. The Agreement provides for exemptions from customs duties on agricultural, animal, industrial, and natural resource products of national origin. The Agreement also provides for implementing a common external tariff and trade policy and coordination of economic development. The GCC, so far, could not reach an agreement on unification of tariffs. Discussions are still proceeding regarding options to be adopted with a view to ultimately creating a customs union and a free trade region. Proposals being considered include (1) a three-tier system, under which consumer goods and medical supplies would be duty free, but tariffs of 8 percent and 12 percent would be imposed on unspecified two other categories; (2) an arrangement under which the latter two categories would be set at 4 percent and 6 percent, respectively; and (3) a two-tier system under which duty would not be payable on consumer goods and medical supplies. Unification of GCC tariffs is also being deliberated in the context of the European Union's potential free trade agreement with the GCC.

53.   The GCC Investment Corporation is intended to consolidate endeavors in productive activities, and may participate or provide loans for development projects in the GCC or other Arab countries. Other GCC entities include the Gulf Standards Organization (for a common standards and measures framework), the Patent Office (for patent regulations), and the Commercial Arbitration Center (for settlement of trade disputes). The Gulf Organization for

Industrial Consulting advises the private sector on industrial policies of GCC governments. A recent concrete development in GCC-wide industrial effort is in respect to two gas distribution networks linking the GCC. One of these two networks is planned to link Oman with Dubai.

54.   An area of key policy focus of GCC governments in recent years is the role of the private sector in the economy. Several public entities in Oman and Kuwait have been privatized in recent years, and there is increasing emphasis on providing opportunities for private sector (including foreign) participation in the GCC economies. Oman is making concerted efforts in this regard, using the Muscat Securities Market to provide an important venue for such participation. In October 1996, a Royal decree endorsed amendments to the Omani corporate law, intended to encourage foreign investment and promote industrial diversification. The GCC, in continuing discussions with the EU, is seeking EU capital inflow into the GCC industrial sector as a means of diversifying the GCC economies and acquiring technology. Currently, manufacturing activities in most GCC industries including Oman, are concentrated on activities such as clothing and textiles, foodstuffs, building materials, home appliances, and petrochemicals.

D. Prospective Challenges

55.   The central challenge currently facing Oman—like other GCC countries—is to forge a path of development that ensures a steady growth in real per capita income along with sustainable fiscal and external sector adjustment, while developing further the economic links with other GCC countries. For optimal results, Oman's efforts would need to be focussed on a number of key areas relative to other GCC countries.

- Oman's higher oil dependency profile, relative to the GCC as a whole, and hence greater vulnerability to changes in oil prices, lend urgency to diversifying its economy. However, Oman's comparative advantage is natural-resource based. Accordingly, a diversification strategy that draws on these resources would seem to offer the prospects for optimal results. Potential resources, besides petroleum, include gas, fisheries, an extended coastline (for tourism, for example), and proximity to important regional markets.

- An improvement in Omani labor productivity, including through training, should enhance the total productivity of its available resources. As the analysis of Section I indicates, Oman's total factor productivity was, on average, barely positive during the ten years ended in 1995. Economic growth in the longer term should not rely on increased investment and labor input, which was the case in the past, but emphasis should also be given to enhance factor productivity, particularly for Omani nationals. Oman's low savings rate makes the case for higher factor productivity more pressing.

- The ratios of Oman's savings and investment to GDP are lower than the corresponding ratios for the GCC. While Oman's domestic saving ratio exceeded its investment ratio by a wider margin than for the GCC as a whole, as indicated in Section II, Oman's national savings are much lower than domestic investment. In addition to strengthening domestic efforts to promote savings, the required financial resources to fill the savings-investment gap would need to include foreign private capital, and the related challenge is to create a domestic environment with appropriate incentives to attract foreign capital to fill the savings-investment gap.

- Fiscal adjustment is more pressing for Oman than in most other GCC countries, because of the relatively shorter horizon of its oil reserves. Like most other GCC countries, Oman's investments in the reserve fund for the future have declined in recent years, and fiscal adjustment would be critical in reversing the trend. As the exploitation of new oil and gas reserves will also entail additional financial commitments, the availability of resources to facilitate such productive ventures dictate that government consumption requirements should not crowd out the needs of the productive sectors.

- Financial policies that would be needed to complement the fiscal and real sector policies would require enhancement of the existing coordination of the institutional framework of regional capital markets, in order to attain economies of scale in financial mobilization. Increasingly, most GCC countries are now attaching greater importance to foreign investment in their capital markets, and Oman will need to pursue this objective more vigorously.

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IV. STANCE OF FISCAL POLICY AND NON-OIL ECONOMIC GROWTH[12]

A. Introduction

56.   Oman's economy is dominated by the oil sector and a large central government. Oil accounts for about 40 percent of GDP, about 95 percent of exports and about 75 percent of budgetary revenues.[13] Central government expenditures were equivalent to an average of about 49 percent of GDP during 1981–95, one of the highest ratios in the world. Budget deficits have been high, averaging about 10 percent of GDP over 1991–95. Fiscal adjustment has become an increasingly important concern for Oman, since the assets of the State General Reserve Fund (SGRF)—established in 1980 to create a source of revenues after the exhaustion of oil reserves—have been substantially depleted to finance large budget deficits. The government is fully aware of the unsustainability of the fiscal policy stance pursued through 1995, and accordingly adopted a medium-term fiscal consolidation plan beginning in 1996 as part of its Fifth Five-Year Plan (FFYP). However, given the dominant role of the government in the economy, the effect of fiscal adjustment on non-oil GDP growth would be an important consideration in the design and phasing of fiscal adjustment.

57.   The purpose of this paper is to (i) analyze the developments in fiscal policy in Oman since 1981; (ii) determine the effect of fiscal policy in sustaining Oman's non-oil real GDP growth; and (iii) based on these findings, design a strategy for achieving fiscal consolidation while contributing to sustained economic growth in the medium term.

58.   The empirical analysis presented in this chapter indicates that Oman's stance of fiscal policy was different in three sub-periods covering 1981–95. Fiscal policy was expansionary and deficits grew during 1981–86 because despite a falling oil price, expenditures were not restrained. Non-oil real GDP grew by about 12 percent on average during this period, which was largely attributable to the expansionary stance of fiscal policy. During 1987–91, in response to the sharply lower level of oil prices a contractionary stance of fiscal policy was pursued, primarily driven by restrictive expenditure policies. The decelerating impetus to economic growth partly resulting from declining fiscal outlays contributed to a deceleration of the average growth rate of non-oil real GDP to about 4 percent. During 1992–95, fiscal policy was first expansionary in the aftermath of the Gulf war and then turned moderately contractionary. The quality of the government expenditure program also suffered because the composition of expenditures changed substantially since 1981, with the share of current expenditures increasing significantly at the expense of capital expenditures. The econometric analysis presented in this paper shows that, as expected, the real growth rate of expenditures has strong explanatory power for the growth of non-oil real GDP; furthermore, the two

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[12]Prepared by Volker Treichel.

[13]Unless otherwise indicated, the figures given for Oman's central government fiscal operations refer to the fiscal position excluding SGRF operations.

variables appear to be cointegrated, indicating long-run stability of the impact of fiscal policy on growth. Importantly, the behavior of recursive parameter estimates suggests that the importance of the fiscal impulse seems to have declined in recent years, as non-oil GDP has gained increasingly its own momentum.

59.   On the basis of considerations that the stance of fiscal policy in recent years was unsustainable, the paper also discusses the authorities' fiscal adjustment plan under the Fifth Five-Year Plan (FFYP), which aims at achieving a balanced budget position by the year 2000. Taking into account the Indonesian experience and the recent literature on fiscal policy and growth, the paper argues that, while the pronounced retrenchment of current expenditures under this FFYP would be most desirable, this should be coupled with a more ambitious non-oil revenue effort.

60.   Section II of the paper briefly reviews some of the literature about the relationship between fiscal policy and short- and long-term economic growth. The following section analyzes aspects of Oman's fiscal policy since 1981: first, trends in revenue and expenditure developments are identified; second, the stance of fiscal policy in Oman since 1981 is assessed using fiscal impulse analysis; and finally, the link between expenditure policy and the growth of non-oil real GDP is analyzed econometrically. Section IV addresses the question of the sustainability of Oman's recent stance on fiscal policy. The final section discusses a fiscal adjustment strategy which would limit short-term adjustment costs and be conducive to a sustained high growth rate of non-oil real GDP over the medium term.

B. Fiscal Policy and Growth—An Overview of the Literature[14]

61.   Economic literature generally distinguishes between short- and long-term effects of fiscal policy on real economic growth. That fiscal policy can have effects on growth in the short run, is a relatively noncontentious issue. It was first set out theoretically by Keynes (1936) and formalized by Hicks (1946) in his IS-LM framework. An expansionary fiscal policy would be expected to drive up aggregate demand and push nominal GDP beyond its potential level in the short run. Based on two considerations, the expansionary fiscal impulse would not be fully transmitted into a higher growth rate: (i) under the assumption of a fixed money supply, the expansionary stance of fiscal policy could trigger an increase of interest rates, which would depress investments; and (ii) if the money supply was adjusted, so as to accommodate the increase in the money demand and allow for a constant level of interest rates, inflation may rise and depress growth. Both effects undermine the long-run sustainability of fiscal impulses: interest rates or the inflation rate might rise to such levels that the expansionary effects of fiscal policy on output would be fully crowded out.

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[14]See Tanzi, V. and Howell Zee (1996) for a survey of different approaches to the link between fiscal policy and long-run growth.

62.   The idea that there could be a causal direction between fiscal policy and long-term growth is relatively new. In neoclassical models of growth, growth is entirely determined by exogenous factors (Solow, 1956). Only in the context of the endogenous growth literature (e.g., Romer (1986)), whose basic claim is that the growth rate of a country can be directly influenced by economic policies, has the role of fiscal policy been reassessed as an important factor contributing to growth. The impact of fiscal policy on the long-run growth rate of a country can be analyzed by considering separately the influences of tax and of expenditure policies and of the overall fiscal policy on the economy.

Tax policy

63.   In general, taxes are thought to have a contractionary impact on growth. Under the assumption that all taxes are nonneutral, taxes distort the allocative decisions of economic agents compared to a no-tax situation. For example, a tax on income from physical capital could lower the after-tax return to savings and is therefore a disincentive to accumulate physical capital. The overall effect on growth of this tax would depend on how the other factors of production, which cooperate with physical capital in the production process, are affected by the tax as well as on the production function of the economy. Therefore, the impact of taxation on growth will crucially depend on the structure of taxes, i.e., the distribution between direct and indirect taxes, in particular, that between consumption and income taxes.

Expenditure policy

64.   While public expenditures may displace private sector output (crowding-out effect), they may also improve private sector productivity (externality effect) through the accumulation of the stock of public infrastructure as well as of human capital. Therefore, the structure of expenditures plays an important role in influencing the rate of economic growth. Traditionally, expenditures were divided into public consumption, which were generally considered to be unproductive, and public investment, which tends to foster growth. This distinction, however, is questionable, since expenditures on education and alleviating income inequality that may have growth enhancing effects are generally regarded as public consumption, while some public projects, whose impact on growth may be doubtful, are considered to be public investment. Therefore, the emerging consensus is that expenditures may be more usefully categorized as either productive or non-productive outlays. Recent research (Tanzi and Schuknecht (1995)) also shows that the relationship between expenditures and growth may not be monotonic, and in fact, beyond a particular share of GDP public expenditure may become increasingly harmful.[15]

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[15]Tanzi and Schuknecht (1995) found that beyond a share of 30 percent of GDP expenditures tend to have a harmful effect on growth.

Budgetary balance

65.   The idea that the level of the budget deficit itself may affect growth is contentious.
On the one hand, Barro's Ricardian equivalence theorem suggests that budget deficits are
neutral with respect to private savings and growth, as economic agents perceive the deficit as
delayed taxes and therefore increase their savings to neutralize public dissavings. On the other
hand, there exists some evidence that the correlation between deficits and growth is negative,
in particular for middle-income countries.[16] Moreover, the evidence buttressing Ricardian
equivalence has been quite ambiguous. The response of private sector savings to public sector
dissavings does not seem to completely neutralize the latter.[17]

C.   Fiscal Policy in Oman, 1981–95

Overall developments in the fiscal sector and the stance of fiscal policy

66.   Based on the development of the overall fiscal balance (Chart 5), the composition of
expenditures and revenues (Charts 6 and 7), the developments in fiscal impulse (Table 11) and
the structural fiscal balance, this section distinguishes three sub-periods characterizing three
different types of fiscal policy stances covering 1981 to 1995. The methodologies used to
derive the output-adjusted fiscal stance and impulse, and the underlying structural fiscal
balances for Oman are described in Appendix I.

The expansionary phase of early 1980s

67.   The period 1981–86 was characterized by an increasing deficit, which averaged about
9 percent of GDP, primarily as a result of higher growth of expenditures than of revenues.
While expenditure growth averaged 12.5 percent, the growth of total revenues averaged only
5.6 percent. Among the various expenditure groups, recurrent expenditures of the civil
ministries grew at an average rate of over 16 percent, while capital expenditures grew by over
14 percent. Accordingly, the share of civil expenditures in total expenditures rose from about
25 percent to over 30 percent. About 40 percent of civil expenditures were allocated to
health, education, electricity generation, water production and housing, which reflected partly
the development needs of a country where a broader share of the population did not have
access to some of these basic services. Defense outlays were by far the biggest expenditure,
averaging 20 percent of GDP. The composition of revenues changed quite significantly over
the period 1981–86, as the share of non-oil revenues in total revenues rose from about
10 percent to over 20 percent. This reflected partly the frequent adjustment of fees and

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[16]Easterly and Rebelo (1993); Martin and Fardmanesh (1990).

[17]A review of empirical evidence is found in Bernheim (1987); also Leiderman and Blejer
(1988).

CHART 5
OMAN
OVERALL FISCAL BALANCE
(In percent of GDP)
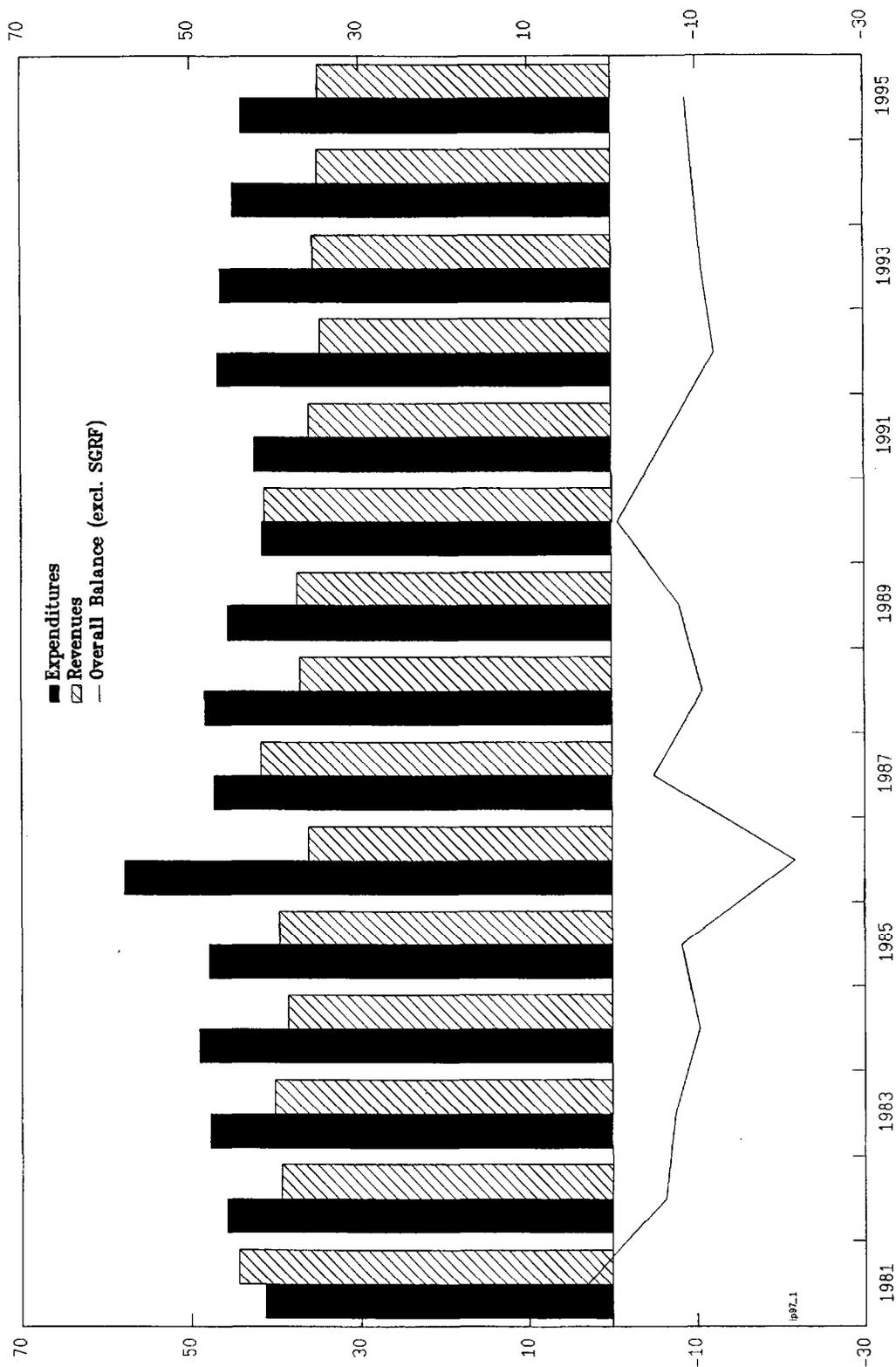
■ Expenditures
▨ Revenues
— Overall Balance (excl. SGRF)

Sources: Data provided by the Omani authorities; and Fund staff estimates.

CHART 6
OMAN

COMPOSITION OF EXPENDITURES
(In percent of total)

■ Current Expenditures
▨ Capital Expenditures

ip97_2
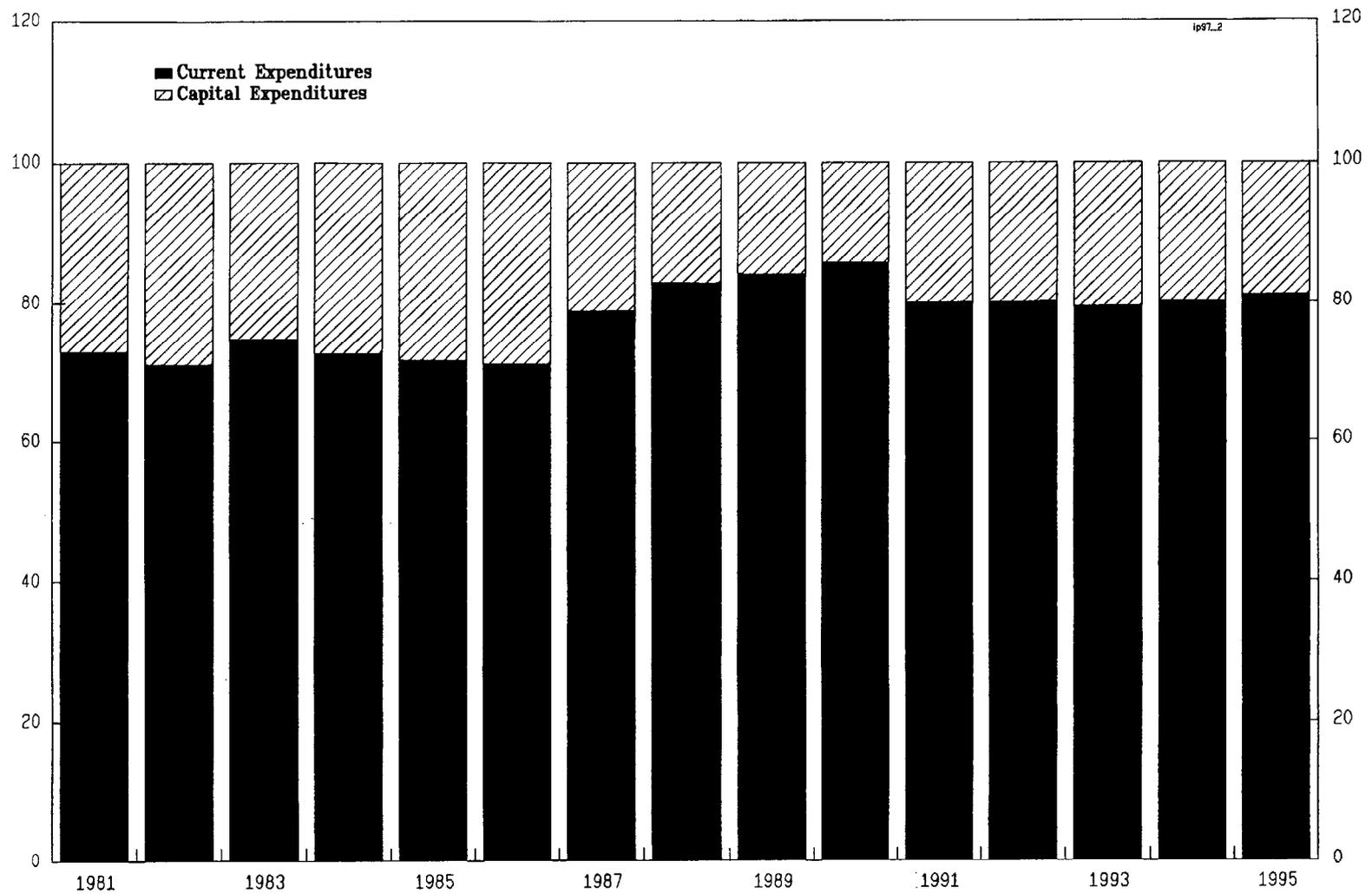
Sources: Data provided by the Omani authorities; and Fund staff estimates.

CHART 7
OMAN

COMPOSITION OF REVENUES, 1981–95
(In percent of total)

▨ Oil Revenue
⊞ Non-Oil Revenue (excl. taxes)
■ Tax Revenue
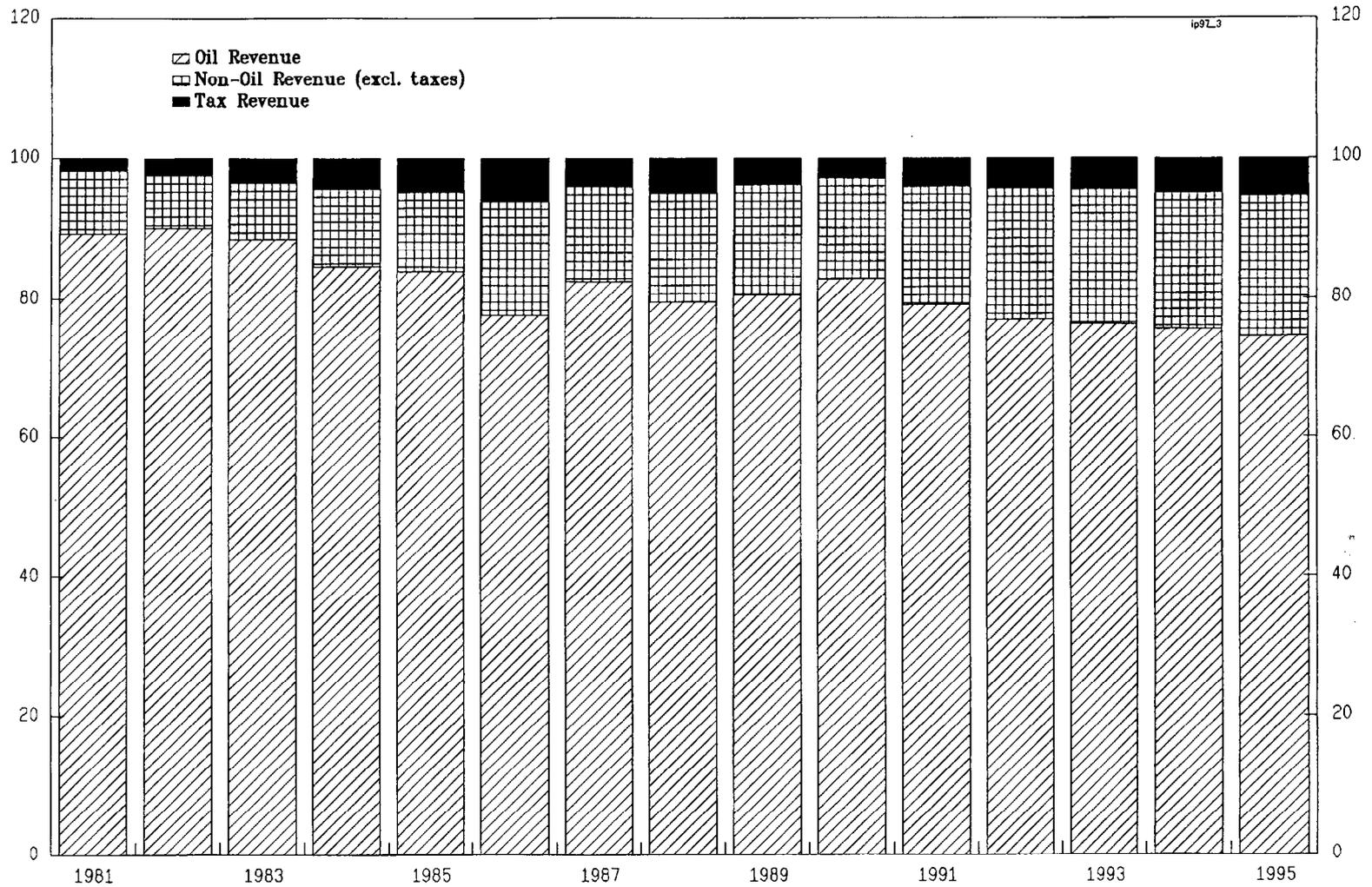
Sources: Data provided by the Omani authorities; and Fund staff estimates.

charges as well as increases in profit transfers from the Central Bank and the General Office of Telecommunications. Furthermore, the share of tax revenues in total revenues grew from 2 percent in 1981 to over 6 percent in 1986, reflecting increases in customs duties and the training tax.

68.   Fiscal impulse analysis (Tables 11 and 12) indicates that this period was also characterized by an increasingly expansionary stance of fiscal policy, as policymakers did not alter expenditure policy in response to the falling oil prices. The fiscal impulses were positive and ranged from 0.2 percent to 10 percent of GDP, averaging about 3.5 percent of GDP during 1981–86. The corresponding fiscal stance—measuring the cumulative change in fiscal impulses beginning in 1982—increased from less than 4 percent of GDP in 1982 to more than 10 percent of GDP in 1986. Also, the structural deficit was greater than the official deficit indicating that over this period the economic growth was higher than its trend level, perhaps reflecting the expansionary fiscal impulses during this period.

Table 11. Oman: Fiscal Indicators, 1981–95
(Averages over indicated periods in percent of GDP)

	1981–86	1987–91	1992–95
Expenditure growth	12.5	0.7	5.9
Current	12.0	2.9	6.3
Capital	14.4	-3.5	4.5
Official fiscal balance	-8.8	-6.2	-10.4
Consolidated fiscal balance[1]	-1.0	0.2	-5.6
Cyclically neutral budget	-4.5	-7.4	-7.6
Fiscal stance	4.3	-1.2	2.8
Fiscal stanceFisc			
Fiscal impulse	3.5	-1.9	-1.8
Structural deficit	-12.6	-5.3	-9.3

Sources: Data provided by the Omani authorities; and Fund staff estimates.
[1]Including the operations of the SGRF, Oil Fund, and Contingency Fund.

Table 12. Oman: Fiscal Impulse Analysis, 1981—95

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
	(In millions of rials Omani)														
Observed GDP (Y)	2,637.6	2,773.9	2,932.8	3,232.1	3,590.6	3,143.4	3,317.7	3,224.5	3,603.6	4,493.1	4,360.8	4,787.9	4,803.8	4,967.2	5,288.2
Potential output (YP) 1/	2,325.8	2,475.7	2,635.3	2,805.1	2,985.9	3,178.3	3,383.2	3,601.2	3,833.3	4,080.4	4,343.4	4,623.3	4,921.3	5,238.4	5,576.1
Output gap (Y-YP)	311.8	298.2	297.5	427.0	604.7	-34.9	-65.5	-376.7	-229.7	412.7	17.4	164.6	-117.5	-271.2	-287.9
Official fiscal balance 2/	88.4	-221.8	-242.3	-346.8	-295.6	-653.4	-165.0	-346.0	-289.5	-32.8	-281.7	-584.6	-513.1	-485.9	-468.1
Consolidated balance 3/	341.6	33.1	-4.6	-98.1	-73.5	-469.3	37.7	-217.3	6.3	235.8	41.8	-199.4	-389.8	-389.9	-118.5
Cyclically neutral budget deficit (CNB)	-96.8	-117.5	-133.6	-95.0	-36.8	-329.6	-243.5	-369.7	-331.9	-116.6	-276.0	-241.3	-362.2	-438.1	-466.1
Fiscal stance (Deficit—CNB)	-185.2	104.3	108.7	251.8	258.8	323.8	-78.5	-23.7	-42.4	-83.8	5.7	343.3	150.9	47.8	2.0
Fiscal impulse	...	289.5	4.4	143.1	7.0	65.0	-402.3	54.8	-18.7	-41.5	89.5	337.7	-192.4	-103.2	-45.7
Omani crude oil export price (in U.S. dollars per barrel)	36.9	34.4	29.2	28.4	27.0	13.5	17.3	13.5	16.3	21.4	17.5	18.0	15.5	15.2	16.2
	(In percent of GDP)														
Official fiscal balance 2/	3.4	-8.0	-8.3	-10.7	-8.2	-20.8	-5.0	-10.7	-8.0	-0.7	-6.5	-12.2	-10.7	-9.8	-8.9
Consolidated balance 3/	13.0	1.2	-0.2	-3.0	-2.0	-14.9	1.1	-6.7	0.2	5.2	1.0	-4.2	-8.1	-7.8	-2.2
Cyclically neutral budget deficit (CNB)	-3.7	-4.2	-4.6	-2.9	-1.0	-10.5	-7.3	-11.5	-9.2	-2.6	-6.3	-5.0	-7.5	-8.8	-8.8
Fiscal stance (Deficit —CNB)	-7.0	3.8	3.7	7.8	7.2	10.3	-2.4	-0.7	-1.2	-1.9	0.1	7.2	3.1	1.0	0.0
Fiscal impulse	...	10.4	0.2	4.4	0.2	2.1	-12.1	1.7	-0.5	-0.9	2.1	7.1	-4.0	-2.1	-0.9
Structural deficit	-1.3	-12.1	-12.0	-16.1	-15.5	-18.6	-4.1	-5.8	-5.3	-4.6	-6.6	-13.7	-9.6	-7.5	-6.5
Memorandum item:															
Oil revenues/expenditures	95.9	77.5	74.5	66.6	69.4	48.5	73.8	61.4	66.5	82.9	66.6	57.6	58.9	58.5	59.1
Oil revenues/capital expenditures	354.7	267.7	294.0	243.7	245.0	168.3	347.9	357.6	419.8	579.2	333.5	289.4	286.8	296.4	313.5
Oil revenues/current expenditures	131.4	109.2	99.7	91.7	96.8	68.2	93.6	74.1	79.1	96.8	83.3	72.0	74.1	72.9	72.8

Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Assuming potential output annual growth rate is equal to the average growth rate over 1980—95.
2/ Excluding grants, SGRF operations and timing differences.
3/ Includes transfers to the State General Reserve Fund, Oil Fund and Contingency Fund.

The first phase of fiscal consolidation (1987–91)

69. Following the collapse of oil prices in 1986, the government attempted to restore a sustainable fiscal position through strict containment of expenditure growth which was limited to an average of only 0.7 percent during 1987–91. The composition of government outlays was, however, adversely affected with civil expenditures rising on average by over 6 percent, capital expenditures falling on average by 3.5 percent. Consequently, the share of civil expenditures in total expenditures became increasingly large, rising from about 30 percent to 40 percent. Defense expenditures were reduced by one third to about 15 percent of GDP in 1991. The growth of civil expenditures, in spite of the contractionary stance of fiscal policy, was indicative of the pressures experienced by the Omani government to provide basic services, like education, health, and energy (Chart 8). The increase in revenues averaged 6 percent exhibiting a high volatility due to large fluctuations of oil prices, and the composition of revenues did not change markedly over the period. Fiscal impulse analysis indicates that during the entire period strong contractionary impulses were exerted on the economy through the tightened fiscal stance; the cumulative withdrawal of stimuli accounted for about 10 percent of GDP. The strongest contractionary impulse was recorded in 1987. Consistent with this contractionary impulse, the structural deficit over this period declined significantly to an average of 5 percent of GDP compared with about 13 percent of GDP during 1981–86.

Mixed-performance of recent years (1992–95)

70. Except for 1992, when in the aftermath of the Gulf war defense expenditures and the wage bill grew significantly, the period 1992 to 1995 was characterized by falling official budget deficits. Nevertheless, the planned budget deficits and expenditure authorization were exceeded by relatively wide margins, averaging over 4 percent of GDP. The reduction of the deficit was brought about mainly by a containment of capital expenditures, which grew by only 1 percent on average, while civil expenditures increased by almost 4 percent. Defense expenditures remained roughly unchanged at around 15 percent of GDP, although excluding the Gulf War- induced pressures on the defense budget, the average would have been around 12 percent of GDP (Box 1). As in the previous two periods, the share of civil expenditures continued to expand, from about 41 percent in 1991 to over 44 percent in 1995, while the share of capital expenditures declined slightly from 20 percent to 19 percent. Fiscal impulse analysis indicates that while in the aftermath of the Gulf war in 1992 fiscal policy was sharply expansionary, subsequently it turned less expansionary and became neutral in 1995. The analysis of the structural deficit over this period mirrors the results from fiscal impulse analysis, as the structural deficit declined from the sharply higher level of 1992 but remained substantially high in the range of 7 percent of GDP during 1994–95.

CHART 8
OMAN

CIVIL AND CAPITAL EXPENDITURES

(In percent of total)

is97_4

Civil Expenditures 1/

Capital Expenditures

1981   1983   1985   1987   1989   1991   1993   1995

- 49 -
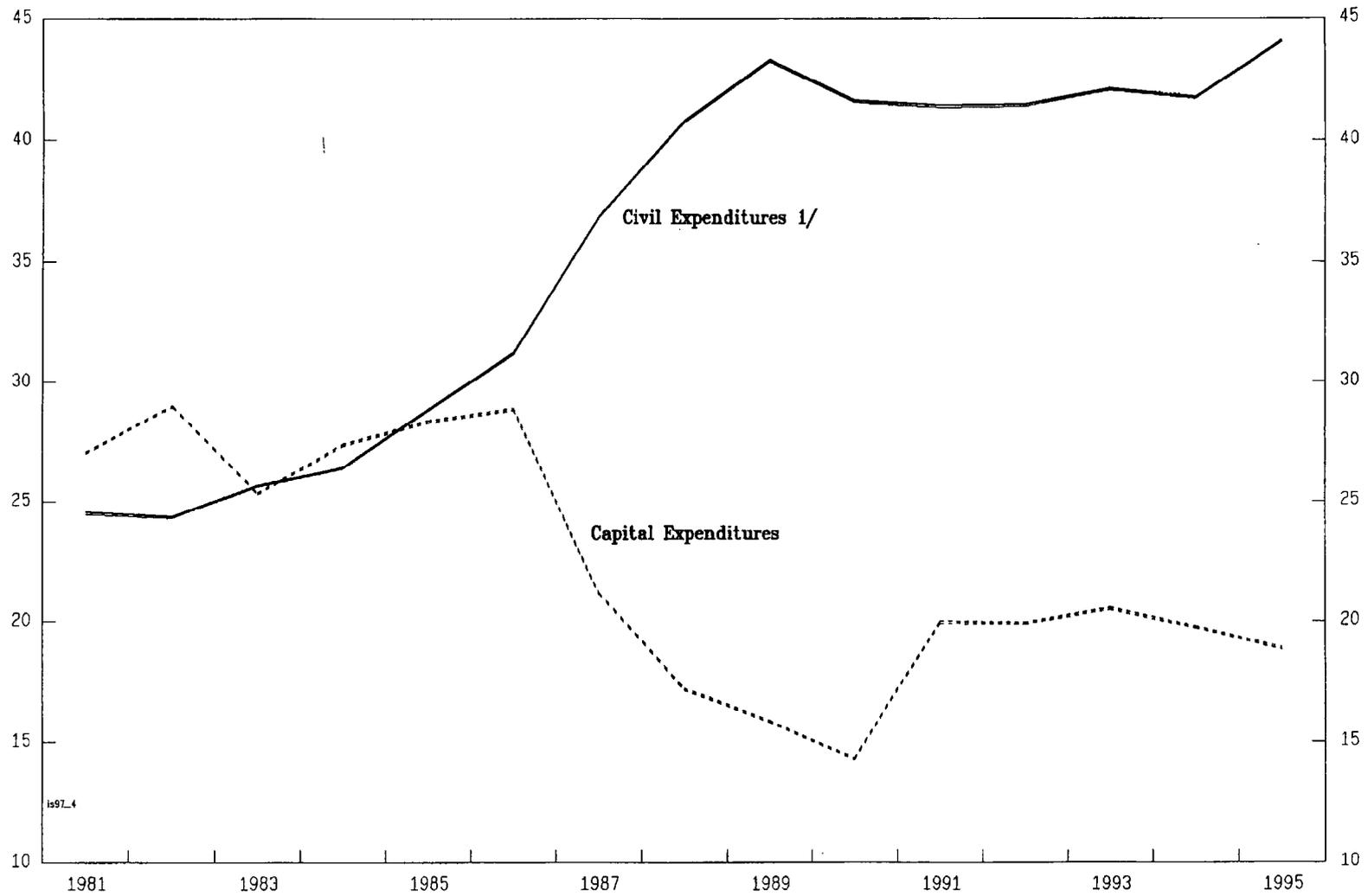
Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Current, non-defense outlays.

Box 1. Oman: Selected Fiscal Indicators in a Regional Perspective

Oman's central government budget deficit in relation to GDP was the highest among all GCC countries except Kuwait, which was affected by the reconstruction needs following the Gulf war and is therefore not directly comparable (Table 13).

Current expenditures in relation to GDP in Oman were at about the same level as those in Saudi Arabia and Qatar, but higher than those in the U.A.E. and Bahrain. Only Kuwait had significantly higher current expenditures than Oman. The ratio of capital expenditures to GDP of Oman was the highest among all GCC countries followed by the U.A.E.

Oman's ratio of total revenues to GDP was at about the same level as that of Saudi Arabia and Qatar, but much lower than that of Kuwait and Qatar and much higher than that of Bahrain, primarily reflecting differences in oil revenues. The ratio of Oman's non-oil revenues to GDP (excluding investment income) was the second highest of all GCC countries and was only below that of Bahrain. As regards investment income, Oman together with Saudi Arabia had one of the lowest ratios of investment income to GDP in the GCC, far below the level of Kuwait, Qatar and the U.A.E., but higher than that of Bahrain.

The share of Oman's oil revenues in total revenues was the highest of all GCC countries and substantially higher than that of other oil-exporting countries like Syria, Venezuela, and Indonesia, demonstrating the high dependence of Oman on oil revenues.

Overall, the main characteristics of Oman's fiscal indicators in comparison to other GCC and oil-exporting countries can be summarized as follows:

- a high deficit to GDP ratio, primarily as a result of high current and capital expenditures;
- low investment income, but comparatively high revenue from fees and charges; and
- a very high dependence on oil revenues.

The role of oil revenues in determining expenditure policy

71.   In many oil-exporting countries, sometimes oil revenues have been identified as an important determinant of the stance of expenditure policy.[18] In order to assess the role of oil revenues for the level of expenditures in Oman, the ratios of oil revenues to total and to capital and current expenditures were calculated (Table 12; Chart 9). A falling ratio would be consistent with an expansionary stance of policy and vice versa. This analysis is

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[18]Morgan, David R. (1979).

Table 13. Fiscal Indicators in Oil Exporting Countries, 1992–95

(In percent of GDP)

	Bahrain	Kuwait	Oman 1/	Qatar	Saudi Arabia	United Arab Emirates	Indonesia	Syria	Venezuela
Current expenditures	28.6	55.3	36.4	38.4	35.4	30.4	8.7	15.0	16.0
o/w Wages and salaries	17.5	15.5	9.7	16	18.2	9.1	...	...	...
Capital expenditures	6.6	7	9	7.4	6.2	8.2	7.7	11.0	5.3
Total revenues 2/	28.5	46.2	36.4	40.2	32.7	37.3	14.4	24.0	16.9
Oil and gas revenues	17.3	33.4	26.6	24.2	24.4	25	4.5	4.0	9.3
Non–oil revenues	11.2	12.8	9.8	16	8.3	12.3	9.9	20.0	7.6
Other non–oil revenue	11.2	2.8	8.5	3.7	6.9	6.7	...	...	...
Investment income	– –	10	1.3	12.3	1.4	5.6	...	...	...
Fiscal balance	−5	−17.3	−10.4	−9.2	−8.8	−3.7	−0.5	−2.0	−3.3
Memorandum item : Oil revenues as percent of total revenues	57.5	73.9	75.9	65	74	66.7	31	16.5	55.0

Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Oman's figures refer to the budget balance excluding SGRF operations.
2/ Excluding grants.

CHART 9
OMAN

RATIOS OF OIL REVENUES TO EXPENDITURES
(In percent of GDP)

Oil Revenues/
Capital Expenditures

Oil Revenues/
Current Expenditures

Oil Revenues/
Expenditures

ip97_5
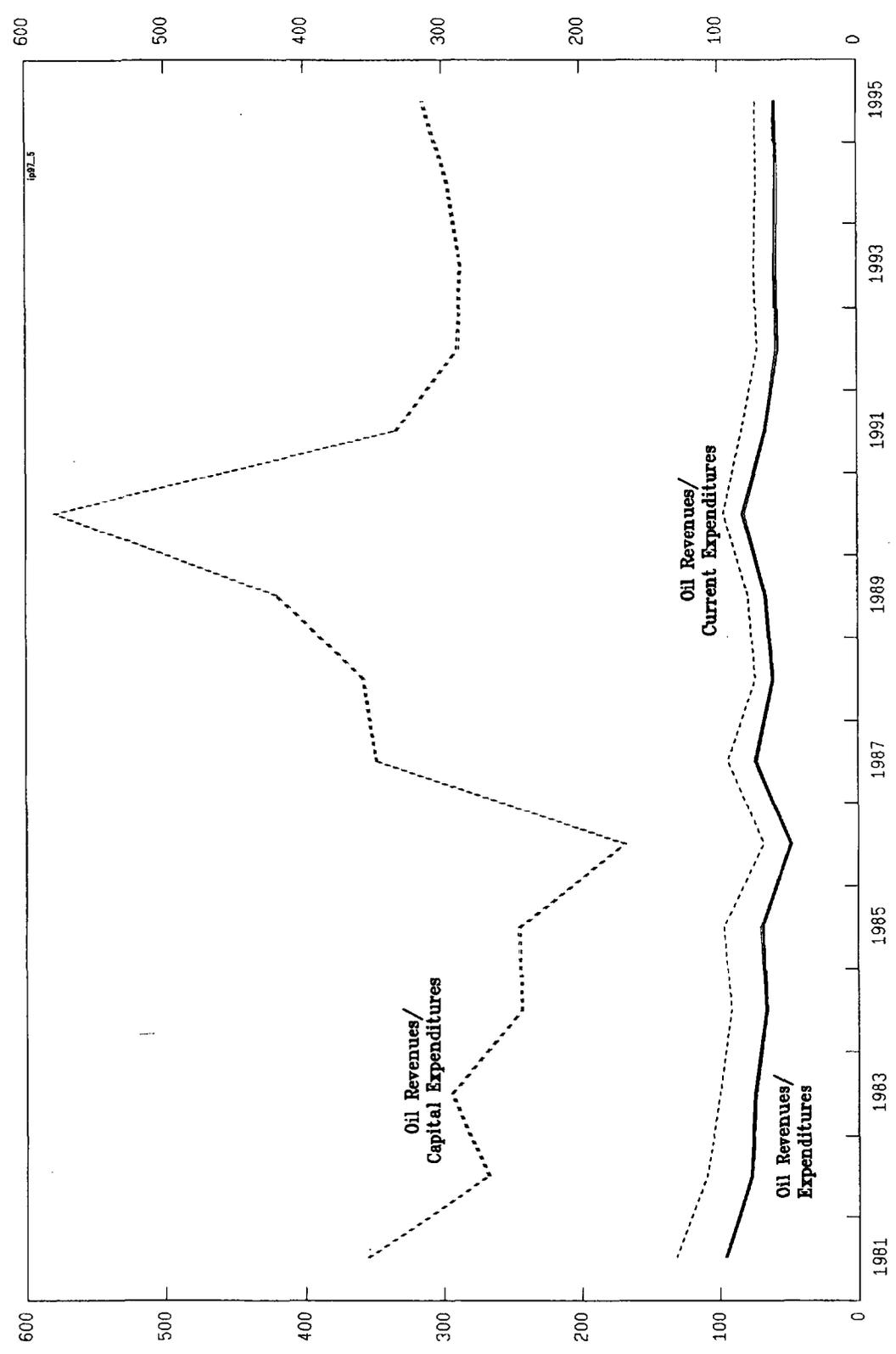
Sources: Data provided by the Omani authorities; and fund staff estimates.

different from fiscal impulse analysis: while fiscal impulse analysis compares the stance in the current year with a hypothetical stance derived from the fiscal stance in a base year, this analysis compares the stance of expenditure policy in relation to oil revenues which is the dominant component of government receipts. The results are, however, broadly in line with those of fiscal impulse analysis.

72. The ratio of oil revenues to total expenditures during 1981–86 declined from 96 percent to less than 50 percent indicating a period of expansionary fiscal policy since the growth rate of government outlays substantially exceeded the growth rate of oil resources. Between 1987–90 fiscal policy became steadily more contractionary compared to the previous year, since the ratio moved upward to about 83 percent by 1990. In 1991, the ratio of oil revenues to total expenditures fell from 83 to 67 percent, mainly on account of higher capital expenditures. During 1991–95, the ratio of oil revenues to expenditures remained broadly stable at less than 60 percent indicating broadly unchanged fiscal stance, albeit at an unsustainable position since the ratio of less than 60 percent in an environment of a limited non-oil revenue base entailed a unsustainably high fiscal deficits. The behavior of the ratio of oil revenues to current and capital expenditures were also broadly in line with that of total expenditures to revenues.

73. Notwithstanding some movements in the ratio of oil revenue to expenditure between the sub-periods, the analysis presented above suggests that in the past Oman did not succeed in cutting or containing expenditures to a level consistent with the level of oil revenues. The facts that the ratio of oil revenues to total expenditure remained below 60 percent and that non-oil revenue base remained narrow, essentially indicated that the fiscal policy stance pursued in recent years was structurally unsustainable

The impact of fiscal policy on non-oil GDP growth

74. One of the critical questions about the role of fiscal policy in Oman whose economy has traditionally been dominated by the government is to what extent the growth of non-oil real GDP depends on fiscal policy. In addition to assessing the contribution of the stance of fiscal policy on economic growth, the answer to this question is particularly relevant in the assessment of the potential output cost of fiscal retrenchment and its most appropriate phasing.

75. In order to assess the link between fiscal policy and non-oil real GDP growth, regressions of non-oil real GDP growth on expenditures were run over the period 1981–95 in two specifications: first, on the growth rate of real total expenditures as the independent variable; and second, on the growth rate of real current and real capital expenditures as independent variables. The dynamic nature of the relationship between budgetary expenditure and growth has been analyzed through recursive parameter estimates. The recursive parameter estimate for a particular coefficient at a certain point in time is derived by estimating the

regression parameters based on data up to that point. The moving values of the parameter estimates allow to determine changes in the nature of correlation between the variables in question over time.

76.   The stability of the relationship was assessed using cointegration analysis. Under the premise of the same degree of integration of the independent and dependent variable in a particular regression, the question of the cointegration of variables can be addressed through tests for the stationarity of the residuals of an estimated regression. If a time series is stationary, it will have the tendency to return to the original value after a random shock, while the mean and the variance of such a series would not change with the passage of time. If long-run stability of the relationship between the growth of non-oil real GDP and expenditures was found in Oman based on the residuals of the estimated regression, this would further corroborate the presumption of a dominant role of fiscal policy for non-oil output in Oman.

77.   The results of the regression analysis are summarized in Table 14. Both regressions indicate that indeed growth was strongly correlated with fiscal expenditures and that developments in non-oil growth can be explained to a large degree by developments in government expenditure policy.[19] In both regressions, the R^2 are fairly high (80 percent) and the Durbin-Watson statistics do not indicate the presence of first-order residual autocorrelation. Cointegration analysis based on an augmented Dickey-Fuller test which was performed on the residuals of the estimated regressions suggests the existence of a stable relationship between fiscal expenditures and non-oil real GDP growth.[20]

78.   Interestingly, recursive parameter estimates in both regressions indicate that the coefficient of current expenditures declined significantly since the mid-1980s indicating a weakening of the structural dependence of non-oil growth on government expenditure policy. This weakening role of government outlays is more visible in the case of current expenditures, while the importance of capital expenditures seems to have increased marginally since 1981 and remained approximately constant over the past three years. These regression results, while broadly confirming the crucial role of fiscal policy for economic growth in Oman (Chart 11), also suggest that this relationship has become somewhat less important in recent years with the private sector increasingly developing its own momentum.

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[19]Chart 10 illustrates the regression result by showing the similar movements in expenditure growth and growth of real non-oil GDP.

[20]Unit-root tests showed that all variables in question were I(1).

Table 14. Oman: Non-Oil Real GDP Growth and Government Expenditures, 1981-95

CONSTANT	DREXP	DRCUREXP	DRCAPEXP	R2	D.-W. 1/	ADF 2/
4.13 (3)	0.69 (6.13)	--	--	0.72	2.24	3.94 **
3.94 (3.09)	--	0.46 (3.84)	0.26 (4.55)	0.79	1.7	3.0

Sources: Data provided by the Omani authorities; and Fund staff estimates.

DNOILGDP = Real growth rate of non-oil GDP
DREXP = Growth of real total expenditures
DRCUREXP = Growth of real current expenditures
DRCAPEXP = Growth of real capital expenditures

1/ Durbin-Watson statistics for residual autocorrelation.
2/ Augmented Dickey-Fuller test for stationarity of residuals.   ** indicates significance at the 1 percent level.

CHART 10
OMAN

REAL GROWTH RATES OF EXPENDITURES AND OF NON-OIL GDP
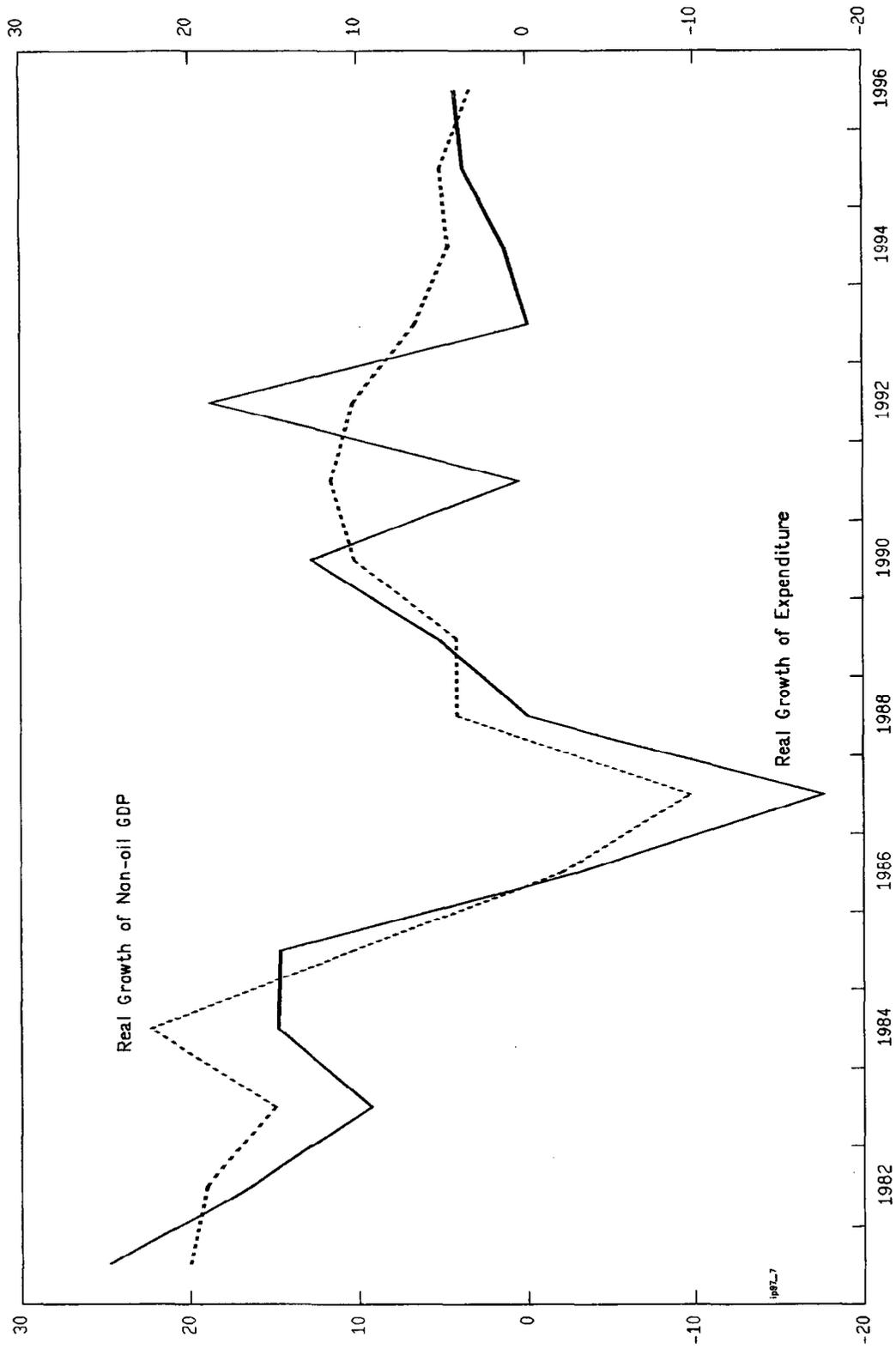
Sources: Data provided by the Omani authorities; and Fund staff estimates.

CHART 11
OMAN

EXPENDITURE ELASTICITY OF NON-OIL REAL GDP GROWTH, 1981-95

Coefficient on Current
Expenditure

Coefficient on Capital Expenditure
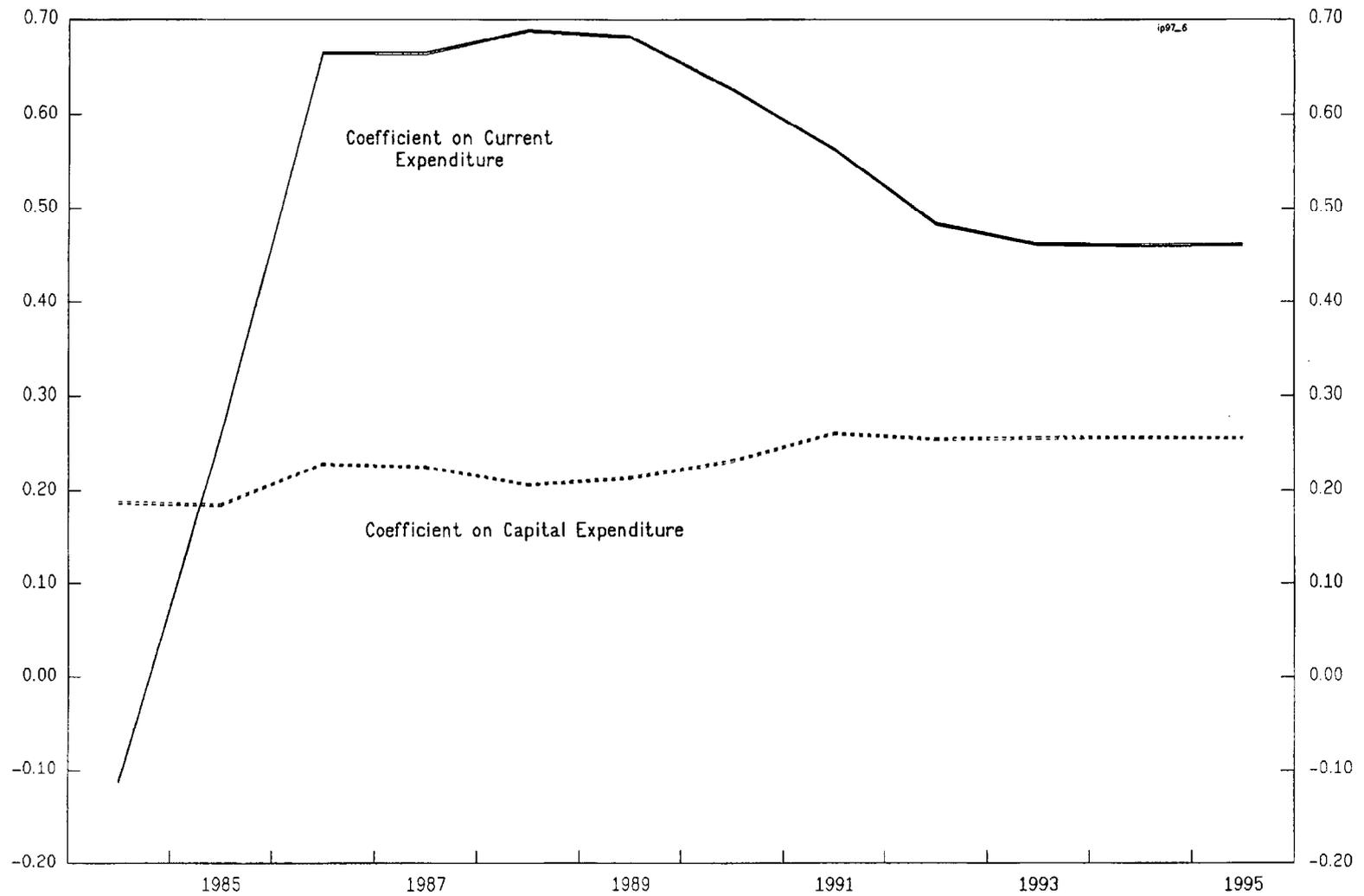
Sources: Data provided by the Omani authorities; and Fund staff estimates.

D. The Sustainability of Fiscal Policy in Oman

79.   The fundamental question involving the assessment of fiscal sustainability is whether the government can continue to pursue indefinitely the recent expansionary stance of budgetary policy. The sustainability of fiscal policy in a country can be assessed in a variety of ways.[21] Most criteria of fiscal sustainability are based on developments in the debt position. On the basis of one criterion, for the fiscal policy to be sustainable, the discounted present value of primary surpluses in terms of GDP must be equal to the initial stock of government debt in terms of GDP. For Oman, this criterion appears to be less relevant, since the level of total public debt (less than 30 percent of GDP) is fairly low and the financing of the budget deficit in recent years has primarily relied on the drawdown of foreign investments. Another criterion for the assessment of the sustainability of fiscal policy is the level of the primary balance, i.e., the difference of total revenues and total primary (non-interest) expenditures. Based on this criterion, Oman's fiscal policy appears to be unsustainable, because the primary balance was negative in almost all years. An alternative criterion to judge fiscal sustainability is whether the real interest rate paid on public debt is greater or smaller than the real economic growth rate. For a fiscal situation to be sustainable and the debt burden to assume a declining path the real interest rate should be lower than the real growth rate. In this respect, Oman's markedly slower economic growth rate recorded in recent years and the developments in the real interest rate have the potential for the emergence of unsustainable debt dynamics.

80.   In order to assess Oman's fiscal sustainability in a more meaningful manner, the specificities and long-term development objectives of the Omani economy should be taken into consideration in an appropriate forward-looking manner. Oman's horizon of proven oil reserves is about 16 years. Even though new exploration projects may continue to increase the level of proven oil reserves, Oman clearly faces a shorter horizon of proven oil reserves than most other GCC countries. This situation would require the government to pursue three important objectives: (i) the accumulation of financial reserves for the time after oil reserves are depleted; (ii) the development of a strategy to reduce dependence on oil revenues by broadening the non-oil revenue base to finance an increasing proportion of government operations on a sustained basis, particularly in the period beyond the oil-reserve horizon; and (iii) the diversification of the economy.

81.   Recognizing the importance of the first objective, the government of Oman established the SGRF in 1980, in order to create a source of revenue that would be capable of replacing oil revenues, at least in part, after the depletion of oil reserves. Under the assumption of a return of about 6 percent on invested capital per year and average budgetary oil revenues of about RO 1.5 billion, this would imply that, at the time of full exhaustion of all oil reserves, the SGRF would have to amount to about RO 25 billion in constant 1996 prices in order to compensate fully for the potential loss of oil revenues. The current level of the SGRF is rather modest compared with this implicit target amount and has been declining in recent years to

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[21]See Horne, Jocelyn (1991).

finance government budget deficits. This stance of fiscal policy is clearly unsustainable and runs against the government's longer term fiscal and other economic objectives. The objective to build up SGRF investments at a fast pace will require elimination of the central government budget deficit and ensuring that oil revenues in excess of US$15 per barrel are fully transferred to the SGRF and Oil Fund, as intended in the government's Fifth Five-Year Plan.

82.   Even if the SGRF could generate sufficient revenue to replace oil revenues fully after oil reserves have been depleted, this may be insufficient to achieve fiscal sustainability in the long run. Given a constant nominal return from the SGRF, a constant ratio of expenditures to GDP in an environment of growing nominal GDP would lead to growing fiscal deficits, unless a strategy to develop non-oil revenues is effectively in place to compensate for the difference. This issue appears even more important, given that the accumulation of the SGRF to the target level by the time of the depletion of oil reserves would require substantial fiscal adjustment efforts which might be difficult to achieve through expenditure cuts alone.

83.   Given the high dependence of the economy on expansionary fiscal impulses in the past, the attainment of a fiscal surplus through fiscal retrenchment appears to be in conflict with the objective to sustain economic growth. At the same time, however, the diversification of the economy and strengthening of the private sector would benefit from a partial withdrawal of the government from the economy and from the increased confidence emanating from the execution of a comprehensive fiscal adjustment program. Thus, fiscal adjustment and increased economic growth in the longer term and diversification of the economy are mutually reinforcing objectives. Moreover, since the degree of dependence of the Omani economy on the fiscal impulse has somewhat fallen in recent years—as suggested by the regression analysis presented above—the short-term costs of fiscal adjustments are expected to decline over time.

84.   In contrast, the costs of failing to put fiscal policy on a sustainable path could be considerable. Under a continuation of current policies, in addition to further depletion of the SGRF assets Oman would have to start borrowing far beyond the present level to finance its deficit. A progressively higher debt level would require much larger fiscal retrenchments to achieve sustainability.

E. Government's Fiscal Consolidation Plan and its Appropriateness

85.   The government is fully aware of the unsustainability of the stance of fiscal policy pursued in recent years and its implication for the future. Accordingly, Oman has recently passed the Fifth Five-Year Plan (FFYP) with a fiscal adjustment plan at its center that foresees the achievement of a balanced budget at the central government level (excluding SGRF operations) by the year 2000 (Chart 12). The authorities' plan foresees a front-loaded fiscal adjustment aimed at reducing the fiscal deficit by more than 2 percentage points from 4.9 percent in 1996 to 2.4 percent of GDP by 1997, largely on account of a reduction of expenditures by about 4 percentage points of GDP and a further reduction of the deficit by over 1 percent of GDP during 1999–2000. The thrust of the adjustment is rightly on the reduction of current expenditures, which compared to the 1995 outturn are envisaged to be

CHART 12
OMAN

OMAN'S FIFTH FIVE-YEAR PLAN FISCAL ADJUSTMENT
(In percent of GDP)

ip97_9

Expenditures and Net Lending

Revenues

Current Expenditures

Capital Expenditures

Official Budget Surplus/Deficit

1996   1997   1998   1999   2000

- 60 -
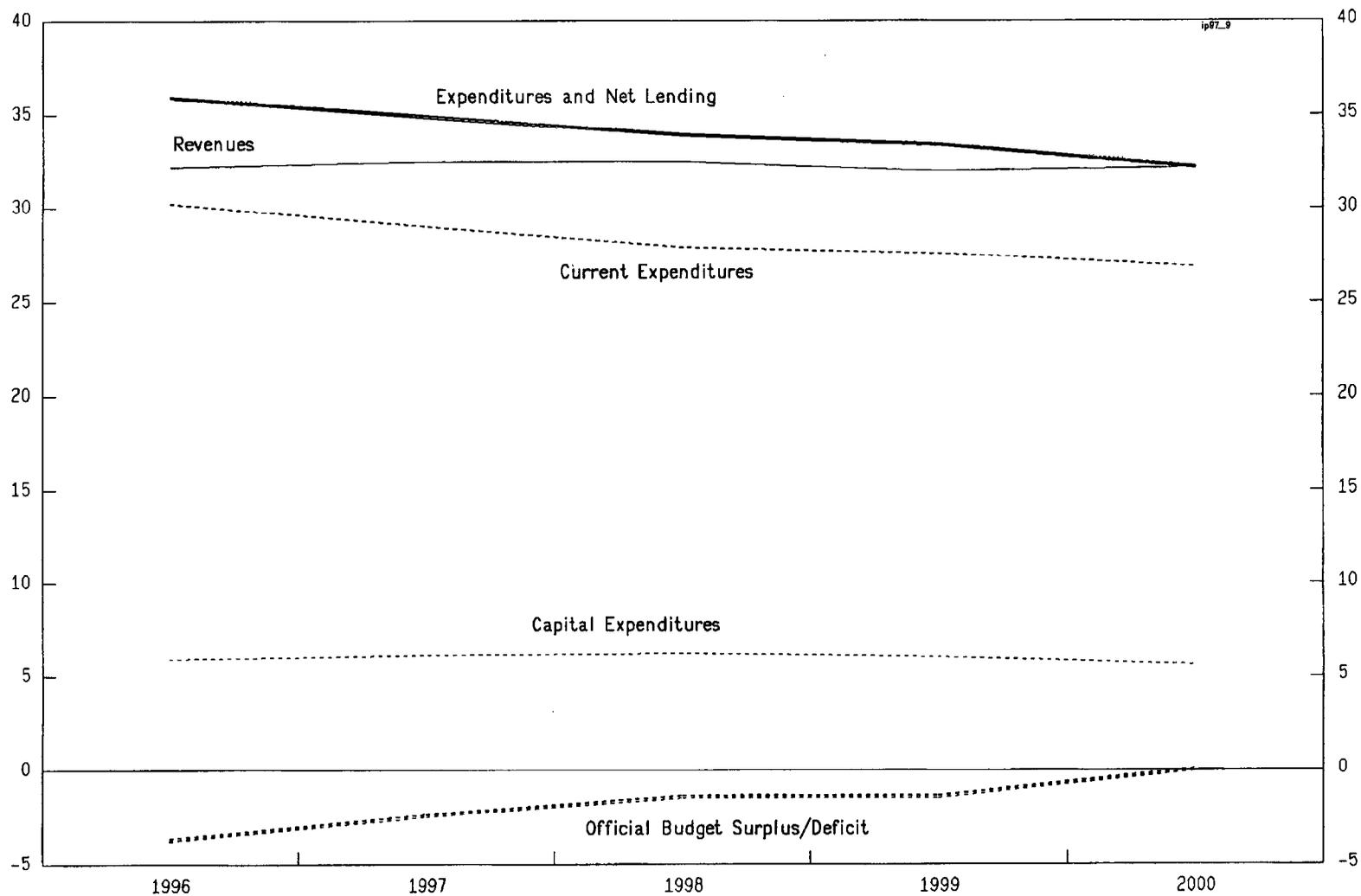
Sources: Data provided by the Omani authorities; and Fund staff estimates.

reduced by about 9 percentage points in relation to GDP, with reductions being equally distributed among civil expenditures, defense expenditures, and operations of Petroleum Development Oman (PDO). Key components of expenditure measures announced by the government include: an early retirement of about 20 percent of civil servants over 1996–98; the introduction of a new expenditure authorization process which replaced the previous system of continuous authorizations by a single annual authorization of additional expenditures in the form a special Royal Decree, which should lead to a much more intensive scrutiny of each additional expenditure authorization request; cuts in capital expenditures by about 3 percent of GDP; also, a modest non-oil revenue effort is planned, which (net of the expected revenues from the sale of gas) is foreseen to amount to 0.5 percent of GDP. In addition, the plan foresees the replacement of government-provided services by specific allowances and privatization of a number of government-owned enterprises. Acknowledging the special significance of education and development of technical skills for Omani nationals, expenditures on vocational training have been substantially increased in the FFYP.

86.   Oman's fiscal adjustment plan, if implemented successfully, would not only enhance the sustainability of fiscal policy by building up the reserve fund, but could also help to invigorate the private sector by enhancing private sector confidence in the economy and increasing its self-momentum. In order to assess the appropriateness of the government's fiscal consolidation plan under the FFYP, we compare the Plan with the fiscal adjustment experience of Indonesia, another oil-exporting country which successfully implemented a fiscal consolidation plan in late 1980s (Chart 13). Recognizing the volatility of oil revenues, Indonesia's fiscal adjustment consisted of two main elements: (i) the increase of domestic tax revenues, in particular through a value-added tax; and (ii) the reduction of current expenditures. Tax revenues were increased by more than 5 percentage points to about 11 percent of GDP during FY 1980 to FY 1993. Current expenditures (excluding interest payments on external debt) were reduced over the same period by about 4 percentage points to 7.7 percent of GDP, primarily through freezing of wages and reduction of subsidies. Expenditures on education and health were not reduced, while capital expenditures were increased by 3 percentage points to 10 percent of GDP.

87.   Oman's fiscal adjustment plan—like that of Indonesia—concentrates on a sizable reduction of current expenditures as a percentage of GDP. The main difference of the Indonesian adjustment strategy compared to Oman's is the development of non-oil revenues through the introduction of a broad-based consumption tax. Efforts to protect capital outlays and current expenditures in health and education in both cases seem particularly conducive to promoting growth. The Indonesian experience also highlights that Oman's fiscal adjustment strategy may benefit from a proper mix of expenditure cuts and non-oil revenue mobilization. Although the need for non-oil revenue mobilization is not as pressing for Oman as it was in the case of Indonesia, establishing a broad-based tax system (initially at relatively low rates) would prepare Oman for the post-oil period and would permit to increase and sustain capital expenditures at a desirable level. A reduction of current expenditures beyond the level planned by the Government also seems advisable in the case of Oman. A reduction in such outlays would seem appropriate because, at 36 percent of GDP (1995) these outlays are among the

CHART 13
INDONESIA

FISCAL INDICATORS

(In percent of GDP)

Total Revenue and Grants

Development
Expenditures

Current Expenditures

Non-Oil Taxes 1/

Overall Balance

ip97_8
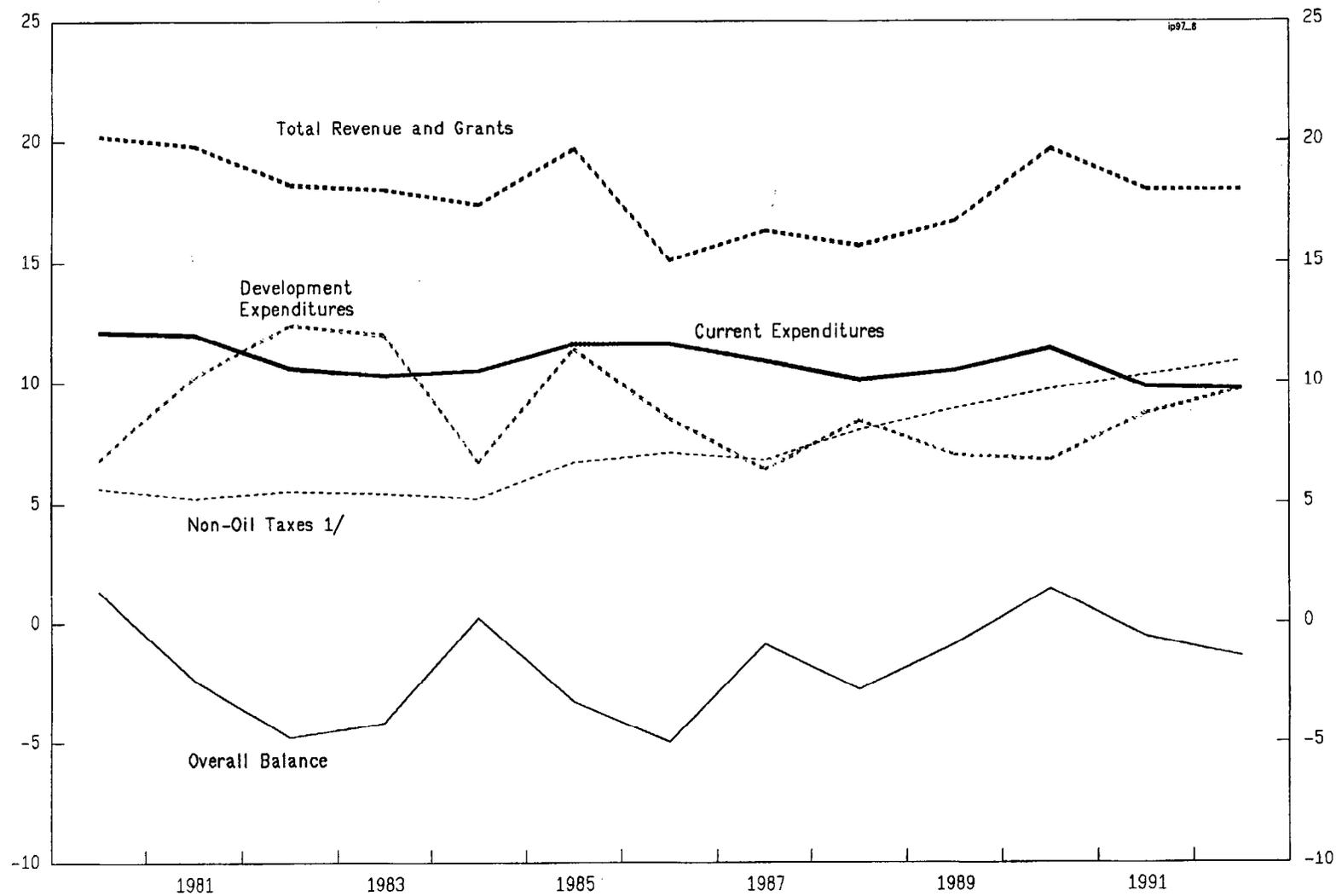
Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Includes revenue from gas.

highest in the world. It could be achieved through a further reduction of transfers and subsidies, the level and range of services provided by the public sector, as well as other unproductive outlays.

F. Conclusions

88.   The empirical analysis in this paper demonstrates that Oman's fiscal policy can be divided based on fiscal impulse analysis into an expansionary period covering 1981–86, a contractionary period covering 1987–91, and a period of mixed policies during 1992–95. Econometric analysis provides evidence for the close link between the fiscal policy impulse and the growth of non-oil real GDP, but also shows that the importance of this impulse seems to have declined in recent years. The sustainability of fiscal policy is assessed based on a number of indicators, including the primary deficit, the level of debt, real interest rates, and the long-term development objectives of the Omani economy which necessitates the establishment of a respectable level of the SGRF assets. Following a determination that the current stance of fiscal policy is not sustainable, the paper assesses the fiscal adjustment program under the FFYP and concludes that the objectives of this plan would be in line with the achievement of a sustainable fiscal position. Based on the adjustment experience in other countries (including Indonesia), however, it appears that sustainability of both the government's fiscal adjustment plan and Oman's growth prospects could be enhanced by ensuring a proper balance between non-oil revenue and expenditure cuts; such a balance would entail more pronounced efforts to increase non-oil revenues and sharper cuts in current expenditures, so as to allow for an increase of capital expenditures.

Fiscal Impulse Analysis

Fiscal impulse analysis is a tool to identify expansionary and contractionary periods of fiscal policy by comparing the current deficit to a hypothetical deficit that would have materialized, if fiscal policy was neutral.[22] The hypothetical deficit is based on the assumption that expenditures are unit-elastic with respect to the **potential** growth rate of nominal GDP, while revenues are unit-elastic with respect to the **actual** growth rate of nominal GDP.

In order to calculate the stance of fiscal policy in a given year, the **cyclically neutral deficit** (Bn) is calculated by subtracting from the base year ratio of revenues to GDP multiplied by the actual nominal GDP in the current year, the base year ratio of expenditures to GDP multiplied by potential GDP in the current year.

(1) $B^n = (t^oY^P - g^oY^P) - [t^o(Y^P - Y)]$,

where: T = Government Revenues
G = Government Expenditures
$t^o = T^o/Y^o$, the revenue ratio in the base period
$g^o = G^o/Y^o$, a base-year expenditure ratio
Y = actual output in nominal prices
Y^P = potential output in nominal prices

Based on B^n, the actual deficit in a given year can be described as either expansionary or contractionary, depending on whether it exceeds or falls short of the cyclically neutral budget B^n. The fiscal stance is defined as the difference between the cyclically neutral budget deficit B^n and the actual deficit B.

(2)   fis = $B^n - B$, where fis is the **fiscal stance**.

The first difference of the fis describes the nature of the **fiscal impulse**.

Another concept that is a useful tool for analyzing the fiscal stance is the **structural budget deficit**. Conceptually it is the deficit that would have materialized, if the economy was moving "along its normal trend", i.e., if the economy was neither in recessions nor booms. An appropriate choice of the base year is critically important for measuring the structural balance correctly. The structural deficit (B^s) is calculated by subtracting from the base year deficit the fiscal stance variable (fis).

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[22] For a comprehensive review of fiscal impulse analysis, see Peter Heller, Richard Hass, and Ahsan Mansur (1986).

(3) $B^s = B^o - fis$.

If the stance of fiscal policy was expansionary (fis <0) and the budget was in deficit in the base year (Bo<0), the structural balance would be higher than the base year balance.

The calculation of B^n requires the definition of two basic variables, (i) the growth rate of potential output and (ii) the base year. There are different methods for calculating the potential output.[23] In this paper, the potential output growth rate for Oman has been defined as the average growth rate over the period 1981–95. The basic criterion for choosing a base year is that potential and actual output do not diverge substantially. Moreover, given the importance of the oil price for Oman's economy, the base year should not exhibit extreme oil prices.

Based on these two criteria, over the period 1981 to 1995 two base years have been distinguished, 1983 and 1991. 1983 is the benchmark for assessing fiscal performance during 1981–86 prior to the collapse of the oil price, while 1991 is the base year for the subsequent period 1987–95. In those two years, the potential output exhibited a relatively small deviation from actual output. Also, the oil price is close to the average over the period in question.[24] In calculating the structural deficit, the same two base years (1983 and 1991) were assumed as in the calculation of the cyclically neutral budget.

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[23] See Heller, Haas and Mansur, (op cit) for a review of different methodologies for defining potential output.

[24]Using the two criteria in a rigid fashion would have led to the choice of 1992 as base year for the second period, as the deviation of potential from actual output was the smallest in that year, and the oil price is close to the average over 1987-95. The reason for not selecting 1992 as the base year is that in that year expenditures were very high, primarily because in the aftermath of the Gulf war defense expenditures reached a very high level. Under these circumstances, the choice of 1992 as a base year would have led to a conclusion that in other year's fiscal policy was contractionary. The considerations for not choosing 1992 highlight that judgment needs to be applied in identifying a suitable base year for fiscal impulse analysis.

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V. FINANCIAL INTERMEDIATION AND THE EVOLVING ROLE OF THE CENTRAL BANK[25]

A. Introduction

89.   The macroeconomic challenge facing Oman requires an efficient mobilization of savings and optimal intermediation to ensure that the mobilized resources are deployed to maximize overall real output of the economy. This requires an appropriately functioning institutional framework, diversified instruments for savings mobilization and intermediation, results-oriented and efficient regulatory and supervisory framework, a nondiscriminatory tax environment, and a well-functioning capital market to channel available resources into productive activities.

90.   This chapter reviews developments and analyzes the current status of the institutional and regulatory framework, as background to assessing prospects for use of indirect instruments of monetary policy and achieving an optimal environment for the needed financial intermediation over the medium term. In particular, it examines the nature and degree of financial deepening and intermediation that have been attained, and reviews the role of the Central Bank of Oman (CBO) in this process. The paper concludes that considerable transformation, including deepening and improved regulatory reforms, of the financial system has occurred over the past two and half decades. Nonetheless, to attain the objectives outlined above, there is need for: (1) reinforcing the existing institutional environment and widening the available instruments, in order to facilitate savings mobilization; (2) developing further the intermediation process for translating savings into domestic investment; and (3) completing recent interest liberalization initiatives, in order to induce both domestic savings and foreign capital inflows and to achieve optimal, market-oriented allocation of resources.

B. The Institutional Framework

91.   Oman's financial system has undergone considerable transformation over the last two and half decades. Since the promulgation of the banking law in 1974, the institutional framework of the financial system has widened and the Central Bank of Oman's regulatory and supervisory powers deepened.[26] This section reviews the structure and recent changes in the financial framework.

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[25]Prepared by Emmanuel K. Martey.

[26]The Central Bank of Oman was established by Royal Decree in December 1974, and replaced the Oman Currency Board effective April 1975.

Structure of the financial system

92.   Institutionally, the expansion of the banking system has been marked, although the authorities have since 1981 placed a moratorium on the licencing of new banks. During 1973–96, the number of local banks increased from two (with 65 operating offices) to seven (with 252 operating offices). Simultaneously, the number of foreign banks rose from five (with 24 operating offices) to 11 (with 32 operating offices).

93.   Currently, Oman has 18 commercial banks (7 of which are locally incorporated), 3 specialized institutions—the Oman Housing Bank (OHB), the Oman Development Bank (ODB), and the Oman Bank for Agriculture and Fisheries (OBAF)—a number of insurance companies and pension funds, 5 investment banks, 4 hire-purchase and leasing companies, 55 money changers, and a securities market. The OHB (100 percent Omani-owned) provides financing mainly to low- and middle-income Omanis to build or purchase residential property. Besides its own capital, the OHB has also received loans from the government, deposits of individual borrowers and insurance companies, and short- and medium-term borrowing. ODB finances mostly private sector industrial projects through medium- and long-term loans and equity participation. The OBAF (government-owned) extends short- and long-term loans to individuals for farming and fishing activities. The number of money changers increased markedly from 5 during 1975–80 to 55 by end 1994, of which 9 were licensed by the Central Bank to engage in both money changing and issuance of demand deposits. A deposit insurance scheme exists for the commercial banking system.

Sufficiency and shortcomings in the financial market structure

In types of institutions

94.   The institutional structure of Oman's financial system has not changed substantially since the late 1980s. Besides three mergers of six commercial banks during 1993–94, a main significant change was a government recapitalization of a local commercial bank (the National Bank of Oman, NBO) following the BCCI collapse in July 1991. The BCCI had 41 percent share of the NBO. The government subsequently sold its 20 percent share in the NBO. The most recent addition to the financial system is the Oman Orix Leasing Co. SAOG which was licensed in 1994 to provide leasing finance. There has been a moratorium on licensing of new banks since 1981. In the event, there is room for liberalization of entry of institutions, in order to improve the capitalization, enhance competition among the institutions, and encourage innovative instruments and processes for savings mobilization. The essential criteria should be the quality and diversity, rather than the number of institutions.

In financial markets and instruments

95.   The CBO has been issuing treasury bills at bi-weekly auctions since 1987; these bills have been purchased mainly by local commercial banks and constituted the principal instruments for liquidity management by banks. Currently, there exist bonds of five different

maturities—2 years, 3 years, 4 years, 5 years and 7 years—with coupon rates ranging from 7.50 percent to 8.5 percent per annum. The issue of government bonds began in 1991, and has been directed at both the local market and foreign residents. Substantial amounts of these bonds are held by pension funds. Although the bonds are traded on the local securities market, the interest rates on these bonds are initially administratively determined by the issuing committee at the CBO. There is no secondary market for the treasury bills, but the Central Bank stands ready to rediscount them.

96.   In May 1994, the Central Bank issued a regulation governing investment banking activities in Oman: the CBO also permitted commercial banks to issue negotiable certificates of deposits, and raised the maximum limit on investment in Government Development Bonds by licensed banks to 30 percent of the banks net worth to increase opportunities for banks to invest their surplus funds; this limit was lowered to 20 percent in September 1995. The Muscat Securities Market was established in 1989 and by 1995 its market capitalization has increased to US$3,900 million (25 percent of GDP).

97.   Oman's financial system still lacks depth in several areas. To diversify financial assets, mutual funds could be more forcefully promoted; bearer bonds with simplified procedures for liquidation could be encouraged; certificates of deposits could be more tailored to local needs to elicit greater public interest; and treasury bills with maturities besides 90-days could be considered. The potential for easy asset liquidation that would be provided by the existence of secondary markets for these instruments is imperative for their success in savings mobilization. Moreover, although the authorities deregulated interest rates on lending in June 1994, they simultaneously placed a quantitative ceiling on consumer loans equivalent to 25 percent of a bank's private sector credit. A fully liberalized interest rate system is also essential for success. Furthermore, increasing the role of the private sector, particularly Omanis, in the economy over the medium term, as envisaged by the authorities will, likely, require a larger role for the nonbank financial intermediaries with respect to activities not suited to commercial banks' portfolio. However, as indicated below, the capital base of the nonbank financial intermediaries is relatively low. This calls for raising the capitalization and strengthening the efficiency of operations of these institutions.

C. Monetary Developments and Framework
for Financial Intermediation

Monetary and credit developments

98.   Overall monetary and credit developments over the 25 years to 1995 reflected primarily the pace of monetization of the economy and the growing demand for credit by the private sector in line with the expanding domestic private sector activity. The public sector had minimal impact on the monetary process since the operations of the government and public enterprises were primarily funded by their own resources and transfers from the government. More important, because the government maintained and managed its own

foreign assets, independent of the central bank, only a small portion of its foreign assets impinged on the foreign assets position of the banking system.

99.   During 1972–95, broad money grew at an annual average rate of 17 percent, initially largely due to the accelerated pace of monetization of the economy; it expanded most rapidly—at an annual average rate of nearly 28 percent—during the 13 years ended in 1985 (Chart 14). As the monetization process ebbed by the mid-1980s, the growth rate of broad money decelerated markedly; in the period 1986–95, it grew at an annual average rate of only 5 percent, below the rate of growth of nominal GDP. Private sector credit dominated credit developments, as the government persistently maintained large net creditor position with the banking system. During 1972–95 credit to the private sector grew at an annual average rate of 32 percent and exhibited a similar pattern as the expansion of broad money; it increased at an annual average rate of 54 percent on its own base during 1973–85 and at an average rate of 7 percent during 1986–95. Although the government persistently maintained a net creditor position during 1979–95, reaching a peak of RO 327 million in December 1991, this position fell rapidly during 1993–95. The government borrowed from the banking system through the issue of treasury bills and development bonds.

100.   Besides their domestic financial intermediation role, the commercial banks resorted—during the second half of the 1970s and, more recently, 1995–96—to external resources to finance some domestic lending operations while maintaining foreign assets in excess of foreign liabilities. In general, given Oman's open exchange and payments system and fixed exchange rate regime, the central bank stood ready to provide foreign exchange resources to the commercial banks and variations in the foreign assets of the monetary authorities reflected to a great extent the relative demand pressures in the economy.

Financial deepening

101.   The financial system that evolved over the past two decades was associated with important developments in financial intermediation and in the mix of private sector holdings of financial assets. Moreover, the degree of private sector search for protection in holding foreign currency-denominated assets diminished. The nature of financial deepening that evolved can be summarized as follows.

102.   Over the period 1972–95 some primary trends in financial deepening that emerged early in the period persisted, irrespective of the cycles in real GDP growth noted in Section II of this document. In particular, the relative importance of currency declined and use of the banking system heightened within an institutional framework of fewer commercial banks (from 22 in 1983 to 18 in 1996) and increased number of nonbank financial intermediaries (Appendix I). In this context, the principal monetary developments included:

- A steady fall in the ratio of currency outside banks to GDP from 8.7 percent in 1972 to 4.5 percent in 1995, reflecting a progressive use of banking system facilities as commercial bank branches more than tripled to 284 during 1973–95 and confidence in

CHART 14
OMAN
MONETARY INDICATORS, 1972-95
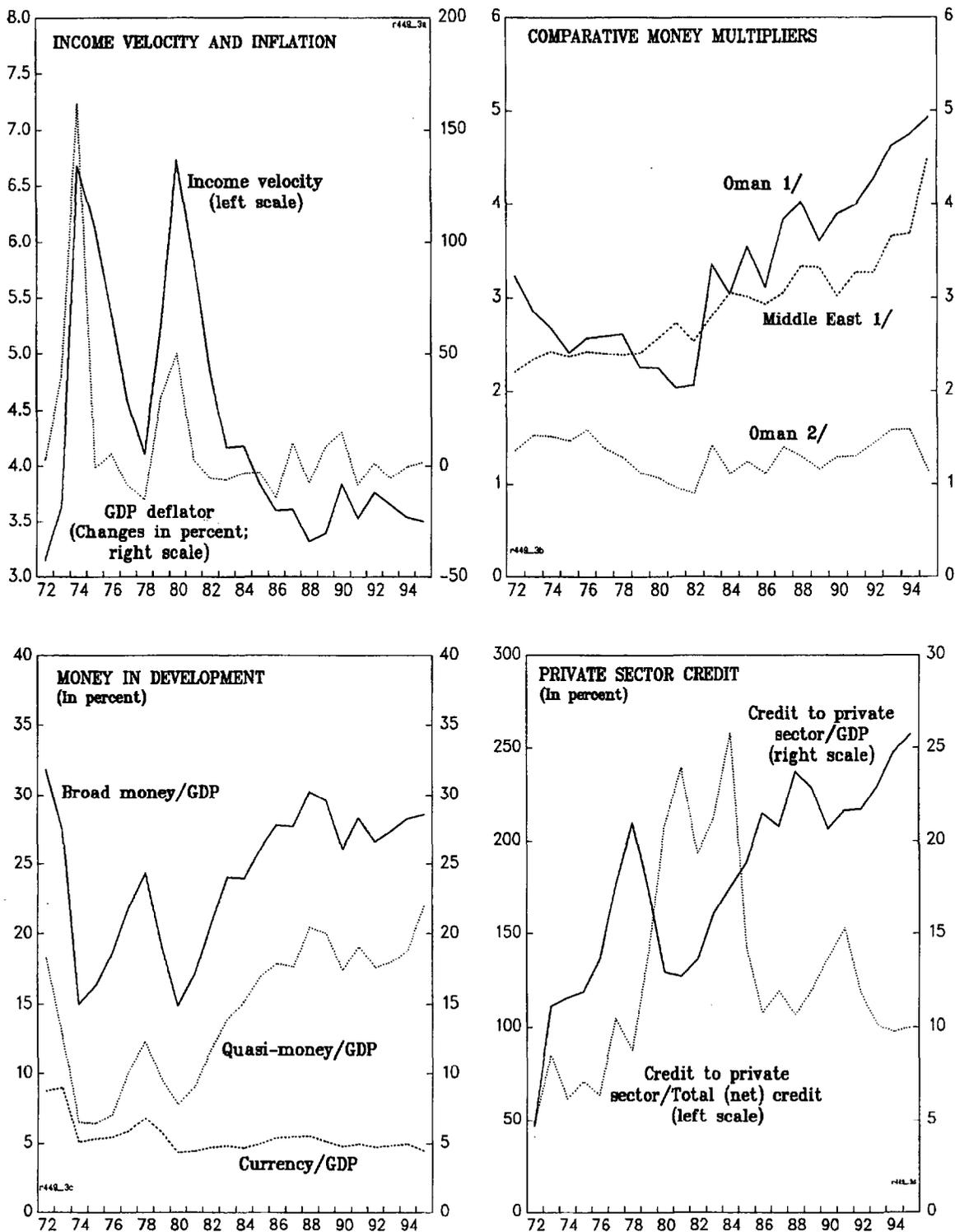
Sources: Data provided by the Omani authorities; and IMF, International Financial Statistics.

1/ Defined in terms of broad money.
2/ Defined in terms of narrow money.

the banking system solidified. In particular, the ratio of currency to non-oil GDP fell from 11 percent in 1980 to 7.3 percent in 1995. The ratio fluctuated significantly, but remained on a downward trend, during the 1970s when crude oil export receipts recorded dramatic increases. A mirror image of the overall declining trend in the currency ratio was the marked increase in bank deposits; the ratio of private sector bank deposits to GDP rose from 9.9 percent in 1974 to 24.1 percent in 1995.

- Although the money multiplier (with respect to broad money) fell steadily from 1972 through 1982, the subsequent financial deepening was reflected in a persistent rising multiplier from 2.2 in 1982 to 4.9 in 1995 as the expansion in quasi-money accelerated the growth in broad money, while the deceleration in growth of currency in circulation tempered the rate of growth in reserve money. This development was broadly in line with developments in other Middle Eastern (Chart 14)[27] and other non-Middle Eastern oil producing countries.

- Cash, however, remained a virtual perfect substitute for demand deposits (on which no interest was paid). After falling steadily during 1972–75, the ratio of currency outside banks to demand deposits with commercial banks remained at around unity during 1975–95; except for 1979–80 when the upsurge of world oil prices appeared to have created a temporary currency glut (Table 15).

- An additional evidence of financial deepening was a virtual steady fall in the ratio of currency to broad money from 35 percent in 1973 (an average of 30 percent during 1972–80) to 15.6 percent in 1995 (an average of nearly 17 percent during 1994–95). In the event, the ratio of private sector deposits in commercial banks to GDP rose from an average of 14.8 percent during 1972–80 to an average of 24 percent in 1994–95. The increasing deposits with the banks were in the form of quasi-money.

103.   The financial deepening was reinforced beginning in 1975 by the creation and expansion of nonbank financial intermediaries, including expansion in the number of money exchange companies, to the creation of several specialized financial institutions, and the establishment of the Muscat Securities Market (MSM). The activities of money changers were brought under central bank supervision in November 1983.

104.   The above developments, though commendable, has not fully satisfied the need for a greater range of savings instruments, with positive real rates of return, in order to stimulate private sector financial savings to levels that would be required to generate significant growth of real per capita income. Moreover, to complement the activities of the MSM in the area of financial intermediation, investment banking needs, to be more aggressively encouraged.

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[27]For this purpose, Middle Eastern is defined as comprising Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Lebanon, Libya, Oman, Qatar, Saudi Arabia, Syria Arab Republic, and United Arab Emirates.

Table 15. Oman: Financial Deepening Indicators, 1972-95
(Period averages; in percent)

	1972-80	1981-85	1986-89	1990-93	1994-95
Currency outside banks/ Broad money	30.2	21.6	18.6	17.8	16.6
Currency outside banks/ Bank deposits	1.36	1.10	1.19	1.13	1.05
Private sector bank deposits/ GDP	14.8	17.6	23.5	22.3	23.7
Quasi-money/ GDP	11.3	13.3	19.0	18.0	19.2

Sources: Data provided by the Omani authorities; and Fund staff estimates.

Savings mobilization

105.   The decade and half through 1995 witnessed a significant increase in financial saving in the banking system, but the levels could have been higher. To some extent, the level of private financial savings that was achieved entailed considerable substitution from currency rather than global expansion. Some key elements in the process were as follows:

106.   During the 16 years ended in 1989, the rate of growth in quasi-money (including foreign currency deposits) out paced the rate of expansion of the economy, such that the ratio of quasi-money to GDP more than doubled, averaging 19 percent during 1986–89 compared with an average of 11 percent during 1972–80 (Table 15 and Chart 14). Subsequently, however, this ratio flattened out at around 20 percent of GDP over the decade ended in 1995. In effect, the private financial saving rate in the banking system, measured as the ratio of quasi-money to GDP, hardly changed on average during the decade ended in 1995.

107.   The private, nonbank sector, foreign currency deposits with the commercial banks became increasingly less vital to the banks' lending operations, as increased confidence in domestic assets led to a substitution of foreign currency deposits for rial Omani time and saving deposits. The ratio of foreign currency deposits (excluding interbank deposits) to total deposits of banks fell from 29.4 percent in 1975 to only 1 percent in 1995. Simultaneously, however, the ratio of the banks' foreign currency assets to their foreign currency liabilities rose from 40.2 percent in 1975 to 252 percent in 1995, as the banks' foreign assets position improved and their foreign liabilities declined.

108.   Although financial mobilization was further strengthened with the establishment of the MSM in 1989, the legal constraints on foreign ownership of Omani assets and discriminatory tax provisions limited the realization of potential private capital inflows. Subsequently, a removal of restrictions to GCC investment in Oman in 1992 contributed importantly to the increase in capitalization of the MSM from 12 percent of GDP in 1990 to 25 percent in 1995. However, an issue that requires redressing has been the persistent minimal foreign participation in the ownership of the MSM assets; foreign ownership, mostly by GCC nationals, amounted to only 10.3 percent of MSM market capitalization in 1996.

Banking intermediation

109.   Over the period 1974–95 as a whole, the commercial banks fully intermediated local resources. During 1974–80, the commercial banks relied to some extent on external resources to complement domestic deposits to meet their local lending operations; the ratio of bank advances to deposits ranged between 86 percent and 217 percent, and averaged 108 percent for the period 1972–80 (Table 16). However, following with the oil price peak of 1981, the banks began to practically rely on local deposits to meet their lending operations; the ratio of advances to deposits remained around unity during 1986–95.

Table 16. Oman: Selected Commercial Banking Indicators, 1972-95

(Ratios; in percent)

	1972-80	1981-85	1986-89	1990-93	1994-95
Total advances/Total deposits	108.0	76.5	91.4	97.1	102.1
Foreign assets/ Foreign liabilities	142.9	263.5	227.4	503.7	293.4
Private sector credit / Total credit (gross)	72.6	97.7	94.2	88.9	93.2
Foreign currency assets/ Foreign currency liabilities 1/	125.9	261.6	99.3	716.0	236.8
Foreign currency deposits/ Total deposits 1/	13.1	6.1	2.5	1.0	0.8

Sources: IMF, International Financial Statistics; and Fund staff estimates.

1/ 1975-80.

110. Moreover, with increased confidence in the domestic economy, the commercial banks strengthened markedly their foreign assets position. The ratio of the banks' foreign assets to foreign liabilities rose sharply from 32 percent in 1978 to 671 percent in 1991, before falling to 237 percent in 1995.

111. Notwithstanding the virtual steady increase in the ratio of private sector credit to GDP, the ratio of commercial banks advances to deposits remained in excess of 90 percent, except for two years (1982–83) over the period 1974–95. Moreover, as the government persistently maintained a net creditor position with the commercial banks, the intermediation was primarily in favor of the private sector. The increased resources of the commercial banks were employed largely to meet the credit needs of the private sector. The ratio of credit to the private sector to total domestic credit (net of government deposits) exceeded 100 percent over the period 1979–95 (Table 16 and Chart 14). Credit to the private sector ranged on average between 73 percent and 98 percent of gross bank credit. Credit to public enterprises was generally marginal.

112. After 1980 when domestic resources fully funded the banks' domestic lending operations, the spread between domestic (rial Omani) loan and deposit interest rates remained virtually constant. During 1984–90, the interest spread remained at about 1.4 percentage points. With a slight increase in the loan-deposit ratio after 1990, the impact of interest rates of foreign funds begun to be felt. As such the interest spread rose to over 5 percentage points by 1994, as deposit rates fell more rapidly than lending rates (Table 17). The spread between the rial Omani time deposit rate and the LIBOR (six-month) deposit rate even turned negative during 1994–95, as the LIBOR rate rose but Omani deposit rates were repressed by official regulations.[28] This contributed to currency substitution in favor of foreign currency time deposits with the commercial banks. Even currency outside banks fell.

113. The distortionary spreads in interest rates may be analyzed as follows. During 1994–96, as government bond yields rose, the diversion of resources to the bond market tightened the availability of local resources, raised the cost of borrowing locally in rial Omani, and narrowed the spread between the rial Omani lending rate and the six-month LIBOR prime rate. Meanwhile, as the local market was not sufficiently competitive, the rial Omani deposit rate did not rise pari pasu, and hence the spread between the rial Omani lending and rial Omani deposit rates widened. Moreover, as the LIBOR time deposit rate improved, the spread between the rial Omani and LIBOR time deposit rates narrowed and even turned negative during 1994–95.

114. In summary, the government's maintenance of a net creditor position with the banking system enabled the private sector to fully utilize the resources of the commercial banks. The distortionary interest spreads of recent years had the following implications: as LIBOR

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[28]Deposit rates were subsequently liberalized in late 1994 and the interest spread became positive again only beginning in the third quarter of 1995.

Table 17. Oman: Interest Rate Spreads, 1991—96

(In percentage points)

	Rial Omani Lending/ LIBOR	Rial Omani Lending/ Deposit	Rial Omani Time Deposit/ LIBOR	Rial Omani Time Deposits/ Total Deposit
1991				
Q1	2.720	4.190	0.991	2.461
Q2	3.304	4.380	1.245	2.321
Q3	3.466	4.358	1.257	2.149
Q4	4.465	4.554	2.025	2.114
1992				
Q1	5.003	4.919	2.026	1.942
Q2	5.199	4.978	2.196	1.975
Q3	6.068	5.134	2.955	2.021
Q4	5.848	5.030	2.899	2.081
1993				
Q1	5.524	4.928	2.442	1.846
Q2	5.689	5.393	2.035	1.739
Q3	5.689	5.832	1.338	1.481
Q4	4.968	5.542	0.646	1.220
1994				
Q1	4.380	5.444	−0.086	0.978
Q2	3.737	5.972	−1.229	1.006
Q3	2.889	5.555	−1.770	0.896
Q4	2.246	5.595	−1.985	1.364
1995				
Q1	2.850	5.993	−1.124	2.019
Q2	2.909	5.288	−0.333	2.046
Q3	3.342	5.357	0.284	2.299
Q4	3.626	5.419	0.782	2.575
1996				
Q1	4.012	5.650	0.868	2.506
Q2	3.615	5.660	0.602	2.647

Sources: Data provided by the Omani authorities; and IMF, International Financial Statistics

deposit rates exceeded Omani deposit rates during 1994-94, this created a disincentive for saving locally and constrained the potential resource base of the banks. Simultaneously, lending rates rose vis-à-vis the LIBOR, creating an incentive for banks to borrow abroad to lend in Oman. As such, the foreign liabilities of the commercial banks rose markedly in 1996. For more on interest rate developments and the scope of monetary policy in Oman, see Section VI.

D. Central Bank's Role in Financial Sector Development and Intermediation

115.   Viewed within the context of a small open economy with fixed exchange rate and a liberal trade and payments system, the role of the central bank is limited with respect to the impact of monetary policy but not with respect to savings mobilization apart from the fact that it cannot freely use the interest rate policy to raise savings. With respect to the latter, the central bank's efforts in the areas of institution building, effective legal and regulatory initiatives, and appropriately designed indirect instruments of monetary policy can stimulate both domestic savings and foreign capital inflows and facilitate needed intermediation into productive investments. This section examines the CBO's efforts so far in the above areas and indicates the necessary directions for the period ahead.

Institutional framework

116.   The CBO's initiatives in financial deepening and the intermediation process included restructuring of financial institutions and emphasizing prudential supervision and regulatory system reforms within the framework of major policy areas of government.[29] Thus, institutionally, the authorities were reticent to permit new banks to be established in the country and have emphasized deepening of banking activities by the existing banks. Accordingly, the CBO's licencing policy for new branches of commercial banks distinguishes between the capital city and the rest of the country. The policy is restrictive for branching in the capital city, less restrictive in the capital governorate, and permissive elsewhere.

117.   As a mitigator to the restriction on foreign entry, a Royal Decree was issued in August 1994, as an amendment to the Commercial Companies Law, permitting the issue of "transferable bonds" that may be transferred to shares, or retained. It also permitted joint stock companies to be established on the basis of approvals by the Director General of the Ministry of Commerce and Industry, rather than the Minister of Commerce and Industry.

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[29]For example, until late 1996 the Foreign Capital Investment Law limited non-Omani investment in Omani companies with capital of less than US$390,000 to 49 percent of total capital, but the percentage could be raised to 69 percent by a decision of the Ministry of Commerce and Industry, or to 100 percent on approval of the Development Council.

Interest rate environment

118. Until 1993, the Central Bank had enforced interest rate ceilings on commercial bank rial Omani deposits and loans. In October 1993, the Central Bank eliminated the ceiling on time and savings deposit rates and lowered the loan rate ceiling to 10.75 percent from 11.25 percent; interest rates are not paid on current account deposits. In June 1994, lending rates were deregulated, except for rates on consumer loans in amounts of RO 9,000 or less; a ceiling of 12 percent applied to consumer loans with maturities of up to one year, and a rate of 13 percent for maturities of two years or more.

Recent noteworthy problems of the financial system

Origin and magnitude

119. The collapse of the BCCI in July 1991 resulted in losses to domestic depositors of the local BCCI branch and to the National Bank of Oman (NBO) which had sizable deposits with the BCCI head office in London. In February 1992, the Central Bank took control of BCCI Oman, arranged for its sale, and provided support to enable BCCI Oman to fully reimburse all its depositors and creditors according to the amounts at the Bank's closure on July 5, 1991. The NBO was recapitalized and it became 100 percent Omani owned. However, in January 1994, the government sold its 19.72 percent share in NBO that it acquired at the time of the NBO recapitalization. There were no significant systemic effects.

Solutions and adaptation to financial problems

120. In the wake of the above developments, locally incorporated joint-venture banks were prohibited in April 1992 from maintaining foreign currency balances exceeding 20 percent of their net worth (excluding provisions) with either their principal shareholders or the shareholders' branches and affiliates abroad, or exceeding 60 percent of net worth for these three categories taken together, the 20 percent limit applies separately to each category. Moreover, in May 1992, the branches of foreign banks were subjected to the same limits regarding foreign currency balances with either their head office and own branches abroad, or head offices affiliates abroad. Previously, the aggregate limit had been 100 percent for both types of banks. Currently, the CBO does not permit banks to take foreign exchange positions in excess of 40 percent of capital and reserves (excluding provisions), in order to limit their foreign currency exposure.

Prudential regulation and supervision

121. The CBO's statutory requirements were periodically reviewed and updated in the light of changing circumstances. The most salient CBO initiatives for stability of the financial system relate to capital adequacy, reserve requirements, loan-deposit ratios, accounting standards, provisioning, and foreign currency exposure. The CBO also conducted on- and off-site inspections of banks and is currently developing a Bank Off-Site Surveillance (BOSS) unit

as an "early warning system" to monitor individual banks and the banking system as a whole for effective supervision.[30] Information on credit records compiled by the BOSS would also serve as an on-line credit information source for commercial banks.

122.   The CBO also exercised its legal powers to examine the accounts, records, and other affairs of any bank, and to take necessary actions.

Intermediation and nonbank financial intermediaries

123.   The nonbank financial intermediaries have also effected some intermediation in the economy. However, as of the latest dates for which data are available, the aggregate value of assets of these institutions, at RO 204 million, was equivalent to only 18 percent of commercial bank lending to the private sector at end-1995 (Appendix II). The operations of these institutions were as follows.

Nonbank financial intermediaries

124.   The **specialized banks**, though not subject to the controls specified in the Banking Law of 1974, have performed important functions with respect to financial intermediation. The Oman Housing Bank has a saving scheme that facilitates housing loans to depositors by the bank. The share ownership of the Oman Development Bank (40 percent by Government, 40 percent by foreign entities, and 20 percent by the local public) provides a venue for both local private and foreign resources to finance locally-incorporated enterprises.

125.   **Money exchange companies**, which generally engage in money exchange and issuance of drafts, are licenced by and registered with the CBO, which seeks to ensure, through regular examinations, that these institutions maintain proper records of their operations, comply with relevant regulations, and remain solvent.

126.   The **investment banking** operations of commercial banks are regulated and supervised by the CBO, which issued in 1989 the Investment Banking Regulation regarding the establishment of investment banking companies intending to engage in share holding business in the MSM. The MSM issues these institutions their operating licences, and also regulates other entities engaged in investment banking. The operations of hire-purchase, leasing, and other consumer durables finance companies are also regulated by the CBO.

127.   Based on a review of the operations of all financial institutions, the CBO has determined that the financial institutions were in need of larger capitalization. In particular, it

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[30]Until December 1995, the Fund provided technical assistance to Oman in the area of bank supervision. The assistance contributed to the establishment of the BOSS unit, intended to enable the CBO to monitor banks individually and the banking system as a whole for effective supervision.

became apparent that the relatively small capital base of the local commercial banks and nonbank financial intermediaries have weakened their competitive position relative to foreign banks, including in matters of local loan syndications. Besides risk-related capitalization, the authorities are now emphasizing the potential benefits associated with economies of scale that can be derived from improved capitalization of the banks, either directly or through mergers. The capitalization of nonbank financial intermediaries could also be improved, possibly through restructuring and privatization of the public entities. Finally, competitiveness could be enhanced by liberalization of entry into all areas of financial intermediation.

The Muscat securities market

128.   The Muscat Securities Market (MSM) was established in 1989, and has since made major strides in facilitating financial intermediation in Oman. The MSM's capitalization rose from US$1078 million (with no government bonds) in 1989 to US$3,893 million (of which US$978 million were government bonds) in September 1996 (Table 18). The number of share holders rose from 18,000 to 139,000 during this period, and the MSM price index increased by more than 85 percent. By September 1996 the volume of trading was more than twenty times the volume in 1989.

129.   The establishment of a central register in 1993, opening of the market to other GCC nationals for investment in Oman, and improved network information and computer systems for ready assess to prices and other activities relating to individual shares have all contributed to the upsurge in activity on the MSM. Moreover, operation of mutual funds in Oman started with the creation of the Orix Fund of 1994 and facilitated the inflow of some US$50 million foreign investment. The establishment of a "parallel" market permitted separate daily trading of shares of newly established "unregistered" companies; the volume of activity on this market rose from US$0.5 million in 1989 to US$93 million in 1995, when some 11,587 contracts were executed. In 1996, there was an upsurge in activity on the MSM, reflecting investors' anticipation of a new tax law that was to permit any company with 49 percent foreign ownership to be treated as an Omani company for tax purposes, provided 40 percent of the company's shares were listed on the MSM. The MSM has also established a reciprocal listing arrangement with the Bahrain stock exchange.

E.   Transition to Indirect Instruments of Monetary Policy

Existing instruments

130.   Oman's current instruments of monetary policy entail largely quantitative ceilings. These instruments include: (i) reserve requirements; (ii) loans-to-deposit ratios; (iii) rediscounting of treasury bills and commercial paper (exchange and promissory notes);

Table 18. Oman: Key Indicators of the Muscat Securities Market, 1989—96

(In millions of U.S. dollars, and in percent)

	1989	1990	1991	1992	1993	1994	1995	1996 1/
Market capitalization (US$'m)	1,078	1,369	1,639	2,016	2,349	3,019	3,420	3,893
of which: Government bonds	— —	— —	— —	— —	— —	827	981	978
Number of shareholders ('000)	18	...	58	59	63	110	128	139
Trading volume (US$'m)	25	...	122	153	112	328	284	506
Foreign ownership (in percent)	...	...	...	...	...	...	...	10.3
MSM price index (1989=100)	100	105.5	119.9	113.0	113.7	146.2	158.1	185.9
Value of issues in the primary market (US$'m)	74	55	130	416	403	543	439	291
of which: Government bonds	— —	— —	106	360	299	259	316	111
Market capitalization (as percent of GDP)	12	12	14	16	19	23	25	...

Memorandum items:
Market capitalization by sector
  (percent share) — 1996

Banks and investment companies	38
Bonds	25
Industry	23
Services	12
Insurance	2

Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ 1990.
2/ September.

(iv) currency swap (introduced in 1980); (v) ceiling on consumer credit not exceeding RO 9000; and (vi) interest rate ceiling on loans not exceeding RO 9,000.[31]

131.   A minimum reserve requirement of 5 percent on all non-interbank deposits has been in existence since 1978.[32] A loan-to-deposit ratio applicable to commercial banks has been set at 75 percent, net of discounted bills.[33] Under the swap facility, the central bank provides overnight and 3-month rial Omani facilities to the commercial banks for U.S. dollars. A quantitative ceiling was instituted in 1994, limiting consumer loans provided by banks to 25 percent of banks' private sector credit. In 1995 the central bank mandated that banks achieve a minimum risk-based capital to asset ratio of 12 percent by 1998, commencing with 9 percent by end-1995. Moreover, as discussed above, the operation of the government bond market has created a distortionary structure of interest rate spreads.

Prospects for transition to indirect instruments

132.   From the above review, the need for flexible instruments that promote competition and efficiency and encourage the functioning of appropriately risk-weighted interest rates in Oman is obvious. The authorities would need to move from the existing system of direct controls to more market-based and indirect instruments of monetary controls. This section assesses the adequacy of the existing financial infrastructure for supporting an effective use of indirect instruments of monetary policy.

133.   The evolution of Oman's institutional framework noted above indicates that its current institutional structure has set the stage for deriving optimal benefits from adoption of indirect instruments of monetary policy. In terms of the sequencing of the institutional structure, Oman's experience has largely followed the concept of three-stage reform (suggested in Sundararajan (1996)), entailing initially institutional reforms, followed by legal framework, and finally a move to indirect instruments of monetary policy.

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[31]Effective June 1994 all ceilings on lending rates, except those relating to consumer loans of up to RO 9,000 were abolished. Ceilings on rial Omani time and saving deposits and on foreign currency deposits were also removed.

[32]No liquidity ratio requirement is mandated.

[33]The credit concentration rule requires that direct and contingent credit to a single borrower not exceed 15 percent of a bank's net worth. This credit limit does not apply to loans secured by cash collateral, by collateral authorized by the CBO, or by guarantee from another bank or the government or its agencies. Insider lending to senior bank management is limited to 10 percent, individually and 35 percent in the aggregate.

134.   The period 1970s–80s witnessed the initiation of the legal framework and measures to establish a sound banking system. These entailed the promulgation of the Banking Law of 1974, delineation of size and procedures governing capitalization and licencing of commercial banks, and regulations governing loans, deposits, interest rates, and management of commercial banks. These were complemented by the introduction of new financial instruments—treasury bills in June 1987 and Government Development Bonds in August 1991—and the establishment of a stock exchange in 1989.

135.   Subsequently, the early 1990s witnessed improvements in the legal framework, entailing a well functioning prudential supervision arrangement, particularly following the BCCI crisis,[34] and implementation of initial steps in liberalizing domestic interest rates. A deposit insurance scheme was established in March 1995, providing protection on net deposits of up to RO 20,000 (US$52,016), or 75 percent for each depositor. Establishment of BOSS unit in 1995 to generate information for monitoring banks individually and the banking system as a whole for effective supervision. The reporting system covers all 18 commercial banks, grouped into three categories, depending on total assets, loans portfolio, and number of branches. On-site inspections and off-site supervision procedures also exist.

136.   From the above, it would appear that Oman's basic institutional legal and regulatory framework have prepared the ground for the third stage of financial reform, namely initiation of indirect instruments of monetary policy; the introduction of a deposit insurance scheme should serve to allay the fears of depositors regarding any adverse consequences of banking system contagion. However, the breadth of financial instruments would need to be widened further, bonds yields should be determined by market forces, secondary markets in government bonds should be encouraged, and other aspects (frequency, maturities, and the modalities) of government securities should be established, in order to lay a firm foundation for effective use of indirect instruments of monetary policy.

F. Challenges for the Medium Term

137.   The basic challenges confronting the financial system include: (1) reinforcing the existing institutional environment in order to facilitate savings mobilization; (2) developing further the intermediation process for efficiently translating both domestic and foreign savings into domestic investment; and (3) and delineating interest rate and other policies that effectively promote intermediation by equilibrating savings and investment.

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[34]As noted above, following the collapse of the BCCI in 1991, the central bank placed new limits on deposits that domestic banks could place with banks abroad. Institutionally, following the closing of the BCCI, the central bank took control of the BCCI Oman and arranged for its sale to a local bank, assisting in fully reimbursing deposits and creditors, and assisted in recapitalizing the NBO. The institutional and legal reforms set the basis for the ensuing regulatory reforms.

- **Savings mobilization**: This Section's review of the existing framework for savings mobilization indicates that the framework could be strengthened through widening the existing system and creating a more competitive environment to improve the efficiency of operations by: (1) encouraging consolidation of existing institutions to raise their capital base; (2) attracting foreign institutions with the latest technology for resource mobilization; (3) broadening the available instruments and portfolio mixes for savings mobilization; and (4) encouraging a competitive environment that provides the maximum yields on savings, but with minimum risks. The system of mutual funds, for example, is not sufficiently developed in Oman. Moreover, the maturity structure of government securities needs to be widened. Furthermore, an appropriate framework would also need to be developed to attract Omani private savings held abroad.

- **Financial intermediation**: The MSM currently provides an excellent venue for intermediation. The existence of a secondary market makes it possible for unregistered companies to mobilize resources through the MSM. An acceleration of the authorities' privatization program could enhance the intermediation role of the MSM. Moreover, the operations of the Development Bank and the Agricultural and Fisheries Bank could be improved and private participation enhanced to provide additional appropriate venues for financial intermediation.

- **Interest rate spreads and financial flows**: Given Oman's exchange rate and external payments system, a key role of the CBO resides in removing distortionary interest rate spreads that militate against savings mobilization and foreign capital inflows. In this connection, the operation of the government bond market, for example, has contributed to a widening spread in the rial Omani lending and deposit rates but narrowed the rial Omani deposit rate against LIBOR. This would tend to direct domestic savings to offshore centers and dampen demand for domestic resources for local productive activities. A restructured framework that aligns domestic interest rates to those in the major overseas centers, should facilitate appropriate financial intermediation and encourage private capital inflows.

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VI. THE SCOPE FOR MONETARY POLICY INDEPENDENCE IN OMAN[35]

A. Introduction

138.   As a part of its effort to facilitate diversification and enhance resource allocation, the Government of Oman has been reforming the financial sector to enhance its ability to efficiently contribute to meeting the objectives of diversification and higher growth. This desirable reform, however, has important implications for monetary policy, in particular with regard to the scope of its independence. This section aims at providing an empirical evidence on the degree of monetary independence in Oman during the past ten years, analyzing the factors that influenced the degree of this independence, and examining the scope for such independence at present and in the immediate future.

139.   While it is reasonable to expect the scope of monetary policy independence in Oman, with its open capital account system and its fixed exchange regime, to be rather limited, empirical evidence suggest that monetary policy had a significant, albeit varying, degree of independence in the last decade. The section argues that this was mainly due to regulatory and institutional factors which limited arbitrage. The evidence, however, indicates that the degree of monetary independence has become increasingly limited and this trend is expected to continue with the continuation of vital reforms and with the increased globalization of financial markets. This has important implications for the appropriate macroeconomic policy mix and highlights the need for increased reliance on fiscal restraint.

140.   Subsection B provides a conceptual background on the scope of monetary policy independence under a fixed exchange regime and an open capital account. Subsection C looks at certain financial sector developments and empirical evidence on the scope for monetary policy independence in Oman during the last 10 years and analyzes factors behind the varying degree of independence. Subsection D conducts formal econometric tests to confirm the conclusions of the empirical analysis of subsection C using cointegration regressions. Finally, the concluding section highlights the key empirical findings and the important policy implications.

B. A Conceptual Background and Methodology

141.   A priori, in a small open economy with a fixed exchange rate regime, such as that of Oman, the scope of monetary policy independence is generally limited. Any attempt by the government to influence monetary aggregates in a way that would result in a significant spread between the domestic interest rate and the interest rate on the peg currency, would lead to large capital flows that would neutralize the initial changes in monetary aggregates and

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[35]Prepared by Khaled Sakr.

bring the domestic interest rate back to parity.[36] Sterilizing such flows can be feasible only in the short run as it would eventually entice more capital flows unless economic fundamentals change. In such an environment, the burden of stabilization becomes, by and large, that of the fiscal policy which, deprived from any active collaboration from monetary policy, has to be restrained in order to maintain price stability and to support the exchange rate.

142.   In the short run, however, there can be a significant scope for monetary independence due to various reasons. One reason is that while monetary policy cannot determine money supply in an open economy under a fixed exchange rate regime, it can still influence the composition of money supply; e.g., determine the share of domestic credit vis-à-vis international reserves. If international money is not a perfect substitute for national money in the short run, then monetary policy will have some independence (Poniachek (1979)). More importantly, there are various factors that may reduce the efficiency of arbitrage in response to interest rates divergence. Such factors include delays in capital flows' response to interest differentials because of lack of information, institutional reasons, high transaction costs, or uncertainty regarding the feasibility of maintaining the peg in view of a deterioration in economic fundamentals. As a result, the government can exercise a reasonable degree of discretion over monetary policy in the short run.[37] This would, in the short run, enable the government to coordinate more actively between fiscal and monetary policies. For example, a larger than otherwise fiscal deficit can be supported by higher interest rates which will raise domestic financing and at the same time help control inflation. On the basis of the factors noted above, overwhelming inflows should not occur and therefore there would be no need for large-scale sterilization, no loss of reserves, and no increased foreign indebtedness.

143.   In investigating the case of Oman, subsection C below looks at the developments in the interest rate on Omani treasury bills vis-à-vis that on U.S. treasury bills. The existence of a significant interest rate spread is taken as an indicator of monetary independence. Developments in the domestic interest rate (and in the spread) are linked to overall fiscal developments, in particular the domestic financing needs of the budget. Factors permitting monetary independence and restricting arbitrage in the past are also investigated.

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[36]This scenario is compatible with the monetary approach to the balance of payments and originates in the Mundell-Fleming model which postulates that capital flows occur in response to differences between domestic and international interest rates (Mundell (1960 and 1963); and Fleming (1962)). A classical presentation of the Monetary Approach can be found in Johnson (1972) and Frankel and Johnson (1976).

[37]For recent empirical work supporting this conclusion see, for example, Laskar (1982) and Stockman (1992) who investigated this question in countries under the Bretton Woods system of fixed exchange rates; and Svensson (1992) who looked at European countries in the context of the European Monetary System. For a recent study on two Arab countries, see Koranchelian (1996).

C. An Empirical Investigation

144.   Looking at the case of Oman during the period 1987–96, one can distinguish between two main sub-periods: before and after the financial liberalization of October 1993. We shall focus in our analysis on the behavior of the spread between the interest rate on Omani and U.S. treasury bills and the factors behind that behavior. The two interest rates are plotted in the upper panel of Chart 15, and the spread between the two rates is plotted in the lower panel. It appears that until late 1993 the government was able to exercise a considerable degree of monetary independence as evidenced by the behavior of the interest rate on Omani treasury bills which, for most of the period, did not track that on U.S. treasury bills. There was a significant spread between the two rates and this spread changed from negative to positive during that period.

145.   A combination of two main factors were responsible for this interest rate divergence. First, interest rates in Oman were subject to various controls that hindered the free operation of the market. For example, interest rate ceilings were imposed on rial Omani deposits of the private sector as well as on commercial bank loans. These distortions affected the way the interest rate behaved so that it did not track the interest rate on the U.S. dollar. Second, there was apparently insufficient arbitrage to enforce interest rate parity and this was due to institutional, perceived exchange rate risk, and cost factors. For example, in March 1980 the Central Bank of Oman introduced a facility under which commercial banks could swap U.S. dollars at par for five days to three months.[38] This facility was intended to improve bank's ability to manage their own liquidity but in effect also encouraged arbitrage operations as it led to a gain (loss) whenever U.S. interest rates were lower (higher) than that on the rial Omani. In June–July 1986, however, the facility was modified so that arbitrage operations would carry a charge, and hence increased their cost. In addition, the modification made banks eligible for subsidies for losses arising form interest rate differential which also reduced the incentive for arbitrage.

146.   Furthermore, the ability of resident banks to arbitrage was also restricted by prudential regulations restricting lending and borrowing abroad. For example, effective March 1982, the net foreign exchange position of a resident bank could not exceed 40 percent of capital and reserves. At the same time, since November 1981, commercial banks were barred from both holding rial Omani deposits with, and advancing loans in, rials to nonresident banks and financial institutions. These restrictions, in effect, prevented arbitrage by nonresidents as they were not able to deal in Omani assets especially because both direct and portfolio foreign

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[38]Since December 1991, the facility entailed maturities ranging from overnight to three months at the discretion of banks. Individual banks are assigned an access limit based on their respective net worths.

CHART 15
OMAN
OMANI AND U.S. TREASURY BILL RATES, 1987-1996
JUNE 1987-NOVEMBER 1996
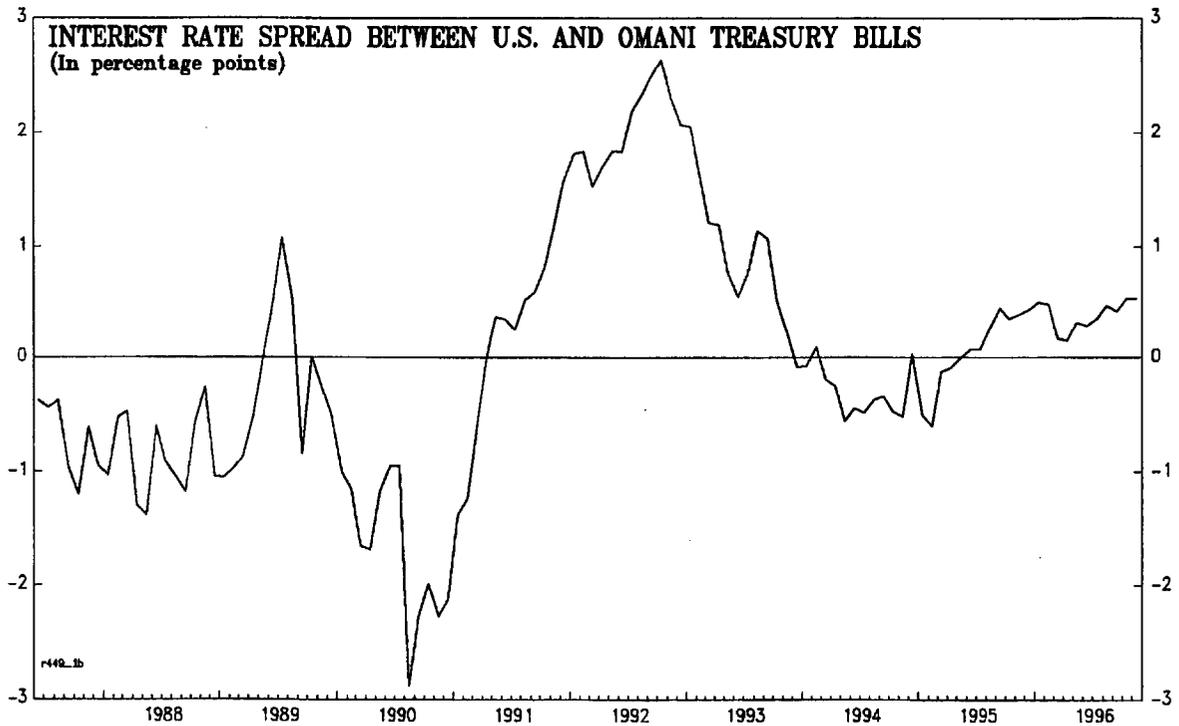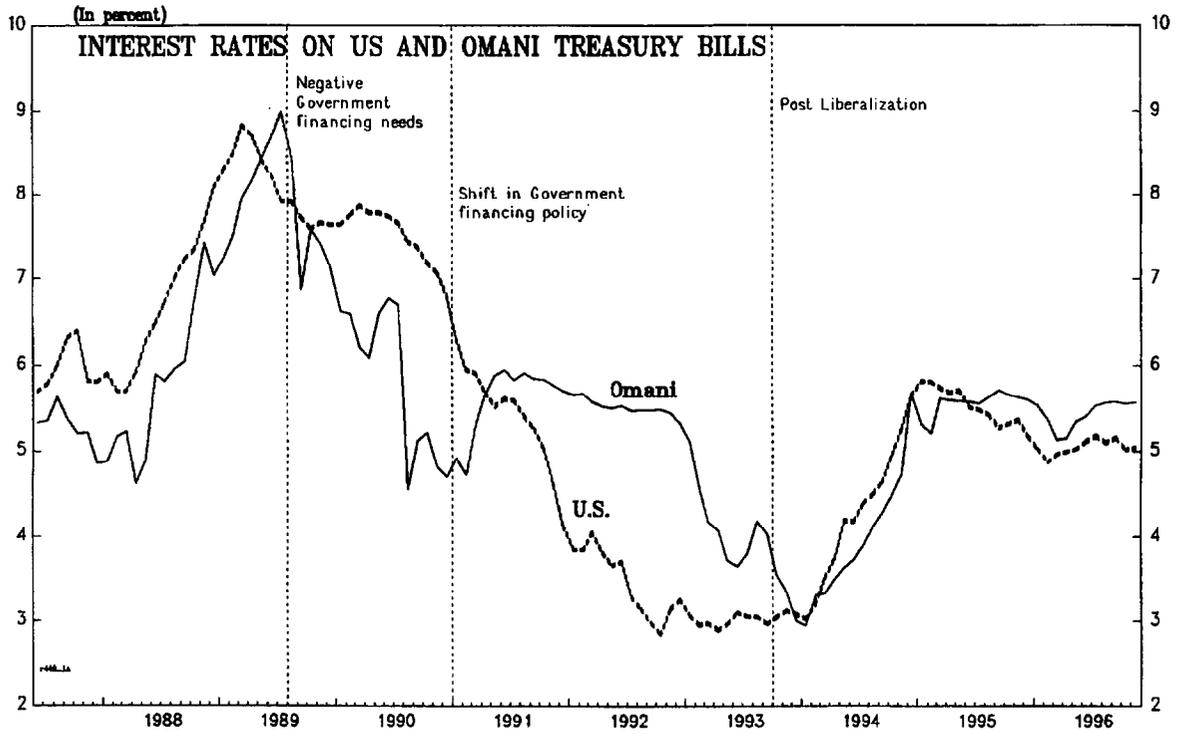
(In percent)

INTEREST RATES ON US AND OMANI TREASURY BILLS

Negative
Government
financing needs

Post Liberalization

Shift in Government
financing policy

Omani

U.S.

1988 1989 1990 1991 1992 1993 1994 1995 1996

INTEREST RATE SPREAD BETWEEN U.S. AND OMANI TREASURY BILLS
(In percentage points)

1988 1989 1990 1991 1992 1993 1994 1995 1996

Sources: Data provided by the Omani authorities; and IMF, International Financial Statistics.

investments in Oman were severely discouraged by regulation and tax discrimination.[39] The scope for arbitrage was thus largely limited to arbitrage by resident individuals and to the maximum 40 percent of the relatively small capital and reserves of resident banks. The result of all this was the relative independence of monetary policy in Oman—as evidenced from the data—during the period up to late 1993.[40]

147.   Looking at the domestic interest rate behavior, it is possible to relate these developments to the implicit short-term objective of monetary policy in Oman at that time; namely to raise sufficient domestic financing for the budget. For example, since late 1989 and until late 1993, the spread between the interest rate on Omani treasury bills and the interest rate on U.S. treasury bills was to a great extent determined by the amount of fiscal financing the government decided to raise through treasury bills and issuance of government development bonds at predetermined high interest rates. Focusing on treasury bills, Chart 16 indeed shows that during that period the interest rate spread moved in line with outstanding treasury bills. This period can be divided into two sub-periods: (i) late 1989–early 1991; and (ii) early 1991–October 1993.

Developments during late 1989–early 1991

148.   During this period oil prices were high and this had a positive impact on both the fiscal balance and foreign exchange reserves. The government also took this opportunity to limit foreign financing of the budget in 1989 to only RO 46 million, down from about RO 200 million in 1988; and to partly replenish its assets abroad and reduce its foreign debt in 1990 (Table 19). So, despite the improved overall financial situation, there was an increase in domestic financing because the government placed an emphasis on improving the net position of its foreign assets. As a result, domestic financing reached a historically high RO 244 million in 1989 before it declined to about RO 190 million in 1990. This was also reflected in an increase in outstanding treasury bills from less than RO 5 million in mid-1989 to more than RO 50 million in early 1991.[41] Despite the increase in outstanding treasury bills and other domestic financing, the government was able to maintain an interest rate that was lower than

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[39]The ability of local branches of foreign banks to arbitrage was also limited by the prudential regulation that they could not hold currency balances exceeding their net worth in Oman with their head offices or affiliates abroad.

[40]It is interesting to note, however, that up to 1991, the Omani interest rate followed more closely the US rate before 1990. This was possibly because the government depended more in its domestic financing on the banking sector which is more efficient in its operation than the less developed market for government debt instruments.

[41]Monthly data on the amount of interest rate on the treasury bills were obtained from the Omani authorities. The interest rate on U.S. treasury bills was obtained from IMF, International Financing Statistics.

CHART 18
OMAN

OUTSTANDING TREASURY BILLS AND INTEREST RATE SPREAD

JUNE 1987–NOVEMBER 1996
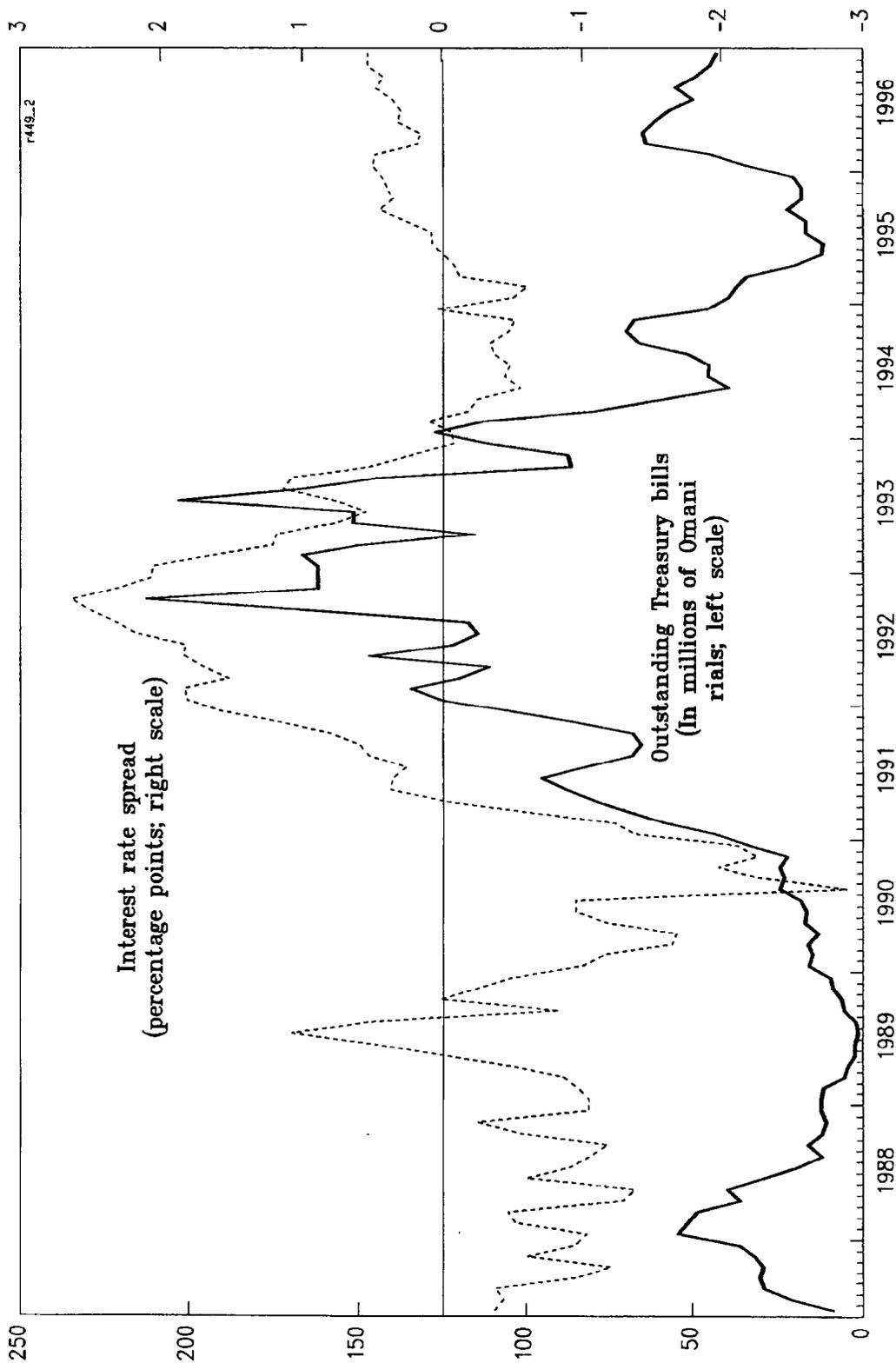
Interest rate spread
(percentage points; right scale)

Outstanding Treasury bills
(In millions of Omani
rials; left scale)

Sources: Data provided by the Omani authorities; and IMF, International Financial Statistics.

Table 19. Oman: Budget Financing Needs

(In millions of rials Omani; unless otherwise specified)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Overall Fiscal Balance	−364	−700	−146	−347	−290	−33	−284	−585	−511	−486
Financing	364	700	146	347	290	33	284	585	511	486
Financing Abroad	374	595	92	197	46	−158	83	171	300	344
Changes in Cash, Deposits, etc.	300	379	144	125	11	−11	−2	67	317	216
Net Borrowing Abroad	73	216	−52	72	35	−147	85	104	−17	128
Domestic Financing	10	−106	−54	−150	−244	−191	−202	−414	−211	−142
Monetary Authorities	−6	112	113	121	66	−32	102	105	151	−8
Domestic Money Banks	5	−20	−29	−24	85	12	−38	−6	8	−28
Memorandum Items:										
Oil Production (index number)	74	82	85	91	94	100	105	110	116	120
International Oil Price (US$/barrel)	27	14	18	14	17	22	19	19	17	16
Foreign Exchange Reserves (US$ million)	1043	915	1347	1004	1304	1618	1609	1925	849	918

Sources: Data provided by the Omani authorities and staff estimates.

the interest rate on U.S. treasury bills with a varying spread that reached minus 2.9 percentage points in August 1990. This was possible partly because, having increased from a low base, domestic financing needs remained at a manageable level during that period.

Developments during early 1991–October 1993

149.   Starting 1991, however, the negative spread started to narrow and turned to a positive spread by mid-1991. Since then, and until October 1993, the interest rate on Omani treasury bills was higher than that on U.S. treasury bills by up to 2.6 percentage points (October 1992). This was, again, a result of the government's decision to restrain foreign financing, including the depletion of foreign assets and, therefore, significantly increased domestic financing needs especially as oil prices weakened and the fiscal deficit widened. During that period, domestic financing of the budget remained at the high level of about RO 200 million and reached a peak of RO 414 million in 1992. In addition to increased borrowing from the monetary authorities, outstanding treasury bills increased to RO 100 million by end-1991, RO 160 million by end-1992, and about RO 140 million in September 1993. (In October 1992 and July 1993 outstanding treasury bills were estimated at more than RO 200 million.) The government also launched development bonds in September 1991 at an administered substantially high interest rate administered to help raise needed budget financing. As a result, the net issuance of

Table 20
Oman: Debt Instruments and National Savings
(In millions of rials Omani)

	1987	1988	1989	1990	1991	1992	1993	1994	1995
Outstanding treasury bills	36.0	12.0	10.0	33.0	104.0	162.0	111.0	45.0	20.0
Outstanding development bonds	0.0	0.0	0.0	0.0	40.2	113.9	151.7	221.2	227.6
Total	36.0	12.0	10.0	33.0	144.2	275.9	262.7	266.2	247.6
Net bill/bond financing	36.0	-24.0	-2.0	23.0	111.2	131.7	-13.2	3.5	-18.6
In percent of national savings	4.3	-6.7	-0.3	2.2	18.7	21.5	-2.9	0.8	-4.1
Memorandum items: (In percent of GDP)									
Gross domestic saving	33.8	23.8	28.9	32.0	23.3	25.5	22.5	24.0	23.7
Gross national saving	25.5	11.2	17.6	22.9	13.6	12.8	9.3	8.6	8.6

Sources: Data provided by the Omani authorities; and Fund staff estimate.

treasury bills and development bonds absorbed about 20 percent of national savings in 1991 and 1992 up from as low as 2 percent in 1990 (Table 20). This switch in policy, along with the small base of national savings (less than 15 percent of GDP), created pressure in the domestic financial market leading to the rise in the interest rate. During 1993, however, the government reversed its policy, and permitted more foreign financing which alleviated some of the pressure in the domestic financial market and allowed the spread to start to narrow.

Developments during October 1993–present

150. Starting October 1993, the authorities have been introducing measures aimed at liberalizing the financial market and increasing the participation of nonresidents, particularly GCC nationals. These measure included elimination of interest rate ceilings on time and saving deposits (October 1993), and on loans (June 1994);[42] and reduction in the tax bias against foreign investment and foreign participation in the Muscat Securities Market as a part of a more liberal policy toward foreign investors (1996).[43] These measures naturally led to an increasing loss of monetary independence. Indeed, as illustrated in Chart 15 above, the interest rate spread between Omani and U.S. treasury bills narrowed starting late 1993. At the beginning of the period, the spread became negative as the Omani rate became slightly lower than the U.S. rate. By mid-1995, however, the spread took positive values that ranged between 0.07 and 0.53. While this correction was triggered by an increase in the domestic financing needs and a corresponding increase in outstanding treasury bills, it also reflected an increased liberalization of the market (and loss of independence) as evidenced by the fact that the spread continued to moderately widen during the second half of 1996 toward the relatively more realistic 0.5 percentage point despite the continued decline in outstanding treasury bills during the same period.[44]

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[42]A ceiling continues to apply to consumer loans not exceeding RO 9,000 (US$23,400).

[43]According to recent amendments in the corporate tax and Muscat Securities Market laws, foreign ownership of up to 49 percent would not disqualify a company from being subject to the same corporate tax rates applied to companies fully owned by Omani nationals. This applied at the beginning to GCC participation only but now covers all foreign participation.

[44]However, the current 0.5 percentage point spread is somewhat on the low side, partly reflecting the facts that foreign participation remains somewhat restricted, and the financial market is not fully liberalized yet. For example, an interest rate ceiling on consumer loans remains and the authorities continue to exert considerable direct guidance over interest rates through unannounced cut-off rates on treasury bills auctions.

D. Econometric Testing

151.   In order to formally confirm the findings of the empirical analysis presented in the above section, we econometrically test for the existence of a significant cointegration between the interest rate on the Omani treasury bills and that on the U.S. treasury bills using monthly data. We look at the period 1987–96 and we also look at three sub-periods along the analysis in subsection C: 1987–89, 1989–93, and 1993–96. We start by establishing the order of integration of the variables.[45] As expected, the stationarity tests confirm that the variables are nonstationary. The first differences, however, turn out to be stationary indicating that both variables are integrated of the same order: I(1). We then test for cointegration during the whole period as well as during the three sub-periods. As shown in Table 21, the results indicate that interest rates on Omani and U.S. treasury bills were not cointegrated during the period 1987–96, confirming that the Omani interest rate did not closely follow the U.S. interest rate, and implying monetary policy independence during the period taken as a whole.[46] Looking at the three sub-periods, however, the results suggest: (i) cointegration during 1987–89 at 95 percent degree of confidence, implying a rather limited degree of independence; (ii) no cointegration during 1989–93, implying a considerable degree of independence; and (iii) cointegration during 1993–96 at a degree of confidence of up to 99 percent implying loss of monetary independence. These results are in line with the analytical and empirical sections above and confirm their conclusions.

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[45]It is important to establish whether the variables are stationary [integrated of order zero: I(0)]or not because using traditional regressions when the variables are nonstationary can lead to serious problems with traditional statistics such as R^2, the Durbin-Watson statistic, and the t-statistic, resulting in spurious estimates. Economic variables are usually integrated of order one [I(1)]; i.e. they are not stationary but their first differences are. One solution around the nonstationarity problem is to run the regression using the first differences. This is, however, inefficient due to the loss of information about the levels. A superior alternative is to test for cointegration; i.e. for the existence of a linear combination of the variables that produces a stationary error term. The estimates of that particular linear combinations of the variables are not spurious. An important condition, however, is that the variables have to be integrated of the same order. For classic work on and surveys of stationarity and cointegration see Hendry (1986), Engle and Granger (1987), and Dickey et al. (1991).

Table 21

Tests for Cointegration (Dickey-Fuller Statistic)

	N			C			T		
Number of lags	0	1	2	0	1	2	0	1	2
1987–96	-2.4821	-2.6020	-2.3089	-2.4821	-2.6020	-2.3089	-2.4822	-2.6023	-2.3149
1987–89	-3.6406 **	-4.1832 **	-3.1188	-3.6406 **	-4.1832 **	-3.1188	-3.7603	-4.2916 **	-3.1964
1989–93	-1.9207	-1.9125	-1.6954	-1.9207	-1.9125	-1.6954	-2.7448	-2.6053	-2.4172
1993–96	-3.2860 *	-3.7859 **	-2.3875	-3.2860 *	-3.7859 **	-2.3875	-4.5657 **	-6.0226 ***	-4.2107 **

N: Indicates that neither a constant nor a trend term is included in the residual term stationarity test.

C: Indicates that a constant is included in the residual term stationarity test.

T: Indicates that both a constant and a trend term are included in the residual term stationarity test.

*** Indicates cointegration at 99 percent degree of confidence.

** Indicates cointegration at 95 percent degree of confidence.

* Indicates cointegration at 90 percent degree of confidence.

E. Conclusion

152.   Past experience indicates that inefficiencies in the financial market, lack of sufficient instruments, and restricted foreign access to the domestic market contributed to a degree of monetary independence in Oman in the last decade. The domestic interest rate did not follow closely changes in the U.S. rate and a spread was sustained and corresponded to developments in the government's domestic financing needs. The analysis presented in this paper, however, indicates that, with the availability of more financial instruments, recent financial reform efforts, and increased globalization of financial markets, domestic financial intermediation has increased as reflected in the narrowing of the spread and cointegration of the Omani interest rate with the U.S. rate. As a result, the scope for monetary policy independence in Oman is increasingly narrowing and that role in the future would essentially be limited to liquidity management based on indirect monetary control. In this context, it is fiscal policy that has to shoulder the central role in ensuring macroeconomic stability.

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VII. EXTERNAL SHOCKS, POLICY RESPONSES, AND DOMESTIC ADJUSTMENT[47]

A. Introduction

153.   Oman's economy is extremely vulnerable to oil related terms of trade shocks because of its heavy reliance on oil export proceeds which account for more than 90 percent of total exports. Over the last 20 years, the price of oil fluctuated considerably and with it the external current account balance. The price of oil surged in the mid- and late-1970s, collapsed in the mid-1980s, and recovered somewhat in the 1990s. In the past, Oman was able to respond to these shocks by incurring large budget deficits financed primarily by drawing down previously accumulated reserves and by resorting to external borrowing. Given the limited availability of official external reserves and oil resources, the scope for similar policy response in the future is somewhat limited.

154.   Volatility of oil prices would likely continue in the future and therefore policy measures would need to be taken to respond to future negative external shocks without resorting to the already reduced level of official assets or bringing forward the depletion horizon of oil reserves. In the meantime, favorable oil price developments should provide the opportunity for introducing needed adjustment and structural reform measures since policies undertaken during an adverse terms of trade shock have more severe implications than policies implemented in a timely and orderly manner.

155.   Against this background, this paper seeks to: (i) examine how Oman responded to oil price shocks over 1980–95; (ii) evaluate the effects of the policy measures used in response to the three distinct terms of trade cycles; (iii) reviews the appropriateness of the policy instruments used in the adjustment process; and (iv) underline some of the policy challenges and responses that would enhance Oman's capacity to absorb future shocks.

156.   Results based on broad economic indicators show that while import intensity during negative shocks was reduced, imports were not compressed sufficiently reflecting expansionary and counter cyclical fiscal policies. At the same time, non-oil exports increased significantly—though from a very small base—during this period in part as a result of promotion measures, much depreciated real effective exchange rate, and a decline in real wages. Given that fiscal policy was the main instrument used to shield the economy form adverse terms of trade shocks, the structure of the economy remained virtually unchanged, resources were considerably reduced, and the economy's ability to withstand future oil price shocks was further weakened.

157.   The remainder of the section is organized as follows. Subsection B looks at adjustment policies to external shocks in a general context by reviewing briefly the policy options and the role of macroeconomic policies and structural reforms. The successful experience of Indonesia

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[47]Prepared by Saade Chami.

in adjusting to oil shocks is also presented in this section. Oman's policy choices and constraints and its actual adjustment to external shocks during 1980–95 are described in subsection C. Subsection D links the outcomes of these shocks to policy measures. Some concluding observations and lessons for Oman are presented in the final section.

B.   External Shocks and Adjustment

158.   Unfavorable external shocks caused by a steep decline in the price of an export commodity could have serious implications for macroeconomic performance in the event of inadequate policy response. Studies have shown that a country's economic performance depends in part on how quickly and efficiently it reacts to external shocks, and that it is not as much as external shocks but domestic responses that determine a country's success or failure (Little et al.(1993)).

159.   In general, countries have at their disposal a host of policy variables in responding to external shocks. The most important policy instruments include: (i) fiscal-monetary policies and their appropriate mix to steer the economy back toward a sustainable path by restoring macroeconomic balances; (ii) exchange rate policy permitting a rapid adjustment in relative prices of tradables versus nontradables and maintaining external competitiveness; (iii) labor market policies entailing flexible wages and alleviation of other labor market distortions to preserve or enhance the country's competitiveness in the world market; and (iv) structural reform policies aimed at enhancing the role of the private sector and reducing rigidities in the market. The relative importance of these policy instruments relates to the specific economic and institutional characteristics of each country.

Role of macroeconomic policies

160.   Fiscal policy is critical in the adjustment process. Measures designed to restrain spending and mobilize savings are essential in responding to unfavorable external shocks. Policy makers frequently have a tendency to postpone structural adjustment to an adverse shock by cutting capital expenditures. The tightening of fiscal policy through postponement or elimination of large capital-intensive and import-dependent projects has the added advantage of improving directly the external current account balance. However, this policy is not sustainable if the duration of the shock is rather long since it could be detrimental to the formation of capital stock in the economy as this type of public investment tends to crowd in (rather than crowd out) private investment[48]. Although revenue enhancing measures would take time to put in place and implement, they have positive and lasting effects that provide a good protection against future external shocks.

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[48]In this connection, it is reasonable to assume that crowding-in would result if public and private investments are complementary such as infrastructure, and crowding-out would result when they are substitutes such as investment in manufacturing and service-related enterprises.

161. Exchange rate adjustment remains one of the most efficient ways to respond quickly to temporary and unexpected negative external shocks. Exchange rate depreciation improves the competitiveness of exports, makes imports more expensive (absorption effects), and shifts resources from the sectors producing nontradables to those producing tradables (switching effects). Nominal exchange rate devaluations, however, remain unpopular and in many instances are used as policies of last resort in view of their substantial effects that spread rapidly across all segments of society and consequently disturb the implicit social contract (Woo (1994)).

162. Interest rate policy is directed primarily at private sector investment and saving in order to re-establish macroeconomic equilibrium in the wake of terms of trade shock. However, the effectiveness of interest rate policy in addressing macroeconomic imbalances depends on the degree of capital mobility and the exchange rate regime. If the exchange rate is fixed and the capital account is fully open, then the scope for using the domestic rates of interest is limited.

Structural reforms

163. Structural reform measures generally take a longer time to put in place and are unlikely to overcome the negative impact of external shocks in the short run. Their importance is derived however from their lasting impacts on macroeconomic adjustment and stability; reorienting private sector behavior, enhancing economic efficiency and growth prospects, and the diversification of the economic base. Structural reforms' role in realizing these objectives do not lend themselves easily to robust statistical relationships but nonetheless there is a consensus that, if combined with macroeconomic stability, structural reforms can elicit supply response and increase growth and efficiency. More important, reducing rigidities and regulatory constraints and creating an environment conducive to private sector investment (particularly foreign investment) are critical in countries where the public sector plays a dominant role and the policies are inward looking.[49]

Labor market and wage policy

164. Labor market reform is critical in bringing about a durable response to an external shock through enhanced competitiveness and improved resource allocation. Labor market rigidities and segmentations restrict labor mobility, create wage differentials beyond those warranted by productivity factors, and thus hinder an efficient allocation of resources.

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[49]In reviewing the experiences of some countries that underwent adjustment programs, an IMF study (Goldsbrough et al. (1996)) showed that countries that made significant progress in structural reform (Chile and Ghana) or those that have begun with relatively less structural distortions (Thailand) have achieved rapid productivity gains and became less prone to external shocks while those that made little progress on the structural front (Senegal) tended to experience slow productivity growth and increased vulnerability to external developments.

165. In general, for economies highly dependent on exports, the unit labor cost relative to partners countries is a key element in responding to shocks and sustaining growth (Mazumdar (1993)). Wage policy acquires a special importance in responding to external shocks when the nominal exchange rate is fixed. Labor market conditions that influence wage rates and factor productivity are potentially as important as the effects of nominal exchange rate adjustments in defining the labor unit costs and competitiveness.[50] The difference, however, lies in the speed with which these adjustments are transmitted in the economy. Leaving this speed differential aside, wage adjustment would be a preferable policy option since it provides a positive signal for foreign investors who sometimes are concerned about frequent nominal exchange rate adjustments and are interested in cost and efficiency considerations.[51]

166. Indonesia's successful adjustment to external shocks and its efficient and timely use of policy instruments are illustrated in Box 2.

C. Adjustment to Terms of Trade Shocks in Oman

Policy setting and constraints

167. Oman is a small open economy with perfect capital mobility and a fixed exchange rate regime. The Omani rial is pegged to the U.S. dollar and the exchange rate has remained fixed except for a small devaluation in 1986. The structure of the economy and the constraints imposed by policy makers on the use of certain policy instrument have important implications for the way Oman can adjust to external shocks.

168. First, the Omani authorities attach a great importance to the stability of the nominal exchange rate and consider that this arrangement has served the country well. Accordingly, while the authorities have not completely ruled out exchange rate adjustment in the past—as reflected in the 10 percent devaluation of the rial Omani in 1986—exchange rate adjustment is not currently viewed as a policy option in responding to a deterioration in the terms of trade.

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[50]Thailand's economic performance and its ability to weather through adverse external shocks over the last 20 years were influenced to a great extent by its flexible wage policy and the absence of labor market segmentation that maintained its competitiveness as measured by relative unit labor costs (Kochhar et al.(1996)).

[51]In view of the high level of globalization and integration of markets, it is becoming increasingly important for countries to use labor market reform tools to attract foreign direct investment and for business locations to depend on encouraging market conditions and friendly business environment.

Policy makers in Oman are concerned that a devaluation of the exchange rate and its perceived instability could lead to loss of confidence in the economy with a negative impact on domestic and foreign investment.

169.   Second, in view of the fixed exchange rate and the open capital account, monetary policy has a very limited scope particularly in the absence of financial market distortions. In a fully liberalized financial system, the difference between domestic and foreign interest rates reflects risk elements and institutional differences related, inter alia, to fees and taxes. In the past, when interest rates and credit allocations were subject to ceilings and restrictions, interest rates could differ markedly from foreign interest rates. However, much of the distortions that characterized the Omani monetary system have been eliminated in recent years and the leverage of monetary policy on the economy has diminished considerably.

170.   Third, although Oman maintained a liberal employment policy with regard to expatriate labor, its labor policy is constrained by labor market segmentation, partial rigidity of the wage rate, and a large size of the public sector with generous entitlements. The two major labor market segmentations that are visible in Oman are between public and private sectors and between Omani national and expatriate labor. Available data on expatriate labor average wage rates in the private sector over the last 10 years indicate that they were quite flexible. Wage flexibility, however, was limited primarily to expatriates' wages since wages for Omani nationals, particularly in the public sector, were not as flexible. In addition, public sector jobs offer higher entry level wage rates and much more benefits than the private sector creating a leverage effect on private sector wages. Liberal labor market and flexible wage policy have also special roles in the context of the Omanization of the labor force currently underway. In the absence of wage flexibility for all, Omanization strategy could lead to efficiency and productivity losses, discourage private domestic and foreign investment, hinder the development of the non-oil export base and diversification, and thus could undermine the government's objective to make the economy less vulnerable to adverse shocks.

Terms of trade shocks and policy responses

Nature of terms of trade shocks

171.   Although major external positive shocks took place in the 1970s with the tripling of oil prices in 1973–74 and the substantial increase in 1979–80, in this paper discussions of external shocks and policy responses in Oman are limited to the 1980-95 period primarily because of data limitations. The 1980–95 period is broken into three phases coinciding more or less with the terms of trade cycles with 1981 used as a benchmark year. The first phase, 1982–86, reflects the significant deterioration in the terms of trade which reached its lowest point in 1986 with the collapse of oil prices. Over this period, the terms of trade deteriorated by about 57 percent with a 50 percent decline in 1986 alone when the price of Omani oil dropped from US$27 to US$13.5 a barrel. The second phase, covering 1987–90, was characterized by an upward trend in oil prices, a trend that reached its peak in 1990 following the regional crisis.

Box 2. The Indonesian Experience with External Shocks

Among all developing and oil exporting countries, Indonesia presents an interesting case study for analyzing the macroeconomic effects arising from oil related shocks and the use of policy instruments in responding to these shocks. Its success in addressing negative external shocks through flexible macroeconomic management and swift structural reform has enabled Indonesia to maintain its macroeconomic stability and ameliorate its social indicators. When the price of oil collapsed from US$28 to US$10 per barrel in 1986, the government responded swiftly by: (i) devaluing the currency by 45 percent; (ii) reducing public investment in the short run; and (iii) allowing larger foreign investment in the country by adopting far reaching structural adjustment measures including labor market flexibility.

- A strong fiscal package—designed to restrain spending and mobilize revenues (with emphasis on non-oil tax revenue)—was the central element of the policy package. This strong fiscal adjustment was also necessary to support other policy measures taken in response to the external shock, to translate the nominal exchange rate devaluation into a real effective exchange rate adjustment, and to reduce the burden on interest rates to protect private sector credit and investment.

- The real exchange rate was devalued by 55 percent between 1981 and 1988 reflecting essentially two major nominal devaluations effected in 1983 and 1986. In some instances (1978), Indonesia resorted to exchange rate devaluation even in anticipation of a decline in the oil price on the assumption that the extent and cost of devaluation would be less if measures are taken before rather than during a balance of payments crisis.

- Exchange rate devaluations and restrained fiscal policy were not sufficient however to deal with exogenous shocks, and the policy package had to be supported by other policy actions, such as:
    - flexible labor market characterized by free mobility between urban and rural areas and downward adjustment in real wages;
    - other structural reforms which were instrumental in making the economy more resilient to external shocks; and
    - reducing the incidence of poverty.

The structural reform measures were in the areas of financial sector reform, trade reform, and deregulation of the real sector as investment regulations for domestic and foreign investors were simplified.

- Deregulation of the economy rendered the economy more efficient as: total factor productivity increased from an average of -2.5 percent in 1982-85 to 1 percent in 1986-88; the rate of return on investment increased from 13 percent to 22 percent; and the incremental capital to output ratio (ICOR) fell form 7.8 to 5.2 between the two periods (Woo (1994)).

The terms of trade improved by 8 percent and the oil price moved from US$13.5 in 1986 to a peak of US$21.5 a barrel in 1990. The third phase covering 1991–95 was characterized by a general downtrend in oil prices; the term of trade fell by 30 percent and the crude oil export price declined by US$5 per barrel. Given the dominance of the oil exports in the trade account, the movement in the terms of trade tracked closely the path of crude oil prices (Chart 17), especially at times of large price movements. In oil exporting countries that usually have a merchandise trade surplus, the impact of export price changes tend to have a proportionately stronger impact on the trade balance than similar changes in import prices.

A methodology for evaluating policy responses

172.   In order to examine the responses to the external shocks discussed above, the paper presents some quantitative analysis based on the approach developed by McCarthy, Neary, and Zanalda (1994).[52] This approach decomposes the responses to external shocks during 1981–95 in terms of four performance measures: import intensity; import compression; export promotion; and changes in the level of external debt as a balancing (residual) item. These performance measures might have also reflected in part the effect of other factors that could have been at work but not related to specific policy changes; thus the performance measure should be interpreted as providing only broad indications of the adjustments that were achieved. For this purpose, the effects of the shocks on the external sector are estimated in terms of GDP and the policy responses (also in terms of GDP) are measured essentially in terms of deviations from trends. In the case of Oman, only the terms of trade shocks are considered given their predominance in the external sector developments.[53]

•   The terms of trade effects are the sum of the import effects resulting from changes in the import price which are quite small and the substantial export effects arising from

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[52]This approach was also used by a recent IMF occasional paper: Thailand: The Road to Sustained Growth.'No. 146, 1996.

[53]McCarthy, Neary, and Zanalda (1994) looked at external shocks in the Philippines in terms of terms of trade, global demand, interest rate, and additional debt service. The same set of variables except debt service was also used in Kochhar et al. (1996). The interest rate and global demand shocks are not relevant in Oman given the relatively low level of external debt and the very small non-oil export base.

CHART 17

OMAN

TERMS OF TRADE AND EXCHANGE RATE DEVELOPMENTS, 1980-95

(1990=100)

Terms of trade

Real effective exchange rate

Real effective exchange rate
based on nominal Unit labor cost

r449_5
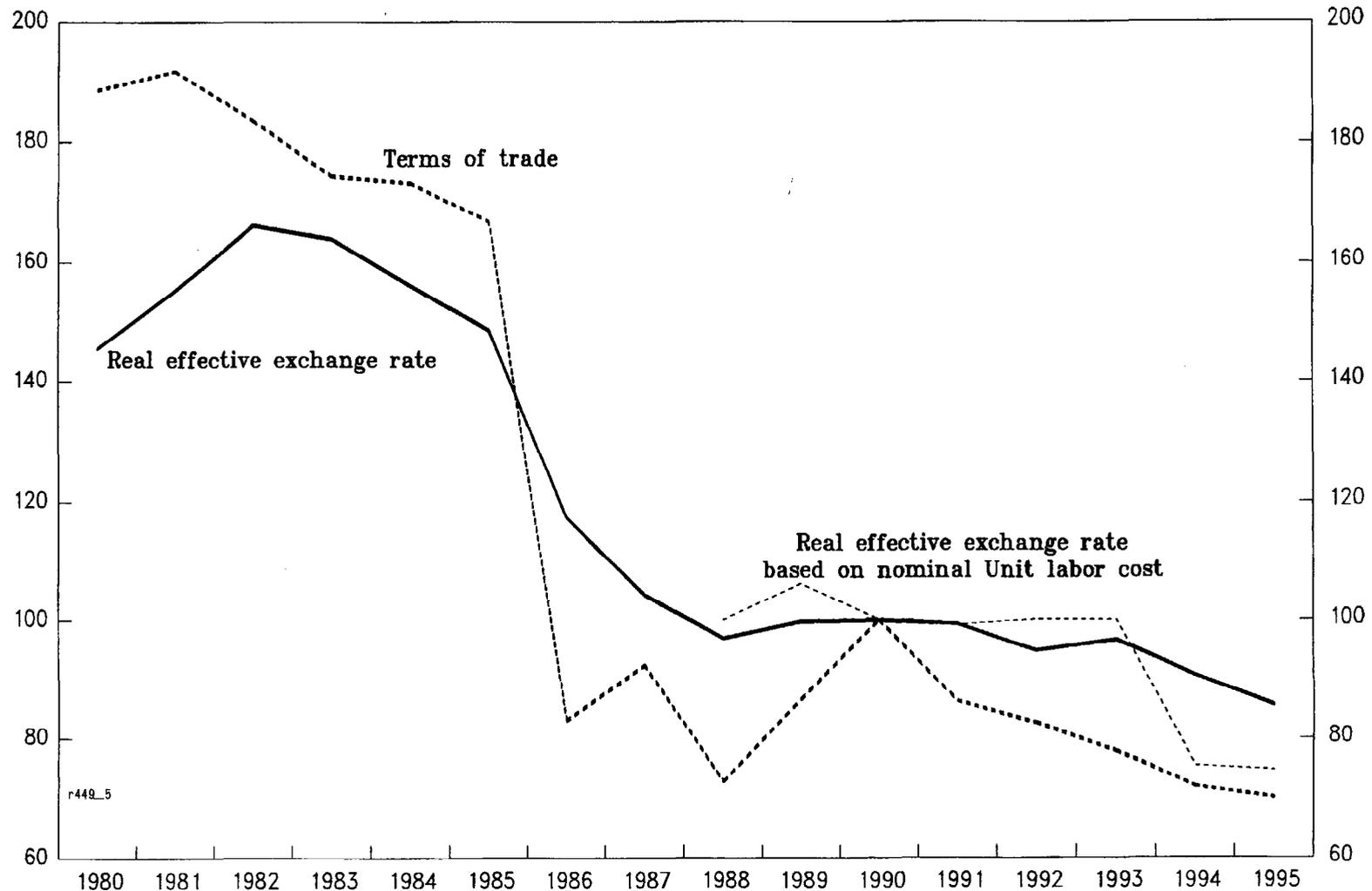
Sources: Data provided by the Omani authorities; IMF, World Economic Outlook, Information Notice System and staff estimates.

changes in the oil price.[54] This approach avoids the problem of using fixed weights by updating the weights of imports and exports each year.[55]

- Import intensity is measured in terms of deviations of actual imports form a hypothetical path derived from an import function with a constant income elasticity.[56] Thus the intensity of imports measures the change in imports resulting from a change in import elasticity.

- Economic compression on the other hand measures the effects on imports due to a slowdown in economic growth with the assumption that the elasticity of imports with respect to GDP remains constant. It is calculated by multiplying the initial share of imports in GDP by the estimated change in real output gap measured by the difference between the actual output and a trend output. The trend output is frequently derived by estimating a trend function (using regression analysis) in a period lying outside the bounds of the period under investigation and characterized by the absence of any major shock.[57] However, in the 1970s Oman experienced very high growth rates in a period when two major positive shocks took place; these growth rates were not sustainable over the medium and long term and therefore could not be considered trend growth rates. Therefore, a trend growth rate of 6 percent is assumed which is plausible given that the rate of growth of population ranged between 3.5–5 percent and the rate of increase in investment averaged about 8 percent over the period. The qualitative results of the analysis would not be affected however, even if the trend average growth rate was different by a few percentage points.

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[54]Import and export effects are based on variations in the price and quantity of imports and exports each year. That is, the change in oil exports value (X) is measured as the volume of exports in year t times the change in the unit oil price (Px) from the previous period i.e., $\Delta x=X(1-Px(t-1))/Px$. A similar method is used to derive the change in the value of imports.

[55]This also presumes that oil production decisions are independent of oil price fluctuations.

[56]Import elasticity is derived by regressing the log of imports on the log of GDP over the 1980-95 period. The estimated elasticity was about 0.7 which is lower than expected in an open and import dependent economy such as Oman. One possible explanation of this low elasticity of imports is that there is a relatively large expatriate population contributing significantly to production but have low consumption rate thus biasing the import elasticity downward. It was estimated in the context of the balance of payments compilation that expatriate labor transfer a substantial part of their income (about 80 percent for low skilled workers in the private sector) to their respective home countries.

[57]Another method used by Kochhar et al.,1996 was based on minimizing the variation of actual output (GDP) around a trend, subject to certain assumptions regarding the variance of the cyclical component relative to that of the trend component.

- Export promotion is ideally a measure of the change in exports given a constant income elasticity of demand in partner countries. In some studies, export growth volume of the country is compared with world export growth, the difference between the two measuring the efforts undertaken by the country to promote exports.[58] In view of the fact that Oman's exports consist almost entirely of oil and that Oman is a price taker in the international market, demand conditions in the rest of the world as well as world exports would not be relevant factors in measuring export promotion. Accordingly, non-oil export promotion has been measured by multiplying the difference between the growth rates of non-oil exports and non-oil GDP by the level of non-oil exports in the preceding period—higher non-oil export growth rates reflect the effect of underlying export promotion measures/efforts.

Quantitative evaluation of responses to shocks

173. Over 1982–86 the cumulative negative terms of trade shocks on the trade balance were estimated at 45 percent of GDP (Table 22) with 1986 alone accounting for about 36 percent owing to the sharp decline in oil prices (Table 23). The response to this severe adverse shock was a significant (albeit not sufficient) reduction in the import intensity by 10 percent of GDP and a relatively modest increase in non-oil export promotion accounting for less than 1 percent of GDP. Although the response of non-oil exports is negligible given the size of the shock, it remains nevertheless significant in view of the narrow non-oil base of the economy. The share of non-oil export increased however from 0.3 percent of total exports in 1980 to about 2.6 percent in 1986 (and subsequently to 9 percent in 1995) reflecting some improvements in the diversification efforts of the export base of Oman. The positive effects of import intensity were partially offset by the opposite movement in economic compression—measured in terms of import reduction—because of higher than normal non-oil GDP growth rates sustained largely by an expansionary fiscal policy which pushed up imports by about 5 percent of GDP.

174. In the second phase of 1987–90, favorable terms of trade shocks represented about 10 percent of GDP due essentially to the rise in oil prices on the international markets particularly in 1990 when the terms of trade effect accounted for 9 percent of GDP (Table 23). With imports compression estimated at more than 2 percent of GDP owing to lower growth rates brought about by the lagged adjustment in fiscal policy, import intensity was reduced further (about 6 percent of GDP), and export promotion continued to improve.

175. Following the regional crisis of the 1990s, oil prices began to decline and by 1995 unfavorable terms of trade shocks were estimated at 12 percent of GDP. The intensity or compression of imports were marginal (both at about one half of one percent of GDP) but

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[58]See McCarthy, Neary, and Zanalda (1994) for details.

Table 22. Oman:Terms of Trade Shocks, Performance Measures, and Policy Instruments, 1981–95
(In percent of GDP; unless otherwise indicated)

Period	Term of Trade Shock 1/	Performance Measures				Quantifiable Policy Instruments		
		Change in Import Intensity 2/	Change in Import Compression 3/	Change in Non–oil Export Promotion	Residual 4/	Overall Fiscal Deficit	Unit Labor Cost (percent change) 5/	Exchange Rate (percent change)
		(Cumulative)						
1981	−7.1	−2.6	−2.0	−−	−2.4	3.4	...	6.7
1982–86	45.1	10.2	−4.9	0.8	39.0	−56.0	...	−24.9
1987–90	−10.4	5.6	2.4	0.7	−19.2	−24.4	−9.0 6/	−15.1
1991–95	12.0	0.4	0.2	2.1	9.3	−48.1	−19.4	−15.1
		(Averages)						
1981	−7.1	−2.6	−2.0	−−	−2.4	3.4	...	6.7
1982–86	9.0	2.0	−1.0	0.2	7.8	−11.2	...	−5.0
1987–90	−2.6	1.4	0.6	0.2	−4.8	−6.1	−3.0 6/	−3.8
1991–95	2.4	0.1	0.0	0.4	1.9	−9.6	−3.9	−3.0

Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Positive values imply adverse shocks.
2/ Negative values indicate that imports are higher than expected.
3/ Positive values indicate that imports are compressed because of a compression in economic activity.
4/ Represents external borrowing or drawing down of official reserves.
5/ Measured in rial Omani for a representative sample of 3 manufactuirng industries and 2 service sectors. A negative value implies that real wages adjusted for productivity factors are declining.
6/ Due to the lack of consistent data for the period before 1988, this refers to 1988–90 only.

Table 23. Oman: Terms of Trade Shocks and Macroeconomic Responses, 1980–95

(In percent of GDP, unless otherwise indicated)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Terms of trade	−20.3	−7.1	1.7	6.7	0.5	1.8	34.5	−6.5	11.7	−6.5	−9.2	8.6	−0.2	5.5	0.7	−2.5
Import intensity	...	−2.6	−5.3	4.8	−1.2	−1.7	13.7	8.6	−1.5	0.2	−1.6	0.7	−0.6	−0.6	3.7	−2.9
Export promotion	0.070	−0.003	0.064	0.163	0.100	0.047	0.472	0.665	0.049	0.020	−0.007	0.209	0.404	0.378	0.614	0.509
Economic compression	...	−2.0	−1.2	−1.6	−1.6	−1.7	1.1	2.1	0.1	0.5	−0.3	−0.0	−0.4	−0.0	0.4	0.2
Residual	...	−2.4	8.1	3.4	3.2	5.1	19.2	−17.8	13.0	−7.2	−7.2	7.7	0.4	5.7	−4.1	−0.4
Memorandum items:																
Terms of trade (1990=100)	188.6	191.8	183.5	174.3	173.1	166.7	82.9	92.3	72.7	86.6	100.0	86.3	82.5	77.7	71.8	70.0
Oil price (U.S. dollar per barrel)	32.0	36.9	34.4	29.2	28.4	27.0	13.4	17.3	13.5	16.3	21.4	17.5	18.0	15.5	15.2	16.3
Current account	14.9	16.2	6.1	5.8	3.2	−0.1	−12.7	9.1	−3.7	3.3	9.5	0.1	−2.5	−7.3	−6.2	−5.5
Overall public sector deficit 1/	−0.1	3.4	−8.0	−8.3	−10.7	−8.2	−20.8	−5.0	−10.7	−8.0	−0.7	−6.5	−12.2	−10.7	−9.8	−8.9
Capital expenditures	11.3	12.0	14.2	12.9	14.4	14.9	16.9	9.9	8.3	7.2	5.9	8.5	9.2	9.5	8.9	8.3
Current expenditures	31.0	32.5	34.9	37.9	38.2	37.6	41.8	36.8	39.8	38.1	35.4	34.2	37.1	36.6	36.2	35.7
GDP growth rates (in percent)	...	17.4	11.6	12.9	13.9	14.5	2.1	−4.0	5.2	3.0	8.4	6.0	8.5	6.1	3.8	4.6
Non−oil export growth (in percent)	...	50.2	15.0	34.8	61.3	32.0	4.5	47.8	60.8	5.5	9.8	7.9	22.4	26.7	18.9	25.4
Oil production (percent change)	−3.7	15.5	2.3	15.7	7.4	19.3	12.4	4.0	6.6	3.2	6.9	3.4	4.7	5.1	3.8	5.4
Oil export (percent change)	−5.1	17.6	−1.0	8.2	5.0	22.1	13.7	5.2	7.4	2.1	6.2	2.4	7.5	5.9	1.2	5.1

Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Excludes SGRF operations.

non-oil export promotion improved significantly accounting for more than 2 percent of GDP as they grew at more than 20 percent over most of this period thus exceeding by far the rates of growth of non-oil GDP.

D. Policy Instruments and Economic Responses

176.   The policy response measures described above were the outcome of policy actions (or inactions) that acted on them directly or indirectly through other intermediate targets.

Fiscal policy

177.   The policy performance measures discussed above were not sufficient to counter the deterioration in the terms of trade during 1982-86. Other factors amounting to 39 percent of GDP were needed to redress the unfavorable developments in the current account. The deterioration in the terms of trade that began in 1982 resulted in severe worsening of the external current account which moved from a surplus of 16 percent of GDP in 1981 to a deficit of 13 percent of GDP in 1986 despite an average increase in the volume of production and exports by about 10 percent per year offsetting in part the effect of the fall in oil prices (Table 23). This external sector development mirrored the developments in the overall fiscal balance which moved from a surplus of 3 percent to a deficit of 21 percent of GDP in 1986, resulting in a cumulative overall budget deficit of 56 percent of GDP. Sustained increase in oil production and a counter cyclical fiscal policy helped keep real total and non-oil GDP growth rates between 12 percent and 17 percent during 1982–85—very high rates by any standard. These high growth rates were only interrupted in 1986 when non-oil GDP growth became negative (3 percent) and the growth rate of GDP dropped by more than 12 percentage points to 2 percent. Counter cyclical fiscal stance was reflected visibly in the high levels of capital expenditures (ranging between 13 percent and 17 percent of GDP) and the increased level of current spending (increasing from 30 percent of GDP in 1982 to 42 percent of GDP in 1986). The resulting fiscal impulses sustained non-oil growth rates at very high levels and prevented a compression of imports.

178.   In the face of the severe shock that occurred in 1986, fiscal adjustment began to take place in 1987 in view of the of the inherent lags in adjusting expenditures including capital outlays due in part to contractual agreements. Most of the adjustment however fell on capital spending which declined from 17 percent of GDP to 10 percent of GDP in 1987 and remained in the 7-9 percent range throughout the period while the decline in current outlays was relatively modest (4 percent) and short lived.

179.   This lower level of public investment during the favorable external shock of 1987–90, also reflected the fact that major investment projects had been completed after 15 years of expanded development program. This led to a further reduction in import intensity since this type of spending generally tends to have a large important content. As a result of lower government expenditures during this period, non-oil growth rates were lower and

consequently economic compression was increased. In 1991–95, the small adjustment in import intensity and import compression was apparently caused by a modest pick up in capital spending and current expenditure in relation to the previous cycle.

Monetary and exchange rate policy

180. Exchange rate policy was not used during the 1980–95 period except for a 10 percent devaluation of the nominal exchange rate in 1986 when oil prices collapsed. Since then, a fixed and constant nominal value of the rial Omani vis-à-vis the U.S. dollar was maintained to enhance the confidence of the private sector and foreign investors. Relative to the size of external shock, the extent of devaluation of rial Omani was rather modest and it is not surprising that it failed to have a significant positive impact on the adjustment process particulary on the import side. However, the real effective exchange rate depreciated over 1982–86 by more than 25 percent due mainly to the depreciation of the U.S. dollar (Chart 17), and continued to depreciate in real effective terms: 15 percent during the favorable terms of trade phase of 1987–90; and a further 15 percent during 1991–95. At the same time, monetary policy was cautious, money growth rates were kept under control, and inflation rates were low. The resulting price stability was also a contributing factor in maintaining the depreciation of the real effective exchange rate which helped to some degree in reducing the import intensity and increasing the share of non-oil exports.

Wage policy

181. The impact of wage policy on the performance measures during the three phases of the terms of trade shocks is very difficult to pin down given the lack of quality labor market data in Oman. Nevertheless, and within the limitations imposed by the data, an assessment of wage flexibility is being undertaken to shed some light on the behavior of the wage rate during the period under investigation.

182. One measure of wage rate flexibility is the unit labor cost expressed in foreign currency which is decomposed into three elements: the wage productivity gap, the shift in the ratio of consumer to producer prices, and the change in the nominal exchange rate.[59] It measures whether real wages have ramained in line with the level warranted by productivity

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[59]Unit labor cost (Uc) in dollars focus is defined as : Uc ($)= W/V.1/e, where W denotes wage rate per worker, V denotes value added per worker, and e the exchange rate (rials per U.S. dollar). The following equation could be derived: $\mathring{U}c=(\mathring{w}-\mathring{v})+(\mathring{P}c-\mathring{P}p)-\mathring{e}$ where the dots represent proportionate rates of change, w is the real wage , v is an index of productivity of labor, Pc is an index for the cost of living, Pp is an index of prices of goods for which the unit labor cost is measured (Mazumdar, 1993). In the case of Oman, and given the lack of data, Pp measures the non-oil output deflator, v is assumed to be equal to zero (see Section II), and e has been zero except for 1986 where it was devaluated by 10 percent. Thus, the equation could be simplified to $\mathring{U}c= \mathring{w}+(\mathring{P}c-\mathring{P}p)$.

changes—adjusted for changes in output prices relative to consumption prices—and the change in the nominal exchange rate. Given that in Oman there was no change in the nominal exchange rate during the period (except for 1986), and that there was no significant productivity improvement (see Section II), the unit labor cost was basically the sum of the rate of change of actual real wages adjusted by the consumer producer price differential. A positive (negative) rate of change of the unit labor cost implies that wages are becoming less (more) competitive.

183.   The data in Table 24 indicate that real wages in a representative sample—consisting of three manufacturing industries and two service sectors—declined significantly over the entire period. Even under the assumption of zero productivity growth, the unit labor costs for expatriates declined more than 33 percent on a cumulative basis during 1980–95. The real effective exchange rate based on nominal unit labor cost (Chart 18) depreciated sharply in 1994 making wages in Oman very competitive. This points clearly to the flexibility of expatriate wages, but unfortunately similar anyalysis could not be undertaken for Omani nationals due to a lack of data.

184.   The movements in the unit labor costs did not seem to be consistent with the terms of trade movements on an annual basis[60]. However, looking more specifically at the individual cycles of terms of trade shocks indicate that on average the unit labor costs decreased by 3 percent a year during the 1988–90 period of positive shocks, and 5 percent on average over 1991–95—a period characterized by a steady decline in oil prices and a deterioration of the terms of trade. Although these results remain at best indicative given the quality of the data and the short time series being considered, the noticeable downward trend over the whole period seems to have reinforced the depreciation of the real effective exchange rate and consequently the reduction in import intensity and the increase in non-oil exports.

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[60]The fact that wage movements were not consistent with the changes in the terms of trade taken one year at a time (Table 14), could be attributed to other factors that are not captured by the flexibility measure used above. Two possible factors could be cited in this regard. First, wages in Oman could be influenced to a large extent by supply considerations determined by external factors related to the economic conditions in labor exporting countries thus affecting the reservation wage rate for expatriates. In this connection, and since most of the labor exporting countries are oil importers, their economic conditions may correlate negatively with those in Oman, offering a possible explanation of the seemingly perverse behavior of wages in some years. Second, expatriate workers are normally hired and labor cards are issued for a period of two to three years, creating a lagged adjustment in the wage rate with respect to terms of trade movements.

Table 24. Oman: Average Unit Labor Cost and Its Components, 1988−95 1/

(Percent change)

Period	Wage Productivity Gap 2/	Consumer− Producer Price Differential	Unit Labor Cost
1988−90	−4.2	1.2	−3.0
1988	−2.5	−2.5	−5.0
1989	3.3	3.2	6.5
1990	−13.3	2.8	−10.5
			−9.0
1991−95	−6.0	1.1	−4.9
1991	−8.0	8.2	0.2
1992	4.6	−5.3	−0.7
1993	−6.3	3.1	−3.2
1994	−19.1	−0.7	−19.8
1995	−1.0	0.0	−1.0
Cumaulative changes (1988−95)	−42.3	8.8	−33.5

Sources: Data provided by the Omani authorities; and Fund staff estimates.

1/ Unweighted average unit labor cost of a representative sample of three industries and two service sectors.
2/ Represents the rate of change of actual real wages (nominal wages adjusted by the consumer price index), since no productivity gains are assumed to have taken place during this period.

CHART 18
OMAN
UNIT LABOR COSTS IN SELECTED INDUSTRIES, 1988–95

(1988=100)
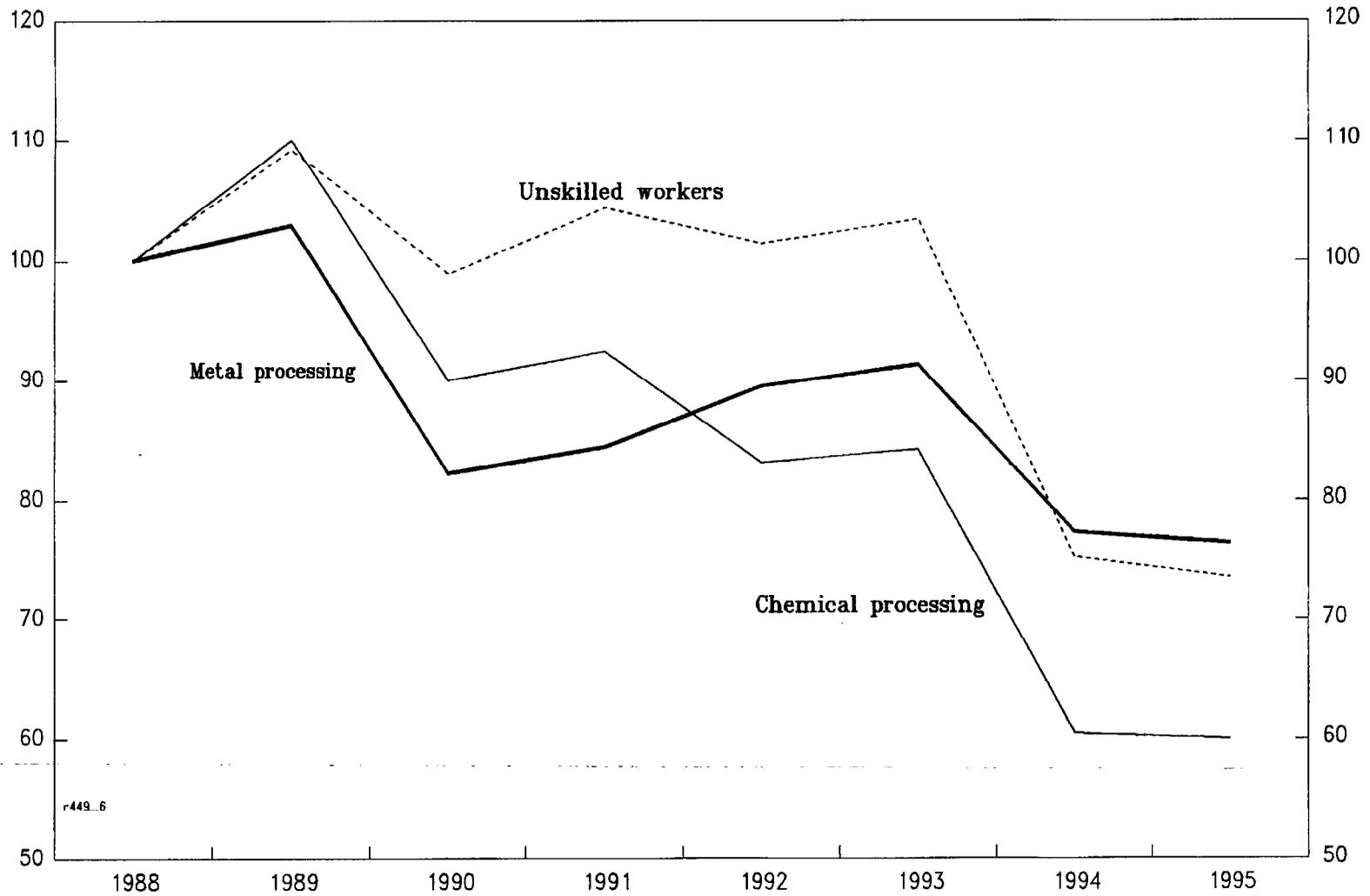
Unskilled workers

Metal processing

Chemical processing

r449_6

Other structural reforms

185.   On the structural front, Oman recently introduced some measures that would encourage foreign investment and enhance the role of the private sector. Recent amendments to the corporate and security market tax laws—reducing to some extent the differentiation between foreign and domestic residents—were designed to encourage foreign participation in all economic activities and hence broaden the non-oil production and export base. These measures have not had the time to have any effect on the performance measures and the adjustment to foreign shocks.

E. Concluding Observations

186.   Despite the negative terms of trade shocks that took place in the 1980s and 1990s, Oman's economy performed well in terms of buoyant growth rates, price stability, and high standard of living of the population. Counter cyclical fiscal policies—the increase in deficit being higher than the terms of trade loss—were used to shield the economy from these adverse exogenous shocks which prevented/postponed adjustment in domestic and external sector imbalances. Accordingly, economic response to the shocks—measured in terms of import intensity, economic compression, and non-oil export growth—were modest. The ability to carry out expansionary fiscal policy despite the terms of trade shock was facilitated by the previous accumulation of SGRF reserves and the government's capacity to borrow externally. The depreciation of the U.S. dollar in the world exchange market and the flexibility of expatriate wages have also contributed in responding to the terms of trade shocks. Significant depreciation of the exchange rate in real effective term—despite the limited use of the exchange rate policy--contributed to a substantial increase in non-oil exports. However, because of Oman's very low export base, the quantitative response in relation to GDP was rather modest. The expansionary fiscal stance through its stimulatory effect on domestic demand prevented the expected adjustment in the demand for imports.

187.   This lack of adjustment has left Oman's economic structure broadly unchanged and made it more vulnerable to future external shocks. Given the significant loss of SGRF assets and their investment income and because of accumulation of external debt in recent years, the government's ability to withstand pressures became limited and Oman's vulnerability to external shocks has accentuated. Unless the remaining structural imbalances are addressed by appropriate policies, future shocks could have more adverse implications on the economy. Some lessons are drawn to deal with the challenges ahead.

188.   First, maintaining a fixed exchange rate regime and using the exchange rate as a nominal anchor in an open trade and capital account system carries with it a huge responsibility for fiscal, monetary, and wage policies. Although the role of monetary policy is constrained, a prudent approach to monetary growth would be needed to ensure price and wage rate stability and hence keep the pressure off the real effective exchange rate. An

appropriate level of the latter would be very important for diversification and the promotion of non-oil exports.

189.   Second, fiscal policy is critical in the adjustment to external shocks. Contractionay fiscal policy would not only reduce import intensity and increase economic compression, but would also enhance the role of the private sector and increase investment. Structural weakness of the budget would need to be addressed by streamlining current expenditures. While investing in "white elephant" projects should be avoided, public sector development expenditures should not be jeopardized particularly those related to infrastructures given their positive impact on private sector investment. On the revenue side, the non-oil revenue base should be broadened to reduce the economy's vulnerability to terms of trade shocks.

190.   Third, improving the functioning of the labor market by reducing its segmentation and enhancing wage flexibility across sectors and nationalities is a prerequisite for stimulating private sector investment (particularly foreign), increasing efficiency, and maintaining competitiveness. This would require removal of the remaining labor market distortions and a rationalization of the public sector benefit structures that currently make job seekers biased in favor of the public sector.

191.   Finally, Although Oman began to deregulate and streamline procedures for foreign investment, there are still many impediments related to the degree of ownerships, employment policies and quotas, and licencing formalities that are not conducive to foreign investment. Removal of the remaining barriers would enhance diversification and increase the resiliency of the economy to external shocks. A pro-business attitude with an open border policy combined with overall macroeconomic stability are key factors in mobilizing private sector domestic and foreign investment.

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