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Jordan: Selected Issues and Statistical Appendix

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JORDAN

Selected Issues and Statistical Appendix

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Approved by Mohsin S. Khan

March 17, 2004

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List of Acronyms

AIIE	Aqaba International Industrial Estate
APC	Arab Potash Company
ASEZA	Aqaba Special Economic Zone
ATC	World Trade Organization Agreement on Textiles and Clothing
BOP	Balance of Payments
CBJ	Central Bank of Jordan
CD	Certificate of Deposit
DSA	Debt Sustainability Analysis
EBIDTA	Earnings before Interest, Dividends, Tax, and Amortization
EJADA	Euro-Jordanian Action for the Development of Enterprise
EPU	Executive Privatization Unit
FDI	Foreign Direct Investment
FSAP	Financial System Stability Assessment
FTA	Free Trade Agreement
GNI	Gross National Income
GST	General Sales Tax
HIPC	Highly Indebted Poor Countries
HEIS	Household Expenditure and Income Survey
IAS	International Accounting Standards
IIT	Intra-Industry Trade
IPP	Independent Power Producer
JGATE	Jordan Garment, Accessories and Textiles Exporters Association
JUSBP	Jordan-United States Business Partnership
MEFP	Memorandum on Economic and Financial Policies
MENA	Middle East and North Africa
NAF	National Aid Fund
NPL	Non-Performing Loans
NPV	Net Present Value
ODA	Official Development Assistance
QIZ	Qualified Industrial Zones
PSET	Plan for Social and Economic Transformation
PSRL	Public Sector Reform Loan
R&D	Research and Development
S&P	Standard & Poors
SDRs	Special Drawing Rights
SITC	Standard International Trade Classification
SSC	Social Security Corporation
TFP	Total Factor Productivity
TSA	Treasury Single Account
WEO	World Economic Outlook
WTO	World Trade Organization

I. OVERVIEW

1. Jordan's economy today is radically different from that in the early 1990s. Prudent macroeconomic policies and effective structural reforms over the last decade have transformed Jordan from an inward-oriented, mostly state-controlled, and highly indebted to an export-oriented economy where the private sector is the primary engine of growth. Significant strides have been made in lowering the initially unsustainable public debt burden to sustainable levels and in reducing high budget deficits. The reform agenda, however remains unfinished, and growth has suffered from regional uncertainties.

2. The common thread running through the chapters of this Selected Issues paper is that although substantial progress has been made in macro stabilization, strengthening of the balance of payments, debt reduction, fiscal consolidation, and the development of social institutions, Jordan continues to face significant challenges over the medium-term. Jordan needs to realize its growth potential, reduce its still high public debt burden, and restrain its high budget deficits. Other challenges emanate from Jordan's upcoming graduation from Fund support, and the elimination of textile quotas under the WTO. A brief summary of the chapters follows.

3. Chapter II provides an overview of the macroeconomic developments and related policies of the last decade. It focuses on three aspects of reforms: macroeconomic stabilization and growth, trade liberalization, and privatization, which have been pivotal in the transformation of the Jordanian economy in the last decade. It points to the benefits of macroeconomic stability for increased confidence in the Jordanian dinar and a resumption of growth. It elaborates on the linkages between trade reform initiatives and the recent surge in export activity. It finally discusses the privatization program and improvements in the business environment as ways to attract foreign direct investment. The chapter concludes that, notwithstanding the difficult regional situation, Jordan is likely to continue to reap substantial benefits from the reforms of the 1990s for the foreseeable future.

4. Chapter III reviews the key fiscal challenges Jordan faced in fiscal policy formulation over the 1990s and concludes that, although progress has often been slow and difficult at times, both the fiscal deficit and the debt burden have been declining toward sustainable levels. Using a simple growth accounting framework, the chapter identifies the factors that contributed to Jordan's success in addressing the challenge of fiscal sustainability. It proceeds to review the progress made in enhancing the flexibility and effectiveness of fiscal policy. It also reviews how the goal of fiscal sustainability impacted the capacity of fiscal policy to smooth the volatility in economic activity and contribute to short-term macroeconomic management.

5. Chapter IV examines the path of Jordan's external debt and the government's debt management strategy over the last decade, and attempts to explain the dynamics of the external debt burden using a balance of payments accounting framework. The paper also uses

cross-country analysis to assess the relative scale of the external debt burden, and further addresses the issue of sustainability over the medium term. The analysis suggests that due to proper demand management policies, Jordan's external current and capital account balances have shifted to levels consistent with a sustained reduction in external debt. The nominal increase in external debt in recent years was primarily attributable to the authorities' efforts to build-up a comfortable reserve cushion. However, its debt burden appears manageable under all but the most extreme external shocks.

6. Chapter V outlines a medium-term fiscal strategy for Jordan in order to achieve public debt reduction targets. The paper evaluates Jordan's performance in fiscal consolidation and debt reduction under the current Stand-by Arrangement. It reassesses the outlook for public debt in light of recent developments. It then identifies and discusses fiscal priorities for the medium-term in order to achieve public debt targets and attain debt sustainability.

7. Chapter VI tracks Jordan's significant progress over the past decade in developing social protection programs and the resulting gains in social indicators and in poverty reduction. The sharp deterioration in poverty levels brought on by the 1988–89 economic crises underscored the need for a formal social protection program in Jordan. The chapter discusses the government's strategy for developing such a program which was based on three pillars: (i) a state-funded social safety net for the poor and vulnerable segments of society; (ii) a basic contributory social security system that would provide a comprehensive coverage for all workers in the economy; and (iii) a well targeted and efficient public spending system for health and education, ensuring equal access to all citizens with an emphasis on underdeveloped areas. The conclusions then outline a future reform agenda.

8. Chapter VII discusses Jordan's prospects for accessing international capital markets against the background of its upcoming graduation from Fund-supported programs. Despite some recent upgrades, Jordan's current sovereign credit ratings are two notches short of 'investment grade' and will need to improve in order to ensure uninterrupted access to international capital markets and favorable terms on market borrowing. The paper begins by providing an overview of the methodologies of the major international rating agencies and proceeds to apply them to Jordan, first by reviewing progress to date compared with other, similarly-rated countries, then by discussing issues related to private sector balance sheets, and finally by attempting to outline a roadmap to the investment grade. The paper concludes that Jordan's macroeconomic framework and debt management strategy are consistent with further ratings upgrades and, if progress is sustained on these fronts, Jordan could be in contention for investment grade status within a few years.

9. Chapter VIII aims to assess the sustainability of the recent export boom by considering not only macroeconomic developments, but also the micro-foundations of export growth. It reviews the main indicators of Jordan external competitiveness, against the background of recent export developments. It then analyzes the primary supply and demand sources of comparative advantage that are likely to shape the medium-term export prospects of key sectors of the Jordanian economy. Finally, it provides a baseline medium-term outlook

for Jordan's exports, and estimates of the sensitivity of its external sector prospects to the impact of the elimination of apparel and textile quotas under the WTO. The analysis suggests that Jordan is likely to continue to sustain favorable external sector prospects over the medium-term, provided some remaining supply constraints are addressed.

II. Stabilization and Structural Transformation of the Jordanian Economy[1]

A. Introduction

10. In 1993, the Jordanian economy was just recovering from a devastating exchange rate and banking crisis that nearly halved the living standard of the average Jordanian and left the government submerged in public debt. The economy had barely withstood the negative impact of the Gulf war and was struggling to absorb the large influx of Jordanian refugees that were expelled from Kuwait following the war. External trade was highly regulated and merchandise exports were mainly concentrated in mining and agricultural products. At the same time, the government controlled a significant share of industrial production and regulated most commodity prices, with significant distortions in the relative price structure.

11. A decade later, the Jordanian economy looks substantially different. Despite the continued negative effects of the Palestinian-Israeli conflict and the recent disruption associated with the war in Iraq, economic growth is steadily rising and the export sector is booming. The structure of economic activity is shifting in support of export-led growth, while domestic demand, which in the past was the main source of growth, has so far lagged behind. The government has privatized most state-owned enterprises and freed most commodity prices. More important, Jordan is slowly gaining the reputation in the region of a place for foreign investors to do business. Once the regional security situation is resolved, the potential for economic growth will be significantly higher.

12. The main contention of this paper is that the transformation of the Jordanian economy over the last decade can be attributed to a large extent on the economic reforms implemented by the government with support from the Fund. These reforms have aimed at (i) stabilizing the economy, so as to foster growth; (ii) liberalizing foreign trade and domestic prices; (iii) reducing public debt; and (iv) privatizing state-owned enterprises. These reforms have, in turn, brought about a structural transformation that is just beginning to bear fruit, in terms of higher export-led growth and more foreign direct investment. To the extent that the reform momentum continues and that the regional security situation improves, growth should increase further and make a serious dent in poverty and unemployment.

13. The chapter is organized as follows. Section B presents evidence on the stabilization and structural transformation of the Jordanian economy in the last decade. Section C discusses the main policies that have brought about this transformation, namely macroeconomic stabilization, trade liberalization, and privatization (fiscal consolidation is discussed in Chapter III). Section D gives a brief overview of the remaining policy challenges from a Fund perspective. In this section, the paper also briefly discusses the impact of the war in Iraq.

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[1] Prepared by Ahsan Mansur and Joannes Mongardini.

B. Evidence of Stabilization and Structural Transformation

14. Evidence of the stabilization and the structural transformation of the Jordanian economy in recent years is widespread. Even a casual observer visiting Amman after 10 years would be hard pressed not to recognize the reorientation of economic activity in favor of foreign trade, tourism, and other export-oriented services. Indeed, it is not only the continued expansion of first class hotels that is changing the landscape of the city, but also of internationally-renowned medical hospitals, universities, training centers, and regional trade fairs. More important, this reorientation is spreading outside of Amman, with the development of the qualified industrial zones (QIZs),[2] the Aqaba Special Economic Zone, and industrial development in the north of the country. The structural change in the economy seems to be widespread, both geographically and in terms of economic sectors.

15. This section covers some of the evidence of structural transformation. It focuses on the following points: (i) macroeconomic stabilization and the improved confidence in the Jordanian dinar; (ii) the increasing importance of the export sector; and (iii) the evidence from a growth accounting exercise. The main macroeconomic and financial indicators for the last 11 years are presented in Table II.1. Overall, the economy has undergone a transformation from an inward-oriented to an export-oriented economy led by a dynamic private sector for the reasons addressed in the following section.

Stabilization

16. There is a general consensus in the economic literature that macroeconomic stabilization is essential for sustainable and equitable growth. The empirical literature has convincingly shown that high inflation is harmful for growth[3] and the development of the financial sector.[4] In addition, high inflation is shown to have a significant negative impact on the poor, as it taxes lower income groups disproportionately more than higher income groups.[5] For small developing countries, the achievement and maintenance of macroeconomic stability poses the additional challenge of choosing appropriate monetary and exchange rate policies that are consistent with the ultimate goal of economic development.[6]

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[2] Qualified industrial zones (QIZs) are industrial estates in Jordan, whose products enjoy special duty- and quota-free access to the U.S. market. This special access was approved by the U.S. Congress in 1996 as an incentive for economic cooperation between Jordan and Israel following the 1994 Peace Agreement. Products produced in the QIZs must have a minimum Jordanian and Israeli input to qualify for special access.

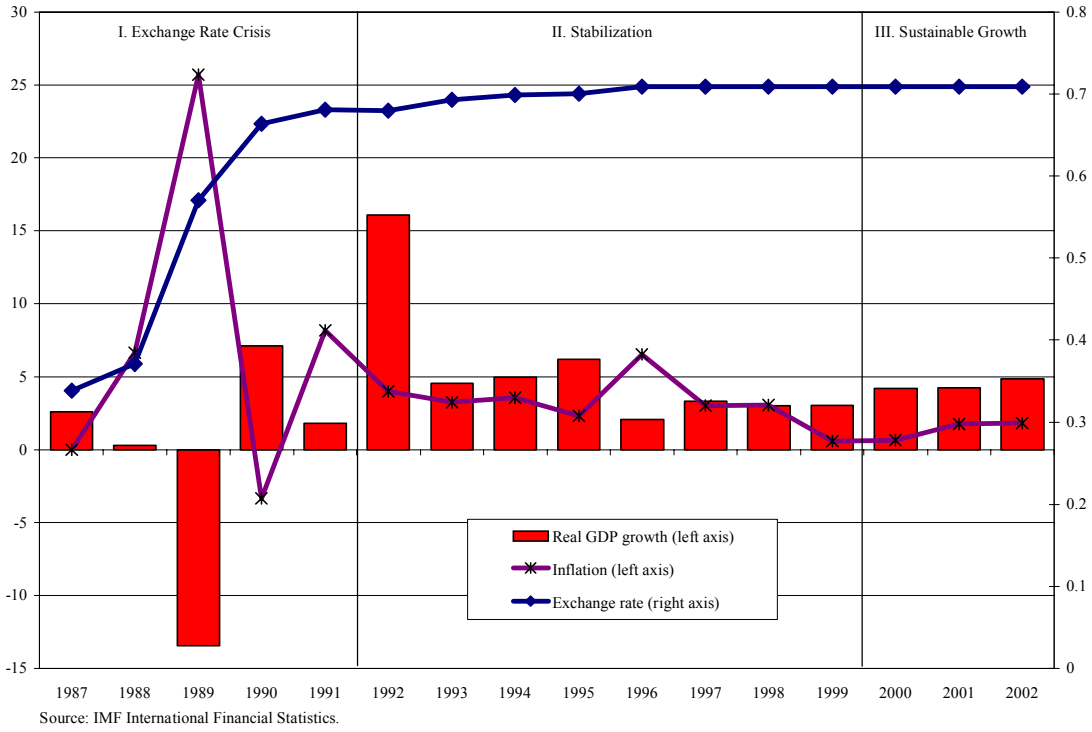
[3] See Bruno and Easterly (1998), Ghosh and Phillips (1998), Khan and Senhadji (2000), and IMF (2001).

[4] See English (1999) and Boyd, Levine, and Smith (2002).

[5] See Easterly and Fischer (2000) and Romer and Romer (1998).

[6] See Mussa and others (2000).

Figure II.1. Jordan: Macroeconomic Developments, 1987–2002



Source: IMF International Financial Statistics.

17. Jordan's experience since the late 1980s is an example of the importance of macroeconomic stability (Figure II.1). The exchange rate crisis of 1989—which forced a nominal devaluation of almost 50 percent against the U.S. dollar—had a severe adverse impact on Jordanian living standards, particularly of the poor. In 1989 alone, real GDP contracted by 13 percent, while inflation jumped to over 25 percent. Notwithstanding a significant recovery in 1992, the negative impact of the crisis was long lasting. Per capita GDP fell from $2,237 in 1987 to $1,404 in 1993, while unemployment nearly doubled to about 20 percent. The most damaging effect was on poverty: the percentage of the population below the poverty line increased from 3 percent in 1986–87 to 14.4 percent in 1992, before declining to around 11.7 percent in 1997.[7]

[7] Shaban, Dina, and Al-Naimat (2001).

Table II.1. Jordan: Selected Economic Indicators, 1993–2003

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002 Prel. Est.	2003
					(Annual percentage changes)						
Output and prices											
Real GDP at market prices	4.5	5.0	6.2	2.1	3.3	3.0	3.1	4.1	4.2	5.0	3.2
GDP deflator at market prices	2.8	6.9	1.9	2.1	1.2	6.0	-0.2	-0.2	1.1	0.4	1.9
Nominal GDP at market prices	7.4	12.2	8.2	4.2	4.6	9.2	2.8	3.8	5.4	5.4	5.1
Consumer price index (annual average)	3.3	3.6	2.3	6.5	3.0	3.1	0.6	0.7	1.8	1.8	2.3
Consumer price index (end of period)	1.6	5.1	4.1	2.6	6.3	-0.8	2.8	-1.9	3.8	0.5	3.6
Nominal GDP at market prices (in millions of JD)	3,884	4,355	4,715	4,912	5,138	5,610	5,767	5,989	6,310	6,653	6,991
					(In percent of GDP)						
Inverstment and savings											
Gross domestic investment	36.6	33.3	33.0	30.5	25.7	21.8	21.6	22.2	20.8	22.5	22.3
Government	6.3	6.0	7.0	7.3	5.6	6.0	5.8	5.2	5.8	6.7	8.8
Other	30.3	27.3	26.0	23.2	20.1	15.8	15.9	16.9	15.0	15.8	13.5
Gross national savings	25.6	26.2	27.2	27.3	26.1	22.1	26.6	22.9	20.8	27.0	33.3
Government	5.7	4.6	3.1	4.4	3.1	0.1	2.2	0.5	2.2	1.7	7.7
Other	19.9	21.6	24.1	22.9	23.0	22.1	24.4	22.4	18.6	25.3	25.6
Savings-investment balance	-12.0	-7.1	-3.8	-3.2	0.4	0.3	5.0	0.7	0.0	4.5	11.1
Government	-0.5	-1.4	-3.9	-2.8	-2.5	-6.0	-3.5	-4.7	-3.7	-5.0	-1.1
Other	-11.5	-5.7	0.1	-0.4	2.9	6.2	8.5	5.4	3.6	9.4	12.1
Fiscal operations											
Revenue and grants	34.8	32.6	34.4	33.6	31.5	30.4	31.0	30.1	30.5	30.2	35.9
Of which: grants	4.1	4.0	3.6	4.5	4.4	3.7	3.5	4.2	4.3	5.2	12.1
Expenditure and net lending (incl. off-budget accounts)	36.4	34.5	36.0	36.6	34.5	36.8	34.9	34.8	34.2	35.2	37.0
Overall fiscal balance (after grants)	-0.5	-1.4	-3.9	-2.8	-2.5	-6.0	-3.5	-4.7	-3.7	-5.0	-1.1
Government and government guaranteed debt 1/	...	...	...	...	94.3	104.5	111.3	100.0	97.0	100.5	101.5
Of which: external	...	...	...	...	89.2	89.3	95.5	84.2	78.7	80.4	77.1
External sector											
Current account balance (after grants)	-11.5	-6.4	-3.8	-3.2	0.4	0.3	5.0	0.7	0.0	4.5	11.1
					(Annual percentage changes in U.S. dollar terms)						
Merchandise exports	2.3	14.1	24.4	2.6	1.0	-1.8	1.6	3.7	20.8	20.8	8.2
Merchandise imports	-6.6	-4.6	9.5	16.2	-4.4	-6.7	-3.3	23.7	5.6	3.5	10.8
					(Changes in percent of beginning of period broad money)						
Monetary sector											
Net foreign assets	-1.7	2.8	2.5	0.4	8.1	1.9	10.4	12.6	1.8	5.4	11.4
Broad money	8.3	8.1	6.5	0.3	7.8	7.6	12.0	10.2	5.8	7.0	11.0
Memorandum items:											
Nominal per capita GDP (in U.S. dollars)	1,404	1,507	1,569	1,559	1,575	1,664	1,660	1,675	1,717	1,761	1,800
Gross usable international reserves (in U.S. dollar millions) 2/ 3/	595	411	407	678	1,673	1,149	1,970	2,742	2,565	3,474	4,745
In months of prospective imports of GNFS 4/	1.9	1.2	1.1	1.8	4.6	3.3	4.8	6.4	6.0	7.8	9.7
As percent of JD broad money	10.6	6.8	6.6	11.1	25.0	16.9	25.6	33.2	30.1	38.1	46.4
Net International Reserves (in millions of U.S. dollars) 2/	612	463	534	442	1,508	967	1,463	2,275	2,111	3,032	4,436
U.S. dollar per Jordanian dinar (period average)	1.44	1.43	1.43	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41

Sources: Jordanian authorities; and Fund staff estimates and projections.

1/ Domestic debt is net of government deposits with the banking system, and external debt includes collateralized Brady bonds.

2/ Net of short-term foreign liabilities and excluding commercial banks' foreign currency deposits with the Central Bank of Jordan.

3/ Excludes pledged assets under the 1993 commercial debt rescheduling agreement and the yearly change in foreign currency swaps.

4/ Imports of goods and nonfactor services, excluding imports for re-export, in subsequent 12 months.

Table II.2. Jordan: Selected Macroeconomic Indicators, 1987–2003

	I. Exchange Rate Crisis, 1987–91	II. Stabilization, 1992–99	III. Sustainable growth, 2000–03
Real GDP growth			
Average	-0.3	5.4	4.1
Standard deviation	7.8	4.5	0.8
Annual exchange rate depreciation			
Average	15.8	0.5	0.0
Standard deviation	22.3	0.7	0.0
Inflation			
Average	7.4	3.3	1.7
Standard deviation	11.2	1.7	0.7

Source: IMF International Financial Statistics.

18. Following the crisis, macroeconomic stability and confidence in the Jordanian dinar were restored only after a number of years. The initial stabilization, based on a peg of the Jordanian dinar to a basket of currencies comprising the Fund's Special Drawing Rights (SDR), was effective in moderating inflation (Table II.2). However, growth and inflation remained quite uneven, as shown by the standard deviation of the two variables. Confidence in the Jordanian dinar took longer to restore and only took root after the switch of the peg to the U.S. dollar in November 1995. Confidence in the domestic currency under the peg to the U.S. dollar can best be seen in terms of the stock of international reserves of the central bank. As shown in Figure II.2, the official reserves of the Central Bank of Jordan (CBJ) have increased ninefold since the switch of the peg to the U.S. dollar and reached $4.7 billion at end-2003. As the increase in reserves gradually alleviated concerns about macroeconomic stability, monetary policy could slowly be relaxed, yielding the lowest short-term interest rates on record. Such a strengthening of confidence has created an enabling environment for sustainable growth.

A more export-led economy

19. The most notable evidence of structural transformation in the Jordanian economy comes from the rapid growth in merchandise exports over the last 2½ years. For most of the 1990s merchandise exports had virtually stagnated, calling into question the competitiveness of the manufacturing sector. Starting in the second half of 2000, however, exports—especially nontraditional exports like textiles and apparel, pharmaceuticals, and some agricultural exports—have expanded rapidly. While a significant portion of the rapid growth in exports is associated with the duty- and quota-free access to the U.S. markets from the QIZs (Box II.1), exports from other areas of Jordan have also expanded rapidly, although at a slower pace. The geographical destination of exports has also widened significantly, with

exports to the U.S. market increasing tenfold over a span of four years. Overall, exports grew by an average of 20 percent per year in 2001–02. This has increased the share of merchandise exports in the economy, from 22 percent of GDP in 1993 to 30 percent in 2002.

Box II.1. Jordan—Export Performance in 2001–02

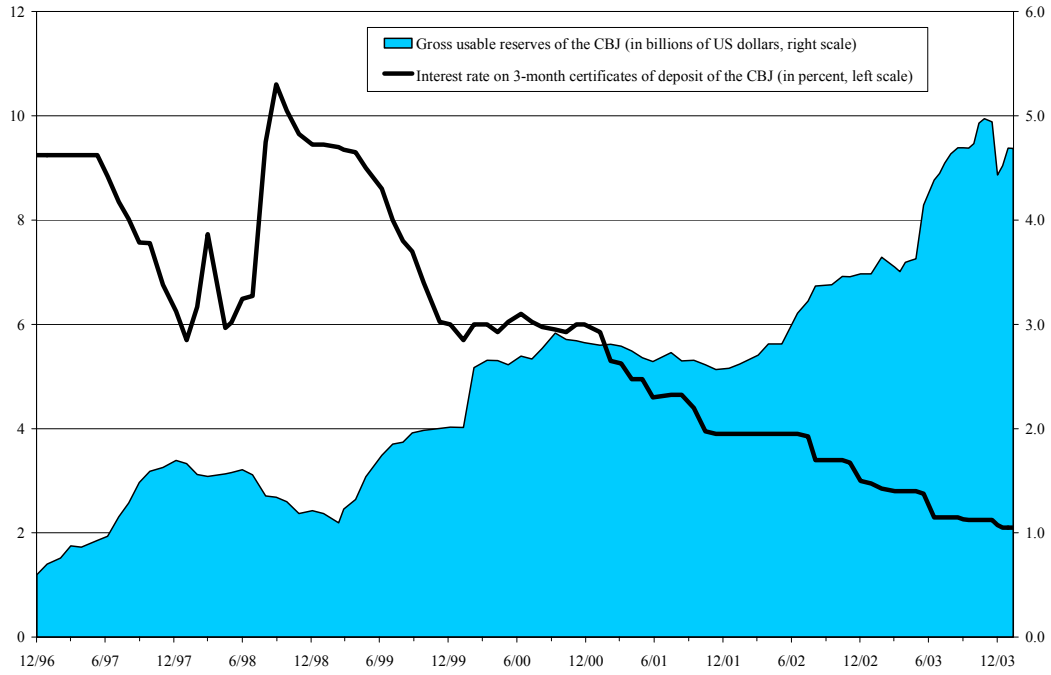
Jordan's export growth in 2001 and 2002 was very strong—estimated at about 20.8 percent each year, compared to an annual average growth of 1 percent in the preceding five years. The export boom has come despite a deterioration in the terms of trade in 2001–02. Trade liberalization, combined with such preferential market access schemes as the QIZs, appear to have been the engine behind this sudden improvement in export performance.

The legal provisions for QIZs were established in 1996 when the United States offered special duty- and quota-free access to goods produced in designated zones with specified minimum Jordanian, Israeli, and Palestinian contents. QIZ status is generally granted to an industrial estate, and manufacturers in these estates must seek approval of their products from a committee jointly chaired by Jordan and Israel with a U.S. observer. To meet eligibility requirements, the product must be "substantially transformed" with 35 percent of its value added in Israel, a Jordanian QIZ, or the West Bank/Gaza. Of this 35 percent, a minimum of 11.7 percent must be added in a Jordanian QIZ, 8 percent in Israel (7 percent for high tech goods), and the remaining 15.3 percent from a QIZ in Israel or West Bank/Gaza; or Jordanian and Israeli manufacturers must contribute at least 20 percent of the total cost of production). Textiles and apparel have been the central focus of activity in these zones, since the QIZ circumvents an otherwise onerous U.S. duty of up to 22 percent and is exempt from quotas established under the WTO Multifibre Agreement. However, QIZs were initially slow to establish and begin operations. While the legal framework was agreed upon in 1996, The first QIZ was designated in 1998. Nine more QIZs have been designated since that time, and most of the plants operating in these zones have only recently begun full-scale production. The establishment of two additional zones was approved during the World Economic Forum in June 2003.

The QIZs have helped to diversify exports and contributed to export growth. Over the last five years, Jordan's exports have shifted away from reliance on mining, in favor of textiles, apparel, footwear, pharmaceuticals, and light manufactures. Much of the rapid growth in overall exports seen in 2001 and 2002 is also captured by these goods, and the most rapidly growing industrial base for such merchandise is the QIZs. Jordan's QIZ exports surged as a large number of new companies completed installation and came on line in 2000–01. Official data indicate that exports from the seven largest QIZs rose from $2.4 million in 1999 to $382 million in 2002. These seven zones have reportedly created 26,000 new jobs.

The U.S.-Jordan Free Trade Area Agreement (FTA) has given rise to some concern that companies operating in the QIZs will lose their competitive edge. But there are substantive differences between the market access granted under the FTA and that under the QIZ scheme. First, the FTA is a phased arrangement, with duties on a number of products eliminated only after 10 years. Products exported from the QIZs, on the other hand, have immediate duty and quota free access. Second, the rules of origin between the two schemes are significantly different. Under the FTA, goods must have a minimum of 35 percent value added in Jordan to qualify for duty-free access, versus 11.7 percent under the QIZ scheme. The combination of phased access and tougher value added requirements suggests that QIZs will retain their attractiveness to investors for some time.

Figure II.2. Increased Confidence in the Jordanian Dinar, 1997–2003



Source: Central Bank of Jordan.

20. The growth in merchandise exports stands in contrast to the weakening of global trade during the last three years. World exports grew by 5.7 percent during that period, mainly reflecting the slowdown in advanced economies in 2001–02. As a result, Jordanian exports have increased their market share and now account for 21 percent more of total world exports than in 1993. Over the same period, Jordan had one of the fastest growth in exports in dollar terms in the MENA region in 2001–03, despite the negative impact of the war on Iraq (Table II.3).

Table II.3. Merchandise Export Growth, 1993–2003
(Cumulative growth rates in U.S. terms)

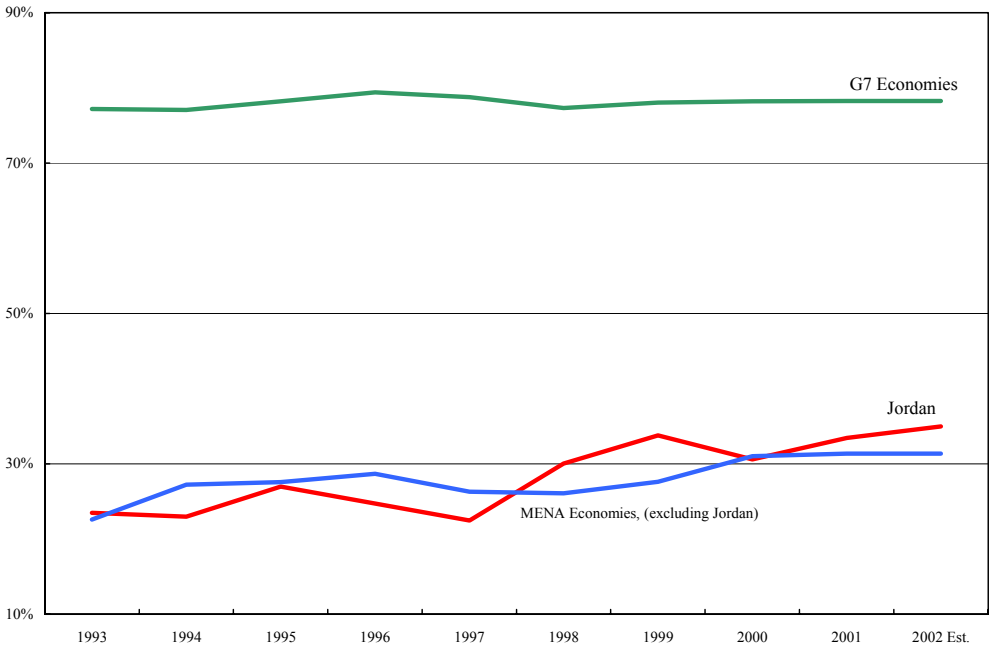
	1993-2000	2001-03
Jordan	6.2	16.6
Egypt	7.7	8.9
Lebanon	4.5	19.5
Syria	5.8	5.4
Algeria	9.8	5.2
Tunisia	5.5	11.3
Morocco	4.5	6.4
MENA (excluding Jordan)	9.6	4.2

Source: IMF World Economic Outlook database.

21. The booming export sector is also indicative of Jordan's growing level of integration with the world economy. One measure of integration is given by the index of intra-industry trade (IIT), which provides a quantitative statistic of the degree of specialization in global

production, or, in a broader sense, the degree of complexity of trade linkages between one country and the rest of the world.[8] The IIT measures the percentage of total trade that occurs within the same three-digit SITC industry. Based on data available through the United Nations Comtrade database,[9] Figure II.3 presents the IIT for Jordan, the G7 and the Middle East and North Africa (MENA) excluding Jordan. It clearly shows the increasing integration of the Jordanian economy into global trade in the last ten years, with the IIT index increasing by 10 percentage points to 35 percent. Most of the increase is concentrated in the machinery and transport industries, which are key to the development of the industrial sector in Jordan. However, it is also clear that there is great potential for further integration, as the IIT of the G7 economies has hovered around 80 percent for the last decade.

Figure II.3. Greater Integration in the World Economy:
Intra-Industry Trade Index, 1993–2002



Source: U.N. Comtrade Database and IMF staff estimates.

[8] The IIT index is defined as $IIT = \frac{\sum_{i=1}^{n}(X_i + M_i) - \sum_{i=1}^{n}|X_i - M_i|}{\sum_{i=1}^{n}(X_i + M_i)}$, where X_i are total exports in product category i and M_i are total imports in product category i. For the theory behind the index of intra-industry trade, see Bhagwati and Davis (1994). For an application to Arab countries, see Havrylyshyn and Kunzel (1997).

[9] The United Nations Comtrade Database is available at http://unstats.un.org/unsd/comtrade/default.aspx.

Increases in productivity

22. One disappointing aspect of economic growth in the 1990s was the lack of improvements in productivity. According to studies done by the World Bank in 1994 and 2001, most of the economic growth in the 1990s could be accounted for by the expansion of capital (both physical and human) and the labor force.[10] This implied that total factor productivity (TFP)—the residual in a Solow growth accounting model[11]—had hardly increased. In fact, the evidence for the second half of the 1990s pointed to unchanged TFP, which called into question the competitiveness of the Jordanian economy.

Table II.4. Total Factor Productivity Estimates, 1981–2002[12]

	Average Annual Growth Rates				Growth Contributions			
	GDP	Physical Capital	Human Capital	Labor Force	Physical Capital	Human Capital	Labor Force	TFP
Period								
1981–85	6.4	6.1	9.4	5.1	2.7	3.1	1.2	-0.6
1986–90	-0.9	6.5	3.7	4.8	2.8	1.2	1.1	-6.1
1991–95	7.0	3.6	5.4	7.2	1.6	1.8	1.7	2.0
1996–00	3.1	2.8	2.9	4.1	1.2	1.0	0.9	0.0
2001–02	4.6	2.6	2.6	4.1	1.2	0.8	0.9	1.7

Source: Jordanian authorities, Barro and Lee (2002), and Fund staff estimates.

23. An updated growth accounting exercise points to a moderate rebound in productivity in 2001–02. Table II.4 presents the updated results of the growth accounting exercise for the period 1981–2002, based on the same methodology and factor shares of production as in

[10] See World Bank (1994, 2001).

[11] See Mankiw, Romer, and Weil (1992) and Bosworth, Collins, and Chen (1995) for an application with three factors of production (human capital, physical capital, and labor force).

[12] The source for data on growth and capital investment is the IMF's International Finance Statistics database. The capital stock series is derived through an assumption of a constant depreciation factor of 4 percent. Data on labor force participation is published in the World Bank's World Development Indicators database. Data on human capital is derived from estimates for Jordan published in Barro and Lee (2001). The data was extrapolated for 2001–02 using the same growth rate as in the period 1996–2000.

Maciejewski and Mansur (1996).[13] The results show that, while the second half of the 1990s witnessed no growth in productivity, this was reversed in 2001–02, when productivity expansion was the largest contributor to overall growth. This was probably the result of the increased productivity of the export sector, particularly in the QIZ, that lifted overall productivity in the economy. Moreover, it is noteworthy to point out that the years 2001–02 also witnessed the strongest expansion in productivity for the last two decades, with the exception of the early 1990s.

24. Overall, the strengthening of confidence in the Jordanian dinar in the second half of the 1990s, the robust export performance of the last two years, and the rebound in productivity all suggest that the structure of the economy has been transformed. The policies that led to this structural transformation are discussed in the next section.

C. Policies of Stabilization and Structural Transformation

25. The previous section provided evidence of the structural transformation which has become apparent in the last two years. Based on this evidence, this section traces the origin of the transformation to the policies pursued by the Jordanian authorities in the 1990s. While undoubtedly the response and resourcefulness of the private sector in Jordan have been essential ingredients, the importance of the appropriate policies should not be underestimated.

Macroeconomic policies

26. After the crisis of 1989, the first priority of macroeconomic policies was to restore stability and confidence in the Jordanian dinar. The difficulties of macroeconomic management had been exacerbated by the collapse of the third largest bank in August 1989 and a doubling of the external debt burden, which amounted to about twice the level of GDP in 1990.[14] In addition, the Jordanian authorities had to respond to further external shocks, like the Gulf war and the return of Jordanian workers expelled from Kuwait in 1991–92.

27. Within the framework of two IMF Stand-By Arrangements in 1989 and 1992, inflation was brought under control rapidly. As a result, the Jordanian dinar stabilized against the U.S. dollar and the SDR in 1992. The Central Bank of Jordan (CBJ) kept monetary expansion broadly in line with macroeconomic developments, thus holding a tight control on excess liquidity. Initially, monetary policy was enforced through direct controls and high reserve requirements. Over time, the CBJ shifted to indirect controls of monetary policy, notably with the introduction of CBJ certificates of deposit in 1993, a gradual reduction of

[13] Cf. page 17. The factor shares are 0.44 for physical capital accumulation, 0.23 for labor force growth, and 0.33 for human capital accumulation.

[14] Cf. Maciejewski and Mansur (1996).

reserve requirements, and the liberalization of current and capital account transactions. However, confidence in the Jordanian dinar was only fully restored following the decision to peg to the U.S. dollar in November 1995. The peg provided a transparent framework for monetary policy that brought about the gradual strengthening of international reserves and the reduction of interest rates shown in Figure II.2. Inflation also declined to advanced country levels and price stability was fully achieved by 1999.

28. Monetary policy, however, could only be effective to the extent that it was supported by sound fiscal policies. While a detailed discussion of the government's fiscal strategy in the 1990s is covered in Chapter III, the strategy can be summarized here as one that aimed at reducing the heavy debt burden through an appropriate mix of fiscal adjustment and bilateral debt relief. As part of that strategy supported by two IMF extended arrangements in 1994 and 1996, the government increasingly reduced its reliance on direct credits from the CBJ, which were finally barred with the passage of the 2001 Public Debt Law. At the same time, the Ministry of Finance developed a market for its debt instruments that partly contributed to the control of monetary liquidity. In addition, the government successfully negotiated six rescheduling agreements with bilateral creditors through the Paris Club in order to defer the heavy external debt burden, with the last rescheduling approved in July 2002 as an exit rescheduling covering debt service falling due through 2007.

29. The authorities' macroeconomic policies were severely tested during the prolonged illness and eventual death of H.M. King Hussein in 1998–99. The uncertainties surrounding the illness and the succession to the throne led to a loss of confidence in the Jordanian dinar and a change in favor of foreign currency deposits. As a result, international reserves of the CBJ were nearly halved to about $1 billion in early 1999, which called into question the stability of the peg. The authorities acted quickly. With the support of a new extended arrangement with the IMF, the CBJ doubled short-term interest rates to defend the peg. Fiscal policy was tightened significantly, resulting in a reduction of the fiscal deficit of the central government to 3½ percent of GDP in 1999, compared to 6 percent in 1998. Overall, the authorities' forceful actions averted a new crisis and quickly restored confidence in the Jordanian dinar.

Trade liberalization

30. Trade liberalization has resulted in a greater integration in the world economy. In successive rounds of liberalization, quantitative barriers to imports and tariffs were eliminated or reduced on a multilateral or regional basis, opening Jordan to world markets. Simultaneously, the Jordanian government pursued bilateral free trade agreements, including with the United States and the European Union, that provided exporters with preferential market access to the largest markets in the world. Overall, these policies have produced one of the most open and dynamic export-led economies in the region.

31. The comparison with the import-substitution policies of the past is striking. Until the late 1980s, Jordan had a high and complex tariff structure, with a maximum tariff rate of

318 percent and an average weighted tariff rate of 19 percent. Widespread exemptions implied that 51 percent of all imports were exempt from import duty. In addition, about 40 percent of imports were subject to quantitative restrictions. The tariff structure was also characterized by a high degree of variation (the standard deviation was 26.1 percent). Today, Jordan has a simple import tariff structure, with an average weighted import tariff rate of 13 percent, a maximum rate of 30 percent, and a standard deviation of 15.7 percent. Nontariff barriers are limited to the exclusive trading rights for petroleum products, due to expire in 2008. Exemptions from import duties now account for less than 15 percent of total imports. More important, Jordan acceded to the World Trade Organization (WTO) in 2000 with a commitment to gradually reduce tariff and nontariff barriers. In particular, the maximum tariff rate will be reduced to 20 percent by 2010 under the WTO agreements.

32. Multilateral liberalization has been complemented with a series of bilateral trade agreements aimed at increasing market access for Jordanian exports. Beyond the special access granted to the QIZs, Jordan ratified a free trade agreement with the United States in 2001 and an association agreement with the European Union (EU) in 2002. Jordan is also a member of the Arab Free Trade Agreement since 1998, and has signed bilateral free trade agreements with most countries of the MENA region and some European countries that are not yet members of the EU. In addition, the government launched in 2001 an ambitious project, the Aqaba Special Economic Zone, aimed at providing a free-trade zone and a streamlined administration with significant tax and infrastructure incentives (Box II.2).

33. Overall, the trade policies pursued over the last decade have made Jordan an attractive channel for duty- and quota-free access to major world markets. So far, this has become apparent mainly in textiles, apparel, and small manufacturing goods, where investors from Asia have taken advantage of Jordan's market access to circumvent import quotas applied to exports from their own countries. However, the export base is likely to diversify further in the coming years, as Jordan's reputation for foreign direct investment improves and investors realize the potential in other areas of manufacturing. This development potential is substantial, as barriers to trade are phased out and Jordan catches up to the level of trade integration of more advanced economies, as shown in Figure II.3.

Box II.2. The Aqaba Special Economic Zone

The last decade has seen a renewed interest in the free zone concept in the Middle East—stemming in part from the need to spur trade and investment. Despite a near doubling of population, the Middle East's share of world exports, excluding oil, dropped from 10 percent in 1980 to 4 percent in 2001. Similarly, foreign direct investment (FDI) flows to the Middle East were only $4 billion—roughly one-third of annual flows to some of the smaller European economies, such as Sweden, Ireland, or Finland. Another notable factor has been the success of the Jebel Ali Free Zone in Dubai, which has been able to attract some 2,200 international companies, create 35,000 jobs, and generate $4 billion in exports since its establishment in 1985.

Jordan has been one of the more proactive countries in the region with regard to trade and investment liberalization. Perhaps the most ambitious among these schemes is the Aqaba Special Economic Zone (ASEZA), which seeks to marry a free trade zone with a streamlined business and investment environment. Launched in 2001, the ASEZA is a 375 square kilometer area—one of the largest free zones ever created— and is established as a liberalized, low-tax, duty-free, and multi-sector development area. A simplified business environment has been designed with streamlined administration to attract investment and maximize private sector participation in zone operations and development. The project is ambitious—seeking to raise $6 billion in investments and create 70,000 jobs over 20 years.

The zone offers the following benefits: 1) no foreign equity restrictions on investment in tourism, industry, retail, and other commercial services; 2) a regional multimodal transportation hub, with a full service seaport and international airport; 3) business income tax set at 5 percent (excluding land transport, insurance, and banking, which are taxed at the prevailing rates of 15, 25, and 30 percent, respectively); 3) sales tax of only 7 percent on goods and services sold within the zone, as opposed to the 13 percent general sales tax (GST) paid in the rest of Jordan; 4) no tariffs or import taxes on imported goods for individual consumption and registered enterprises. Registered enterprises also enjoy exemption from the social services tax, annual land and building taxes on utilized property, taxes on distribution of dividends and profits on activities in the ASEZA and outside Jordan; 5) streamlined labor and immigration procedures.

The ASEZA has enjoyed some measure of success so far. The Zone has registered 350 new corporations since its establishment in 2001, and contracted some $1 billion in investments during this time. Roughly $180 million in contracts for land development were signed, shipping through the Aqaba port (by tonnage) increased 23 percent, and transfers to the central government grew by approximately 600 percent in 2002 to JD 6 million (approximately $8.5 million). A new QIZ was also established in early 2003, the Aqaba International Industrial Estate (AIIE), which will capitalize on the combination of easy access to ASEZA port facilities and the duty- and quota-free access to the U.S. market.

Deregulation of commodity prices

34. Another policy challenge facing the Jordanian authorities in the early 1990s was the extensive regulation of domestic commodity prices. These regulated prices included most food staples (including wheat, barley, sugar, rice, milk, meat, etc.) and domestic petroleum

product prices, accounting for an estimated 34 percent of the average consumption basket.[15] The food subsidies were established in 1989–90 with the intent of protecting the poor following the exchange rate crisis, but resulted in substantial distortions of relative prices and a generalized subsidy system that benefited the rich more than the poor.[16] The impact on the budget was also substantial, with the overall cost of food subsidies amounting to over 3 percent of GDP in 1990. The prices of petroleum products had been regulated even before the crisis, reflecting subsidized crude oil received from neighboring Arab countries. The subsidies on petroleum products covered all industrial and commercial uses.

35. The main goal of government policy was to move away from general subsidies in favor of direct transfers to the poor.[17] This involved a gradual increase in commodity prices that was politically very difficult. Most explicit food subsidies were gradually reduced and eliminated in 1999. In addition, the market for two food staples (chaff and barley) was liberalized in 2002, leaving only a small subsidy on wheat. For petroleum product prices, the authorities adopted a policy of gradual price increases to bring prices in line with international market prices over the long run. This has resulted in a gradual freeing of resources for development needs and poverty alleviation. Overall, only 10–15 percent of the average consumption basket is estimated to be currently still regulated.

36. The gradual phasing out of commodity subsidies enabled the government to increase direct transfers to the poor. Transfers to the National Aid Fund—an autonomous public agency established in 1987 to administer direct transfers to the poor—quadrupled as a share of GDP to reach 1 percent of GDP in 2003. In addition, health and education provisions are being substantially expanded under the authorities' Plan for Social and Economic Transformation (PSET) and financial support from bilateral donors.

Privatization and improvements in business environment

37. Privatization has been a key element of Jordan's structural adjustment strategy since mid-1996. Stated objectives of the divestment program have been to enhance economic efficiency, attract domestic and international investment, develop domestic capital markets, and consolidate public finances. Through a combination of strategic sales and public offerings, the program is progressively transferring ownership of virtually all commercial public enterprises to the private sector.

38. The privatization program has benefited from a transparent institutional environment, supported by legislative and regulatory reforms. A higher Ministerial Privatization

[15] Estimated on the basis of current weights of the consumer price index.

[16] Shaban, Dina, and Al-Naimat (2001).

[17] See Chapter VI for a more detailed discussion on the government's food subsidy elimination in the 1990s.

Committee was formed in 1996 to guide the process, and an Executive Privatization Unit (EPU) was established as the main implementing agency. The arrangement was formalized in 2000 with the enactment of a Privatization Law, which created a Privatization Council chaired by the prime minister, transformed the EPU into the Executive Privatization Commission, and established a Privatization Proceeds Fund. Supporting legislation included, inter alia, the Companies Law (1997), the Stock Exchange Law (1997), the Temporary Electricity Law (2002), as well as various intellectual property rights laws.

39. Asset sales commenced in 1998 and have proceeded apace. A 33 percent stake in Jordan Cement Factories was sold to Lafarge in 1998, and the remaining shares were sold in February 2002. A 40 percent stake in the Jordan Telecommunications Company was sold to a consortium of France Telecom and Arab Bank in 2000, and a further 10.5 percent via an initial public offering (IPO) in October 2002; the IPO was successfully completed at a time of deep geopolitical uncertainty, and attracted 10,000 domestic retail investors. Together with smaller divestments, including a stake in the local oil refinery and some side businesses of Royal Jordanian, total proceeds to date have amounted to about $800 million, equivalent to about 8 percent of 2002 GDP, which compares well with other countries in the MENA region over the same period (Table II.5).

Table II.5. Privatization Proceeds in Selected MENA Countries, 1998–2002

	In billions of U.S. dollars	In percent of 2002 GDP
Egypt 1/	2.6	2.7
Jordan	0.8	8.6
Morocco	3.5	8.3
Tunisia	0.9	4.1

Source: Fund staff estimates.

1/ Based on GDP estimates for 2001/02 fiscal year.

40. The privatization program has gone hand in hand with legislative reforms aimed at improving the business environment. Together with the public debt and privatization laws mentioned above, the government has passed legislation in the last two years to accomplish the following objectives: (i) abolish remaining controls on the foreign ownership of property and land; (ii) strengthen the judiciary system and regulatory agencies; (iii) encourage and regulate leasing activities, electronic commerce, and e-government; (iv) streamline the efficiency of government agencies; and (v) strengthen companies' disclosure requirements. Overall, a large number of economic laws have been revised in the last three years to provide a more conducive regulatory environment for a dynamic private sector.

41. The privatization program and the legislative reforms have increasingly made room for a more dynamic private sector. As summarized in Table II.6, various indicators of regulatory quality, government effectiveness, rule of law, corruption, country risk, competitiveness, and business environment, point to Jordan as one of the highest ranked countries in the region. Once again, however, there is also substantial room for improvement, compared to other emerging markets, particularly in South-East Asia.

D. The Challenges Ahead

42. Overall, the substantial policy initiatives implemented over the last decade point to the Jordanian authorities' determination to excel in economic management in order to overcome a very difficult geopolitical situation. Despite the negative impact of the Palestinian-Israeli conflict on the one hand and the U.N. sanctions and the war in Iraq on the other, the authorities have managed to bring about a structural transformation of the Jordanian economy that is beginning to bear fruit.

43. Notwithstanding the achievements of the last decade, substantial challenges remain to complete the transformation of the Jordanian economy. The first and foremost challenge is to improve the living standard of the average Jordanian. Despite a decade of moderate growth, living standards have yet to return to the level they were at before the exchange rate crisis of 1989, and poverty and unemployment remain stubbornly high in the double digit range. In the short term, the main challenge will be to limit the negative impact of the war in Iraq. Over the medium term, the goal of increasing the sustainable level of economic growth will require: (i) continued policy efforts to maintain macroeconomic stability; (ii) further fiscal consolidation so as to reduce public debt; (iii) the deregulation of the market for domestic petroleum prices; (iv) the privatization of the remaining public entities; and (v) continued improvement in the business environment. These policies, together with a further strengthening of social assistance programs, should make a serious dent in poverty and unemployment.

Table II.6. Country Ranking of Selected Indicators of Attractiveness for Foreign Direct Investment

(Percent share of countries with lower score, latest available information)

	WB Regulatory Quality 3/	WB Government Effectiveness 3/	WB Rule of Law 3/	WB Corruption 3/	IEF Economic Freedom 4/	ICRG Country Risk 5/	EIU Country Risk 6/	GCR Competitiveness 7/	WB Business Environ. 8/
Jordan	80	67	73	59	60	54	72	41	79
Egypt	50	62	61	53	33	46	50	...	…
Lebanon	62	51	55	31	40	13	15	…	…
West Bank and Gaza	69	64	64	76	…	…	…	…	70
Syria	20	23	37	22	8	55	23	…	…
Mashreq (average)	*56*	*53*	*58*	*48*	*35*	*42*	*40*	*41*	...
Tunisia	82	88	77	79	56	59	63	58	…
Morocco	71	54	68	70	56	61	67	31	69
Algeria	16	23	14	32	40	29	54	…	…
Maghreb 1/ (average)	*56*	*55*	*53*	*60*	*51*	*50*	*61*	*44*	...
Central Europe 2/ (average)	74	68	73	70	69	72	79	50	71
Malaysia	56	69	64	61	54	74	79	66	91
Korea	62	68	70	69	67	78	90	74	…
Singapore	99	99	98	98	99	98	100	95	…
Sample size	167	159	168	160	156	140	100	80	67
Incl. industrial countries ?	Yes	Yes	Yes	Yes	Yes	Yes	Yes (very few)	Yes	Yes

Sources: International Monetary Fund (2003), p. 11.

1/ Includes Morocco, Tunisia and Algeria.

2/ Includes Czech Republic, Hungary, and Poland.

3/ Aggregate indicators of governance developed in Kaufmann, D. et al., Governance Matters, Policy Research Paper No. 2196, World Bank, 1999; and database available at http://www.worldbank.org/wbi/governance/gov_data.htm, and http://www.worldbank.org/wbi/governance/datasets.htm.

4/ Index of Economic Freedom published by the Heritage Foundation and The Wall Street Journal, 2002. http://www.heritage.org/index/

5/ Composite risk ratings by International Country Risk Guide, October 2002.

6/ Aggregate scores of business environment in the Economist Intelligence Unit's Country Forecast, September 2002.

7/ Growth Competitiveness index published in Competitiveness Report by World Economic Forum, 2002. http://www.weforum.org

8/ Based on results of survey used for the World Bank's World Development Report 1997 as presented by Brunetti, A. et al., in Institutional Obstacles for Doing Business, Policy Research Paper No. 1759, World Bank, 1997; and database available at http:\\www.worldbank.org\wbi\governance\wdr97data.htm

44. The war in Iraq has so far had a significant negative impact on the Jordanian economy. During the war, bilateral trade with Iraq came to a halt and tourism to Jordan was significantly disrupted. In particular, the flow of subsidized oil from Iraq stopped, implying a significant loss of budgetary grants (3 percent of GDP). The transport sector, which relies heavily on the re-export trade with Iraq, also took a significant hit, with one-third of Jordan's 11,000 trucks idled by the war. More important, the uncertainty before and during the war led to a slowdown of domestic demand and a significant increase in private sector saving. As a result, real GDP growth slowed to 3.2 percent in 2003, compared to 5 percent the previous year.

45. The financial support of the international community helped withstand the negative shock of the war. Additional external grants in the amount of 7 percent of GDP were used to provide a fiscal stimulus at a time when both external and private sector demand were weak. At the same time, steps were taken to limit the loss of the Iraqi oil grant to the budget through an increase in domestic petroleum prices and other tax increases. These policies were successful in maintaining confidence in the Jordanian dinar.

46. Over the medium term, macroeconomic stability will continue to hinge upon a prudent fiscal policy. With public debt still hovering around 100 percent of GDP, it will be important to continue the process of fiscal consolidation through an effective rationalization of the tax system and a reduction of recurrent expenditure. In this regard, as discussed in Chapter III, the recently implemented pension reform will have a substantial impact over the medium- and long-term, as it is expected to reduce the net present value of pension liabilities by over one-third. More, however, could be done to provide a simple and equitable income tax system, with a larger tax base and fewer income brackets. In addition, an improvement in the geopolitical situation may allow for a "peace dividend" to materialize, in the form of an effective but less costly military infrastructure.

47. With the loss of the Iraqi oil grant, the need for eliminating the remaining petroleum subsidies has become even more pressing. A gradual elimination of the subsidies over the medium term would allow for the elimination of relative price distortions in preparation for the eventual liberalization of the petroleum sector, a commitment to be met by 2008 under the WTO agreements. A partial liberalization could also be implemented beforehand through the divestment of the distribution network for petroleum products. In addition, the freeing of additional resources in the budget could help the fiscal consolidation without jeopardizing priority development spending.

48. The privatization program will continue to be the anchor to attract foreign investment and reduce public debt. The plan for 2003 and beyond is to sell the remaining wholly-owned enterprises to strategic investors, and the remaining government shares in partially-divested enterprises to the public via initial public offerings (IPOs) to encourage ownership and deepen the stock market. Major enterprises to be sold include the phosphate company, the power generation and distribution companies, and the national airline. With an improved geopolitical environment, the privatization program should be able to accelerate in the

coming years. This should enable the government to continue reducing public debt with additional privatization proceeds, thus swapping public assets for a reduction in public liabilities. In turn, this will retrench the role of the state in the economy, thereby leaving room for a dynamic private sector to play a more significant role.

49. Finally, further improvements in the business environment will require additional legislative and regulatory changes aimed at reducing further the cost of doing business in Jordan. Deregulation of the domestic transport sector, the establishment of a one-stop shop for foreign investors, and improvements in the effectiveness of government services are just a few examples of regulatory changes that could lower business costs. In addition, the financial system can be brought to play a more active role in financing domestic investment, including by lengthening the maturity structure of its lending portfolio, developing an effective corporate bond market, and providing advisory services for small and medium enterprises.

References

Bhagwati, Jagdish, and Donald R. Davis, (1994) "Intra-Industry Trade Issues and Theory," *Harvard Institute of Economic Research Discussion Paper No. 1695,* September 1994.

Barro, Robert J., and Jong-Wha Lee, 2001, "International Data on Educational Attainment: Updates and Implications," Oxford Economic Papers, (Oxford University Press), pp. 541–563.

Bosworth, Barry, Susan M. Collins, and Yu-chin Chen, 1995," Accounting for Differences in Economic Growth," papers presented at the conference in Tokyo, Japan, October.

Boyd, John H., Ross Levine, and Bruce D. Smith, "The Impact of Inflation on Financial Sector Performance," *Journal of Monetary Economics* (forthcoming).

Bruno, Michael, and William Easterly, 1998 "Inflation Crises and Long Run-Growth," *Journal of Monetary Economics,* Vol. 41 (February 1998), pp. 3–26.

Christoffersen, Peter, and Peter Doyle, 2000 "From Inflation to Growth: Eight Years of Transition," *The Economics of Transition*, Vol. 8, No. 2, pp. 421–451.

Easterly, William, and Stanley Fischer, 2000 "Inflation and the Poor," Policy Research Working Paper No. 2335 (Washington: The World Bank, 2000), forthcoming in the "*Journal of Money, Credit, and Banking*.

English, William B., 1999 "Inflation and Financial Sector Size," *Journal of Monetary Economics,* Vol. 44, (December 1999), pp. 379–400.

Ghosh, Atish, and Steven Phillips, 1988 "Warning: Inflation May Be Harmful to Your Growth," *IMF Staff Papers*, International Monetary Fund, Vol. 45, (December 1998), pp.672–713.

Havrylyshyn, Oleh, and Peter Kunzel, 1997 "Intra-Industry Trade of Arab Countries: An Indicator of Potential Competitiveness," IMF Working Paper 97/47 (Washington: International Monetary Fund).

International Monetary Fund, 2001, *World Economic Outlook, May 2001: Fiscal Policy and Macroeconomic Stability*, World Economic and Financial Surveys (Washington).

International Monetary Fund, 2003, "Algeria: Selected Issues and Statistical Appendix", *Country Report No. 03/69*, Washington, DC. Available on the internet at http://www.imf.org/external/pubs/cat/longres.cfm?sk=16414.0

Khan, Mohsin S., and Abdelhak S. Senhadji, 2000 "Threshold Effects in the Relationship Between Inflation and Growth," IMF Working Paper 00/110 (Washington: International Monetary Fund, June 2000).

Maciejewski, Edouard and Ahsan Mansur, 1996, "Jordan: Strategy for Adjustment and Growth", IMF Occasional Paper 136, (Washington: International Monetary Fund, May 1996).

Mankiw, N. Gregory, David Romer, and David N. Weil, 1992, "A Contribution to the Empirics of Economic Growth," *Quarterly Journal of Economics*, (May 1992), pp. 407–437.

Mansur, Ahsan and Catriona Purfield (2003), "Reforms and Progress Toward Debt Sustainability in Jordan", *Draft paper presented at the Conference "The Jordanian Economy in a Changing Environment"*, Amman, Jordan, July 2003.

Mussa, Michael, Paul Masson, et al., "Exchange Rate Regimes in an Increasingly Integrated World Economy," IMF Occasional Paper No. 193 (Washington: International Monetary Fund, 2000).

Romer, Christina, and David Romer, 1998, "Monetary Policy and the Well-Being of the Poor," NBER Working Paper No. 6793 (Cambridge, Mass.: National Bureau for Economic Research, 1998).

Shaban, Radwan A., Abu-Ghaida Dina, and Abdel-Salam Al-Naimat (2001), "Poverty Alleviation in Jordan: Lessons for the Future", (Washington: World Bank, June 2001).

World Bank, 1994, "Jordan: Consolidating Economic Adjustment and Establishing the Base for Sustainable Growth", Report No. 12645-JO (Washington: World Bank)

World Bank, 2001, "The Hashemite Kingdom of Jordan: Sources of Growth," WB Draft Staff Report (Washington: World Bank).

III. Fiscal Policy and Structural Transformation of the Jordanian Fiscal Structure[18]

A. Introduction

50. Faced with growing budget deficits and a high and unsustainable debt burden, Jordan embarked at the start of the 1990s on a fiscal consolidation effort to restore fiscal and public debt sustainability. This task was particularly complicated by the rigidities and imbalances in the structure of the fiscal system. The revenue base was heavily reliant on trade taxes whose potential was diminishing with trade liberalization. The structure of Jordan's public expenditure was also rigid with limited scope for discretionary outlays, as interest and other statutory transfers comprised over two-thirds of overall expenditure. High population growth rates and a growing incidence of poverty and unemployment were also exerting pressures on social spending. Depressed real economic growth, partly resulting from the debt overhang and persistent balance of payments pressures, also complicated fiscal consolidation.

51. This chapter reviews the key fiscal challenges Jordan faced in fiscal policy formulation over the 1990s and concludes that, although progress has often been slow and difficult at times, the fiscal deficit (including grants) has been maintained at a broadly sustainable range and the debt burden is declining rapidly toward sustainable levels. Using a simple growth accounting framework, this chapter also identifies the factors and policies that contributed to Jordan's progress toward fiscal sustainability. It examines how diversifying the revenue base away from trade-related taxes in favor of consumption-based taxes helped overcome the challenges posed by trade liberalization and other structural reforms. In addition, it shows how a conservative debt management strategy and the reform of the government assistance programs helped to improve the composition and flexibility of government spending. Finally, it reviews how progress toward fiscal sustainability has reduced the volatility in economic activity and contributed to short-term macroeconomic management.

B. Fiscal Consolidation in Domestic and International Contexts, 1991–01

52. A number of structural weakness posed serious challenges to the adjustment efforts over the course of the 1990s.Various features of the fiscal system in Jordan in the early 1990s made budget revenue and expenditure inflexible. Although high, budget revenues in the early 1990s were inelastic and volatile owing to the dependence on nontax revenues and grants. Moreover, the high share of trade-related taxes and transfers from state-owned enterprises in the revenue base meant that efforts to open the economy to international trade and domestic markets to private competition would have negative consequences for revenue. Expenditures were also rigid, leaving little scope for expenditure savings. Interest costs alone comprised almost one-quarter of total expenditures, with other statutory transfers for wages

[18] Prepared by Ahsan Mansur and Catriona Purfield.

and salaries, pensions, and military comprising another one-third. The heavy reliance on grants also added to fiscal vulnerability. In addition, weak economic growth during most of the 1990s and the increasing share of the population living in poverty increased pressures for additional spending.

53. Against this background, fiscal policy in Jordan moved away during the 1990s from the rising debt burden and the large and volatile budget deficits that characterized its fiscal stance in the 1980s. The 1989 balance of payments crises imposed a heavy burden on Jordan's public finances. Net central government debt had risen sharply due to the devaluation of the Jordan dinar, as well a combination expansionary fiscal policy and a slowdown in economic growth. For the period 1990–2001, Jordan succeeded in limiting the fiscal deficit to an average of 4.1 percent of GDP and a primary surplus of more than 2 percent of GDP. Reflecting the fiscal consolidation, special debt operations (such as debt buyback, debt swaps, and debt forgiveness), and saving of most privatization proceeds, net central government debt ratio declined to 97.4 percent of GDP in 2001.[19] Notwithstanding these gains, fiscal policy during the period experienced a number of shocks and positive developments, leading to wide variations in performance over different sub-periods. Based on fiscal performance, the 12-year period can be divided into three sub-periods: (a) an initial period (1990–91), characterized by the post-1989 balance of payments shock and the 1991 Gulf war; (b) followed by a period (1992–95) of rapid economic growth and strong fiscal consolidation lending to a substantial reduction in public debt; and (c) a period of continued fiscal consolidation (1996–2001), albeit at a slower pace in an environment of slower economic growth.

54. **The initial phase (1990–91):** The Gulf war severely disrupted adjustment efforts and highlighted the weaknesses in the fiscal system during the early 1990s. The collapse in trade and a sharp decline in external grants inflows underscored the budget's dependence on trade taxes and other revenues which were highly susceptible to external shocks. The rigid structure of expenditures also meant that the extra outlays needed to absorb the inflow of expatriate workers and additional security-related outlays could not be offset through savings, causing total expenditure to rise. As a result there was significant widening of the overall deficit and a marked deterioration in the current balance and government savings by end-1991 (see Table III.1). In addition, the collapse in trade with Iraq due to the war led to a significant slowdown in economic growth and the proportion of the population living in poverty rose to 14.4 percent by 1992 from only 3 percent at the end of the 1980s creating extra pressures on the budget.

55. **The middle phase of rapid adjustment (1992–95):** Aided by the boom following the end of the Gulf war, fiscal policy underwent a large adjustment starting in 1992 leading to

[19] Net central government debt and guarantees, including the debt of autonomous budget agencies and collateralized Brady bonds (net of the market value of the collateral).

a substantial reduction in the debt burden. Budgetary revenue peaked at a high of 34 percent of GDP in 1992 as imports surged in the post-war construction boom and temporary taxes were imposed on returning migrant workers. Pressures on expenditure also eased as growth surged and the reduction in the debt burden brought extra relief through lower interest payments. As a result the overall central government deficit moved close to balance in 1992. For the first time, budgetary revenue (excluding grants) covered total current expenditure. This improvement was largely sustained until 1995. With both the primary balance and government savings rates averaging about 5 percent of GDP over this period, significant inroads were made toward addressing debt sustainability and the debt burden of the central government fell sharply.[20] However, many of the factors underpinning the improvement in fiscal indicators over this period were transient. The temporary taxes that boosted collections during this period did little to enhance revenue buoyancy which continued to be eroded by trade liberalization and tax incentives. And while declining interest payments contributed to enhancing fiscal flexibility, part of this gain was being eroded by the rising cost of the pension system.

56. **The recent (third phase) of slower adjustment (1996–2001):** With economic growth slowing down, budget rigidities began to pose greater challenges to the adjustment effort. A combination of declining revenue collections and rigid expenditures caused the overall deficit to widen since 1996. A combination of declining revenue, partly associated with the reform of the trade system, and continued rigidities on the expenditure side (including rapidly growing pension liabilities), widened the overall fiscal deficit for the period 1996–2001 significantly to about 4 percent of GDP (Figure III.1). The primary balance, current balance, and government savings also deteriorated in tandem, although all of them on average remained in surplus. Despite the moderate deterioration in aggregate fiscal indicators, the debt burden continued to decline, although at a slower pace, reflecting the continued cautious debt management strategy and the global decline in interest rates. Jordan also intensified its debt reduction strategy through "below-the-line" operations such as privatization, debt buyback, and debt swaps. At this phase, Jordan's fiscal management also moved to a more matured and stable stage, as shown by the decline the annual volatility of the overall and primary fiscal balances.

57. The progress Jordan made over the 1990s in addressing the challenge of fiscal sustainability stands out in an international context. The majority of emerging market countries saw their debt burden rise over the last decade due in part to the financial crises in Asia (see Figure III.2). Although Jordan's debt burden at the start of the 1990s was significantly above that of other emerging market economies, by end-2001, Jordan succeeded in bringing it closer to the average of other emerging market economies. The debt service

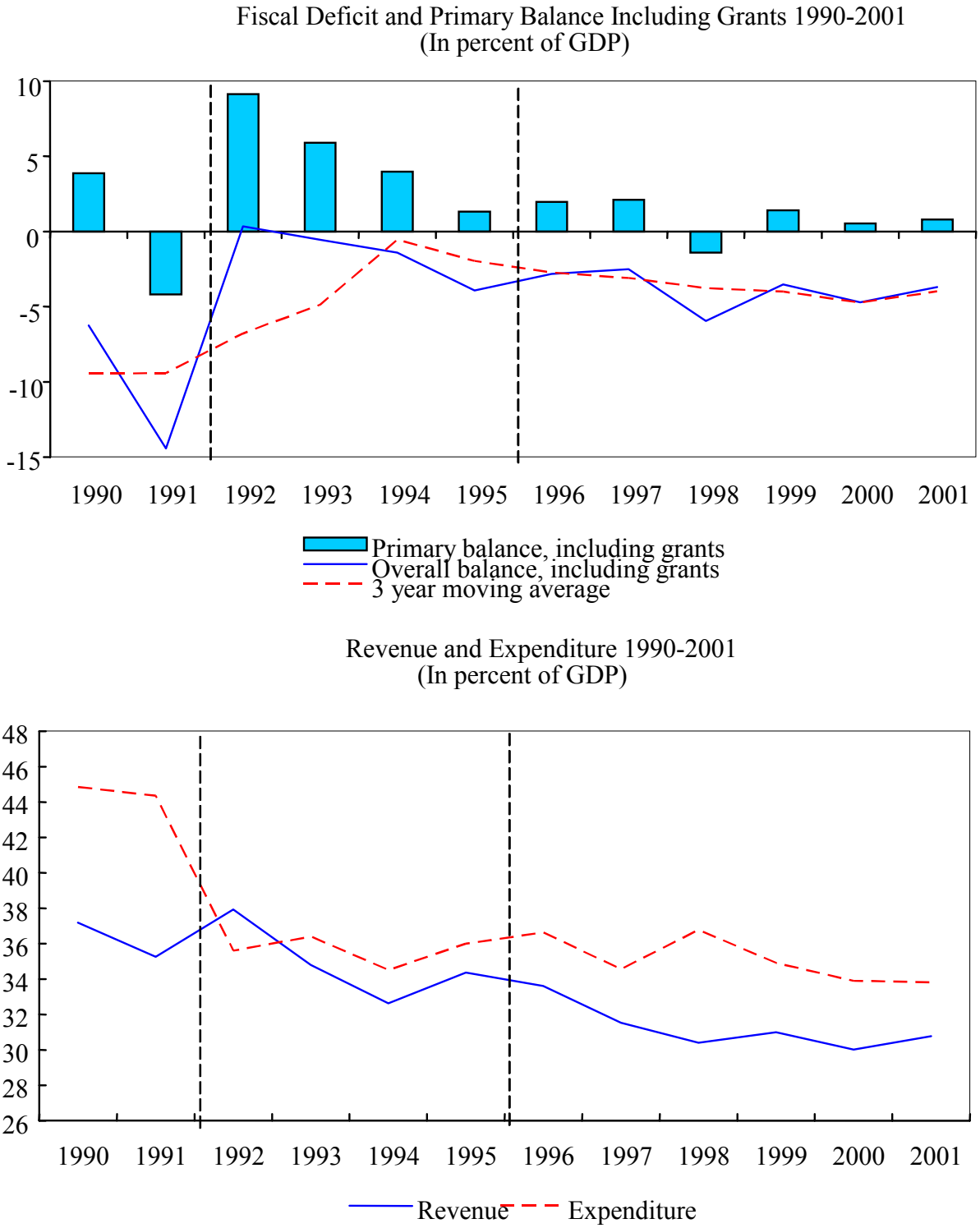
[20] To permit international comparisons, this section reports the total net debt burden of the central government including guarantees. The debt data reported in the subsequent sections covers the broader public sector.

burden in Jordan also declined significantly and is now below that of many emerging market economies.

58. Jordan's goal of fiscal sustainability also dictated the need for a more conservative fiscal stance than what was evident in other economies of similar income levels (see Table III.2). As Jordan began to address its debt sustainability problem, it was able to reduce the primary deficit over the course of the 1990s from just over 4 percent of GDP in 1991 to about 1 percent of GDP by end-2002. In contrast, the average primary balance in countries across the region rose by almost 4½ percentage points of GDP. Relative to the emerging market economies which typically had lower debt burdens, the priority afforded to debt sustainability meant that Jordan had to run higher primary and current balances, and achieve a higher level of government savings. It also meant that the scope to loosen fiscal policy at times when world economic activity was slowing was generally more limited.

59. Jordan's fiscal system still remains less buoyant and more inflexible than that of most other countries. Reflecting the trend in other economies, the tax system in Jordan has become increasingly more orientated toward consumption-based taxes over the course of the 1990s (see Figure III.3). Nevertheless, Jordan's revenue base is still more reliant on trade related taxes and nontax revenue sources than other countries, leaving its fiscal system less buoyant and more vulnerable to external shocks. On the expenditure side, the absence of international data with respect to statutory and discretionary spending makes it difficult to assess how the transformation in the composition of government spending in Jordan compares internationally. Using the share of capital spending to proxy discretionary spending, it appears that Jordan, like many other countries gained little in terms of additional flexibility. However, the fact that Jordan was able to protect capital spending during a period of prolonged fiscal consolidation and despite a rapid growth in pension outlays, indicates its relative prowess in reducing the debt service cost. Furthermore, despite the rise in poverty levels during the 1990s, the level of poverty in Jordan still remains well below that of other countries at similar incomes, suggesting that government spending may be more effectively targeted.

Figure III.1. Jordan: Indicators of Fiscal Deficit 1990–2001



Source: Fund staff estimates and calculations

Table III.1: Jordan: Summary Indicators of Fiscal Policy 1/
(In percent of GDP)

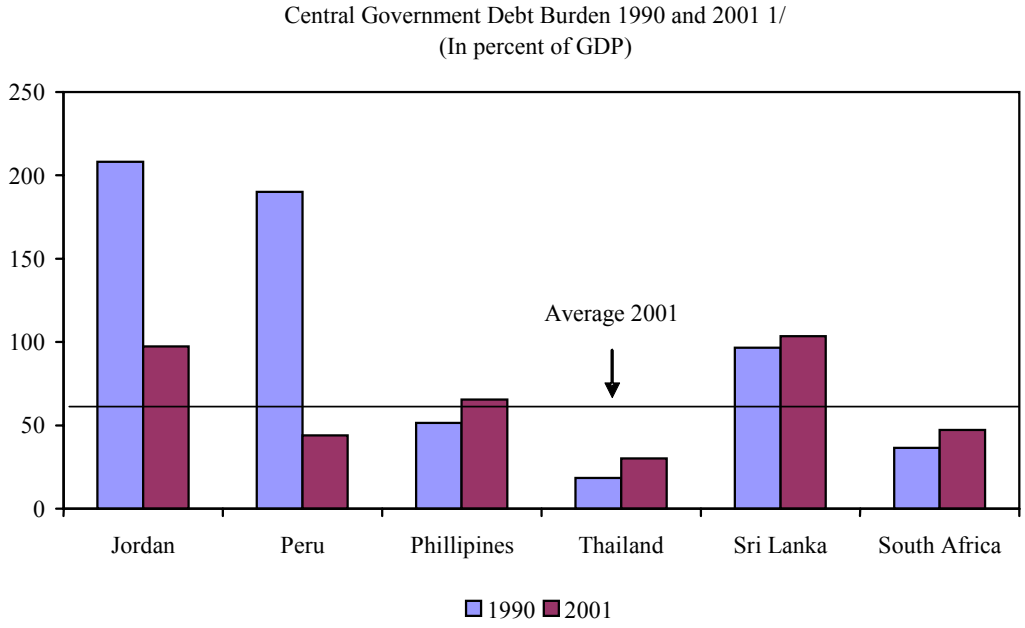
	Overall Balance 2/	Primary Balance	Current Balance	Govt. Savings	Total Debt	Real GDP Growth 4/
1990–2001						
Period average	-4.1	2.1	1.7	1.8	130.1	4.7
Change within period 5/	2.5	-3.2	1.8	2.5	-110.8	3.3
Average annual change within period 6/	0.2	-0.3	0.2	0.2	-10.1	n.a.
Coefficient of variation	-0.9	1.8	2.2	2.1	0.0	0.8
1990–1991						
Period average	-10.3	-0.2	-5.1	-4.8	202.8	9.6
Change relative to 1985–1989	-0.7	3.7	-5.8	-2.8	...	14.7
Average annual change over period	-3.4	-3.0	-5.6	-5.1	-21.0	n.a.
Coefficient of variation	-0.6	-37.1	-1.1	-1.2	0.0	0.6
1992–1995						
Period average	-1.4	5.1	4.6	4.8	131.5	8.2
Change relative to 1991-1992	9.0	5.2	9.7	9.6	-71.4	-1.5
Average annual change over period	2.6	1.4	3.2	3.1	-21.1	n.a.
Coefficient of variation	-1.3	0.4	0.4	0.4	0.0	0.2
1996–2001						
Period average	-3.9	0.9	2.0	2.1	105.0	3.3
Change relative to 1992–1995	-2.5	-4.2	-2.6	-2.7	-26.5	-4.8
Average annual change over period	0.0	-0.1	-0.3	-0.2	-2.7	n.a.
Coefficient of variation	-0.3	1.4	0.6	0.6	0.0	0.4

Source: Fund staff calculations.

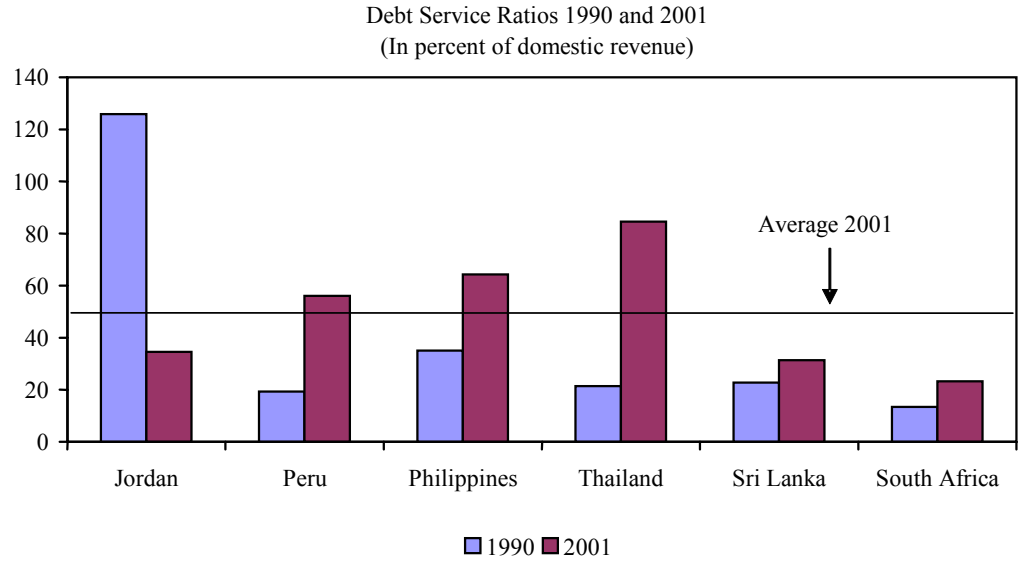
1/ All balances include expenditure through off-budget accounts.
2/ Positive sign indicates improvement.
3/ For debt burden, relative to 1988–1989.
4/ Year-on-year growth in percent.
5/ 2001 minus 1990.
6/ Average of 11 year-on-year changes, 1990–2001.

Figure III.2. Jordan: International Trends in Debt Service Burdens, 1990 and 2001

Debt ratio declined substantially, but remained above the middle income country average.



Debt service ratio declined from one of the highest in the world to well below the average for middle income countries.



Source: Government Finance Statistics, WEO and Fund staff estimates.

1/ For Jordan, debt equals net central government debt and guarantees, including autonomous budget agencies and collateralized bonds at face value.

Table III.2. International Comparison:
Summary Indicators of Fiscal Policy, 1990–2001 1/

Table III.2. International Comparison:
Summary Indicators of Fiscal Policy, 1990–2001 1/

(In percent of GDP)

	Overall Balance	Primary Balance	Current Balance	Government Savings
		Period average		
Middle East				
Jordan	-4.1	2.1	1.7	2.9
Egypt (to 1998)	-5.0	2.2	3.6	1.7
Lebanon	-18.7	-7.2	n.a.	-12.9
Morocco (estimated to 1999)	-3.4	2.1	3.8	3.1
Pakistan 2/	-7.2	-0.2	n.a.	-1.3
Iran (to 2000)	-2.1	-2.1	3.8	9.8
Regional average	-6.7	-0.5	3.2	0.6
Emerging market economies				
Brazil	-2.1	1.1	n.a.	-1.1
Peru 3/	-3.0	0.3	-1.5	2.3
Indonesia (to 1999)	-0.9	1.8	6.3	6.5
Philippines (1997 estimated)	-2.4	n.a.	0.3	1.9
Thailand	0.7	n.a.	7.0	10.4
Sri Lanka	-8.3	-2.3	-1.7	-2.4
South Africa	-4.4	0.7	-3.0	-1.8
Turkey	-8.1	1.4	-6.4	-3.0
Emerging market average	-3.6	0.5	0.1	1.6
		Standard deviation over period		
Middle East				
Jordan	3.8	3.4	4.2	2.0
Egypt (to 1998)	5.8	6.6	6.9	3.5
Lebanon	6.4	4.8	n.a.	6.5
Morocco (to 1998)	1.9	2.0	2.0	1.7
Pakistan 2/	1.2	1.4	n.a.	0.7
Iran (to 2000)	4.1	4.1	3.9	6.7
Regional average	3.9	3.7	4.2	3.5
Emerging market economies				
Brazil	2.6	0.8	n.a.	4.4
Peru 3/	2.0	0.8	2.3	1.5
Indonesia (to 1999)	1.7	1.0	2.0	2.1
Philippines	1.5	n.a.	2.0	2.0
Thailand	3.0	n.a.	2.5	2.4
Sri Lanka	1.3	1.8	1.9	1.3
South Africa	2.5	2.8	2.2	2.2
Turkey	5.4	1.9	5.2	5.8
Regional average	2.5	1.5	2.6	2.7

Source: Fund staff calculations.

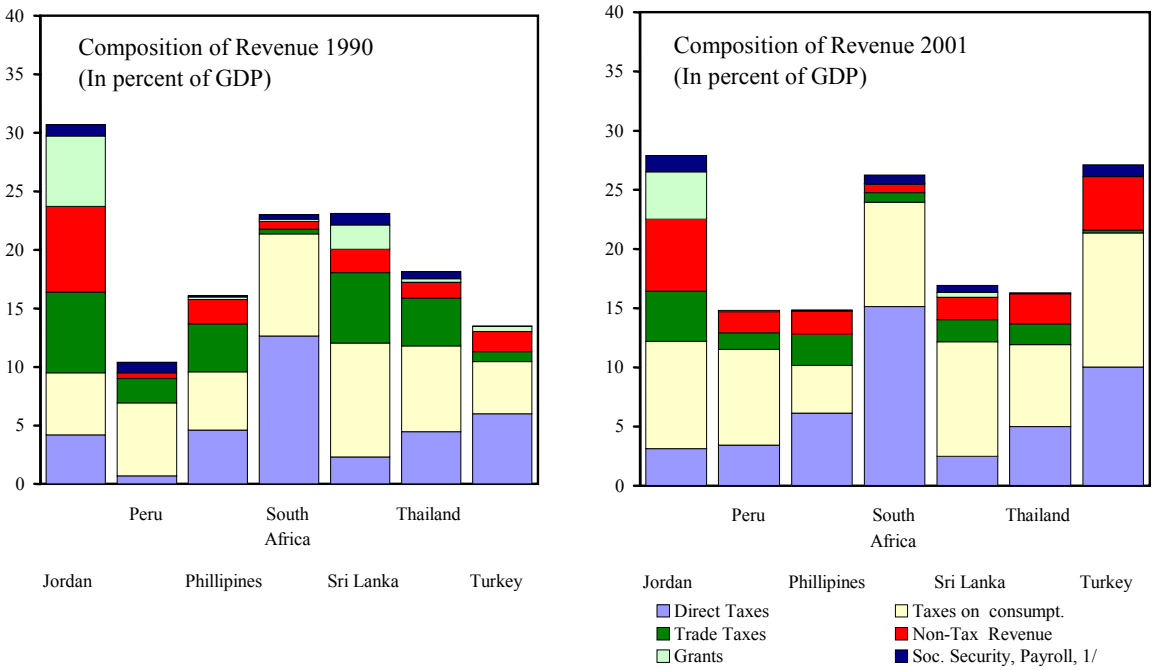
1/ All balances include expenditure through off-budget accounts.

2/ Data on primary balance only available from 1993–2001.

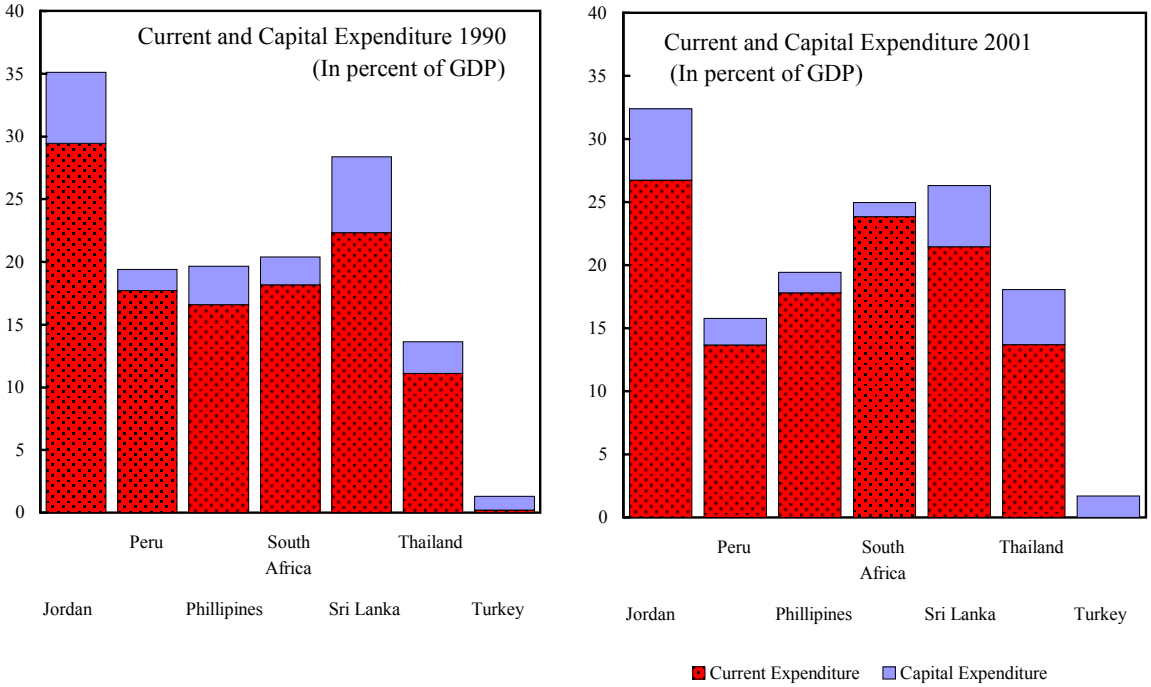
3/ Data on primary balance only available from 1991–2001.

Figure III.3. Jordan: Budget Structure Across Central Governments, 1990–2001

GST contributed to improve the revenue structure, but the share of direct taxes remains low.



Share of capital spending remains respectable.



Sources: GFS and Fund staff calculations.

1/ Social security contributions plus taxes on payroll and manpower plus taxes on property

C. The Challenge of Debt Sustainability

60. Jordan made significant strides in addressing the high burden of public and publicly guaranteed debt over the past decade.[21] By end-2001, the overall net public debt burden had fallen from 1992 by almost 50 percentage points of GDP to close to 100 percent of GDP. A simple growth accounting framework identifies the relative role of various "debt-creating" and "debt-reducing" factors in reducing Jordan's debt levels (see Table III.3). The major debt-creating elements for the central government include: (i) the overall central government fiscal deficit,[22] (ii) the central government's onlending to public entities, and (iii) the assumption of debt by the central government from other public entities. The debt-reducing factors include: (i) the effect of nominal GDP growth on the debt ratio; (ii) privatization proceeds used to retire debt; (iii) debt reduction operations, including Brady Bond buybacks, debt-for-development swaps, and debt forgiveness; (iv) valuation adjustments stemming from exchange rate movements; and (v) a residual factor for debt operations not captured in the above components or in the available data.

61. Economic growth, aided by a policy of prudent debt management and privatization, was the most important factor in addressing the challenge of debt sustainability. Growth in economic activity helped reduce the net public debt-to-GDP ratio by two-thirds, as nominal growth rates exceeded the average real interest rate by about 4 percentage points. Jordan also pursued a prudent debt management strategy by refraining from short-term and commercial borrowing, relying instead on lower cost multilateral debt and official bilateral grants. To address potential rollover problems and the associated financing gap, it actively utilized numerous debt rescheduling arrangements with the Paris Club and commercial creditors. Special debt reduction operations (debt swaps, Brady buybacks, stock of debt operations and other unidentified operations) combined with the policy of devoting privatization receipts to debt reduction contributed 22½ percentage points in relation to GDP to the overall decline. The valuation effect, stemming from exchange rate movements, recorded significant year-to-year volatility depending on the relative strength of the dollar vis-à-vis the euro, the yen, and the SDR. However, over the period, exchange rate effects contributed only 3½ percent to the overall reduction in the debt ratio.

62. Fiscal policy also played an important role. On a cumulative basis, fiscal deficits, on-lending to public enterprises and the assumption of new debt in 2000 and 2001 contributed 41¼ percent of GDP to the public debt over the last decade. For most of this period, fiscal policy was tighter than what was needed to hold the debt burden constant. As a result, fiscal policy contributed to reducing the debt burden in relation to GDP, despite running an overall deficit**.**

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[21] This includes government-guaranteed debt and public sector debt. Domestic debt is net of government deposits with the banking system. External debt includes collateralized Brady bonds (net of the market value of the collateral). This is a broader definition than that used in Section I.

[22] Measured from below-the-line financing data.

Figure III.4 compares the actual primary balance during the 1990s with the level of primary balance needed to hold the net debt ratio constant, given the actual rates of inflation and the effective interest rate on public debt.[23] Jordan maintained substantial primary surpluses that exceeded the level of the sustainable primary balance by large margins for much of this period. The primary balance began to decline after 1997, but remained above that needed to stabilize the debt burden in terms of GDP throughout this period except in one year (2000). However, from 1999, the fiscal stance was able to accommodate this lower primary balance without compromising the ongoing decline in the debt-to-GDP ratio owing to the substantial privatization receipts and debt for development swaps realized since the late 1990s.

63. Despite these significant advances, Jordan's debt stock remains large. Reducing the debt ratio to a level comparable with international and comparators would require maintaining primary surpluses over the medium term. Jordan's debt dynamics also remains vulnerable to exchange rate movements, as shown by the recent uptick in overall indebtedness at end-2002. The literature offers various concepts to evaluate sustainability of the recent fiscal policy. Simply defined, fiscal policy can be viewed as sustainable if it can be maintained indefinitely without leading the government into insolvency. In other words, solvency of the government requires a medium-term framework whereby primary surpluses can finance interest costs, given growth, inflation, and exchange rate assumptions. In the theoretical literature, this concept of fiscal sustainability is usually assessed using the long-run solvency criterion which assesses whether fiscal policy leads to a balanced budget in present value terms or results in an explosive debt accumulation.[24] The criterion implies that the current stock of debt must be offset by the net present value of future budget surpluses. However, from a practical perspective, the long-run solvency criterion has clear limitations. In particular, sometimes fiscal policy stances that are clearly unsustainable can satisfy the long-run solvency criterion while others do not. For example, Chalk and Hemming (2000) explain that the criterion implies that a government cannot run a small primary deficit followed by a primary balance thereafter, while a permanent overall deficit can be sustainable.

64. Simple numerical indicators, not backed by a formal definition of sustainability, can help determine if current fiscal policy is consistent with a minimum concept of debt sustainability

---

[23] The required minimum primary surplus is given by:

$$p = \left((i - \pi - g)d - \frac{\pi - g}{\upsilon} \right)$$

where $(i - \pi)$ is the real interest rate, d is the ratio of net debt to GDP at which the level of public debt is stabilized, *g* is the real growth rate, and *v* is the velocity of base money (nominal GDP divided by base money).

[24] See Buiter (1985), Blanchard (1990), and Chalk and Hemming (2000).

where the debt burden remains constant.[25] This paper uses the indicators developed by Blanchard (1990) to assess whether current fiscal policy in Jordan is sufficient to prevent the debt burden from rising. The first, the primary gap indicator, shows the difference between the current level of the primary deficit/surplus and the deficit/surplus needed to maintain a constant debt-to-GDP ratio.[26] The second, the tax gap indicator shows the difference between the current tax-to-GDP ratio and that which is needed to hold the debt stock constant given current spending policies. While both indicators give the same result their emphasis is slightly different. The former shows the reduction in the primary deficit required for debt sustainability while the latter indicates the increase in the tax ratio required for sustainability given current spending levels.

65. These indicators show that Jordan's current fiscal policy is consistent with this minimum notion of debt sustainability at current levels of economic growth and real interest rates. The primary balances and tax gaps shown in Table III.4 are positively correlated with the gap between growth and real interest rates. The higher the real interest rate and the lower real growth the larger the primary surplus or tax effort needed to stabilize the debt burden. However, should economic growth be lower or real interest rates higher, additional fiscal adjustment would be needed to stabilize the debt burden.

[25] For example, Goldsbrough and others (1996) calculate how the level of primary balance deviates from that which would be consistent with maintaining a constant public debt-to-GDP ratio in the context of low inflation and no financial repression. Buiter (1985) constructs a sustainability indicator that estimates the permanent adjustment in the primary balance needed to maintain the ratio of public sector net worth to output constant.

[26] See Annex 1 for a more detailed explanation.

Figure III.4: Jordan: Actual and Debt Stabilizing Primary Fiscal Balances, 1993–2001

Primary surpluses contributed to rapid debt reduction.

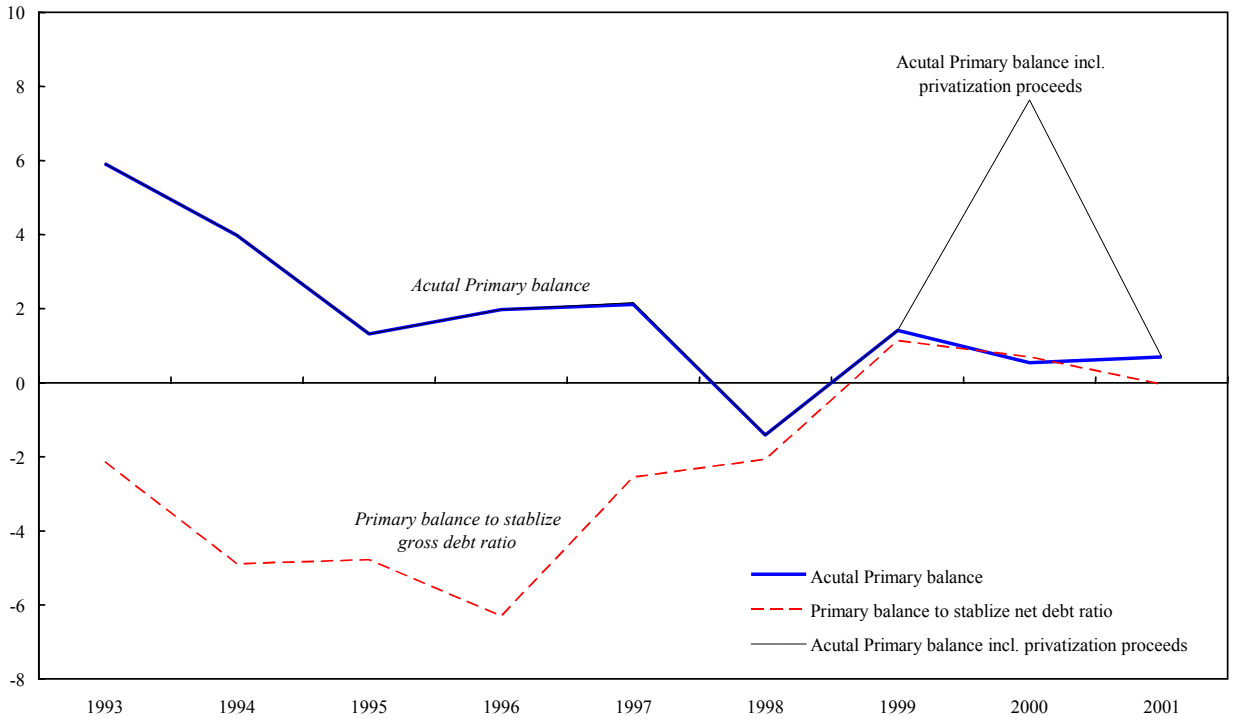

Table III.3. Jordan: Public Debt Dynamics, 1992–2001

(In millions of Jordanian dinar)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Contribution to Debt Ratio Reduction 1/ (In percent of GDP)
I. Total net public and publicly guaranteed debt 2/	5,450	5,538	6,179	5,702	5,838	5,679	6,483	6,716	6,304	6,412	
as % of GDP	150.7%	142.6%	141.8%	120.9%	118.8%	110.5%	115.6%	116.4%	105.0%	102.4%	-48.3
Domestic debt as % of GDP	29.4%	24.6%	21.7%	19.7%	14.8%	13.6%	20.2%	20.8%	21.0%	23.0%	-6.3
External debt as % of GDP 2/	121.4%	118.0%	120.1%	101.2%	104.1%	96.9%	95.4%	95.7%	84.0%	79.4%	-42.0
Change in total debt stock as % of GDP			-0.8%	-20.9%	-2.1%	-8.3%	5.0%	0.9%	-11.4%	-2.6%	
II. Debt-creating factors:											
Overall fiscal deficit (including grants)	-12	21	61	185	139	129	334	203	283	235	25.4
of which, external financing (net)			111	236	220	59	13	118	-83	95	13.4
of which, interest	318	251	234	248	236	238	255	284	315	279	37.4
Onlending	0	0	42	203	186	136	99	64	45	54	13.2
Assumption of debt from other public entities	0	0	0	0	0	0	0	0	170	8	2.8
III. Debt-reducing factors:											
National GDP	3,616	3,884	4,358	4,715	4,912	5,138	5,610	5,767	6,002	6,260	-63.7
Debt reduction operations	0	0	-96	-193	0	0	-6	-5	-222	-94	-9.8
Debt for development swaps	0	0	0	0	0	0	-6	-5	-78	-50	-2.2
Brady buyback operations	0	0	0	0	0	0	0	0	-144	-44	-3.0
Stock of debt reductions	0	0	-96	-193	0	0	0	0	0	0	-4.6
Privatization proceeds	0	0	0	0	0	3	0	0	426	-6	-6.8
Valuation effect	0	128	106	331	-212	-285	-115	139	-120	-194	-3.5
Other/residual discrepancy 3/	-150.4	-61.5	529.0	-1,002.8	23.0	-136.9	492.8	-169.3	-141.3	93.6	-6.0

Sources: Fund staff estimates based on data provided by the Ministry of Finance and the Central Bank of Jordan.

1/ The GDP effect is calculated relative to stock of debt in 1992; for all other components, changes are relative to 2001 GDP.

2/ Official data for external public debt, including collateralized Brady bonds at face value (BOP values collateralized bonds at market rates).

3/ Reflects various factors, including debt reduction operations not captured in the data, incomplete data on onlending and debt assumptions, and exchange rate effects not captured by estimates.

Table III.4. Jordan: Fiscal Sustainability Indicators 1/

Primary balances needed to stabilize the gross central government debt stock at end-2001 level 1/

	Real growth rates, in percent					
Real interest rates (in percent)	1	2	3	4	5	6
2	2.0	0.9	-0.2	-1.2	-2.3	-3.3
3	3.0	2.0	0.9	-0.2	-1.2	-2.3
4	4.1	3.0	2.0	0.9	-0.2	-1.2
5	5.2	4.1	3.0	2.0	0.9	-0.2
6	6.2	5.2	4.1	3.0	2.0	0.9

Primary gap indicator 2/

	Real growth rates, in percent					
Real interest rates (in percent)	1	2	3	4	5	6
2	-1.3	-0.2	0.9	1.9	3.0	4.0
3	-2.3	-1.3	-0.2	0.9	1.9	3.0
4	-3.4	-2.3	-1.3	-0.2	0.9	1.9
5	-4.5	-3.4	-2.3	-1.3	-0.2	0.9
6	-5.5	-4.5	-3.4	-2.3	-1.3	-0.2

Tax gap indicator 3/

	Real growth rates in percent					
Real interest rates (in percent)	1	2	3	4	5	6
2	-1.3	-0.2	0.9	1.9	3.0	4.0
3	-2.3	-1.3	-0.2	0.9	1.9	3.0
4	-3.4	-2.3	-1.3	-0.2	0.9	1.9
5	-4.5	-3.4	-2.3	-1.3	-0.2	0.9
6	-5.5	-4.5	-3.4	-2.3	-1.3	-0.2

Source: Fund staff calculations.

1/ Takes stock of gross debt of 101.3 percent of GDP at end-2001. A negative value implies a primary deficit.
2/ Difference between primary surplus needed to stabilize the gross debt burden and the 2002 primary deficit. A negative value signal that adjustment in current policies is needed.
3/ Difference tax-to-GDP ratio needed to stabilized domestic debt and projected 2002 tax-to-GDP ratio. A negative value signal that adjustment in current policies is needed.

D. The Challenges Posed by Budget Structure

66. Over the last decade, the structure of the budget in Jordan underwent substantial reform as part of the effort to achieve debt sustainability. To bring the deficit to levels consistent with debt sustainability, one would expect the adjustment efforts to focus primarily on generating expenditure savings given the already high revenue ratio in Jordan. Yet the large share of statutory spending meant that there was little scope for expenditure cuts. Jordan's development needs and increasing incidence of poverty also placed additional demands on government spending. The remainder of this section reviews how the fiscal system in Jordan adapted to these various challenges.

Reform of the revenue system

67. Heavy reliance on nontax revenue and trade-based revenue sources rendered the revenue system both inelastic and vulnerable to external shocks. In the early 1990s, nontax revenues comprised about half of total domestic revenue, and trade-related taxes accounted for about 16¾ percent of domestic revenues. Jordan's dependence on nontax revenue was one of the highest among the non-oil producing, low-middle income countries. Nontax receipts are generally inelastic, as many of these sources reflect charges for government services that are often rendered at less than cost and whose demand is not very responsive to economic growth. In addition, in the case of Jordan, these revenues were also a considerable source of volatility for the budget owing to the operation of the oil surplus.[27] The system of administered petroleum prices has meant that any unwillingness to pass on increases in world prices to domestic petroleum product prices generated substantial revenue loss and volatility as the implicit system of excises adjusted to offset the increase in import costs. The reliance on trade-related taxes increasingly limited the buoyancy of the tax system as the structure of production in Jordan shifted toward export orientated sectors with the opening of trade. And, although external grant flows have been a relatively stable revenue source for the budget, they have declined substantially in the aftermath of the Gulf war.[28]

68. Trade liberalization and privatization also placed considerable pressures on domestic revenues over the last decade. Jordan has been engaged in a steady program of trade liberalization starting from the early 1990s (see Box III.1). From their peak in 1992, trade

[27] The standard deviation of nontax revenue sources averaged about 1.6 percent of GDP during the 1990s, increasing from about ½ percent of GDP between 1990–91 to almost 1 percent of GDP between 1996 and 2001.

[28] The standard deviation of grants inflows since 1992 has been about 0.3 percent of GDP, considerably lower than the level of volatility exhibited in other segments of the revenue base.

Box III.1. Trade Reform in the 1990s

The ambitious agenda to liberalize trade which began at the end of the 1980s implied substantial changes in the customs tariffs regime. The major steps taken over the course of the 1990s to reduce protection and taxes on trade include the following:

- Between 1989 and 1992, reducing the maximum tariff rate from more than 300 percent to 50 percent and lowering the weighted average tariff from 34.4 percent in 1987 to 25 percent in 1994.
- In 1994, the maximum ad valorem equivalent customs duty was reduced to 50 percent, as were customs tariffs on the transportation sector. The tariff rates on new and used cars were lowered from 125–320 percent to 70–200 percent and from 115–310 percent to 50–150 percent, respectively. Duties on spare parts were cut from 30 percent to 10 percent.
- In January 1996, the maximum import tariff (including charges was reduced from 70 percent to 50 percent.
- In conjunction with the broadening of the GST (General Sales Tax) base, the maximum tariff was reduced from 40 percent to 35 percent in 1999 and tariffs on industrial inputs were lowered to 10 percent.
- In 2001, the tariffs on industrial inputs were reduced to 3 percent and then eliminated in 2002.
- Reflecting the changes in the tariff rate, in line with the opening up of the economy under various bilateral and regional trade initiatives, the average effective tariff rate declined to 14.9 percent by 2001.

related tax receipts have fallen by almost 6 percentage points of GDP accounting for 3 quarters of the overall decline in domestic revenue ratio. The privatization process also generated pressures as the government lost the ability to earn revenue from state-owned enterprises. Since 1992, transfers from state-owned enterprises have declined by over 2 percentage points of GDP.[29]

[29] The loss is mainly due to the privatization of the state telecom company.

69. In response to these challenges, Jordan embarked on a number of initiatives to diversify its revenue base. The government introduced a general sales tax (GST) in 1994 (see Box III.2). As a tax on consumption, the GST was also more broadly based and had greater buoyancy. Important steps were also taken in reforming the system of excises. The special sales tax (SST) was introduced at the same time as the GST, streamlining the earlier system of excises that had in some instances discriminated between domestically produced products and import goods. Notwithstanding some reduction in SST rates on certain goods in recent years,[30] it remains an important revenue source, representing about 40 percent of taxes on domestic transactions (excluding additional taxes). As a result of the shift in the structure of the tax base away from nontax revenue sources in favor of tax revenue, and within the tax base from external to consumption based taxes (Figure III.5), Jordan succeeded in sustaining its revenue ratio at relatively high levels. In addition, the domestic revenue base has also become more stable as the share of tax revenue rose, presumably reflecting the gains from the diversification of the revenue portfolio.[31]

70. Despite these efforts, the revenue system in Jordan still remains unbalanced and inelastic. Notwithstanding the expansion of consumption taxes, the domestic revenue system is still very inelastic and unresponsive to economic growth (see Table III.5). With nontax revenues still comprising over one-third of domestic collections and their elasticity negatively affected by structural reforms, the overall buoyancy of the revenue system has been compressed. In addition, the tax system has not exploited the potential for direct income taxation and a relatively extensive system of tax privileges (tax holidays, exemptions, sectoral and regional preferences) undermines the buoyancy of both direct and indirect tax sources. At about 3 percent of GDP, the contribution of direct taxes to the overall tax base is relatively low by international standards and has diminished over the 1990s in tandem with the decline in corporate tax collections. Although various reforms were made in the 1990s,[32] personal income tax revenue suffered owing to exclusion of various forms of income including interest, dividends, and capital gains. The system of personal deductions is also generous.

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[30] For example in 1999, the SST on imported cars was reduced from a range of 150–240 percent to 60–120 percent. In 2001, SST collections on cars represented about half of SST revenue.

[31] The standard deviation of budgetary revenue declined to 1.1 percentage points of GDP between 1996–2001 from 2.3 percentage points of GDP between 1992 and 1995.

[32] In 1996, the top marginal corporate tax and personal income tax rates were reduced from 50 to 30 percent, and from 55 to 33 percent, respectively. At the same time, the number of corporate tax rates was streamlined from five to three with a 15 percent rate applicable to companies in certain preferred sectors, 35 percent on bank and financial institutions, and 25 percent on all other companies. Dividends also became subject to a withholding tax of 10 percent. In 2001, the corporate tax rate for banks and financial institutions was lowered to 25 percent and the top personal tax rate cut to 25 percent. The tax on dividends was abolished in January 2003.

Box III.2. Milestones in the Move to a Consumption-Based Tax System

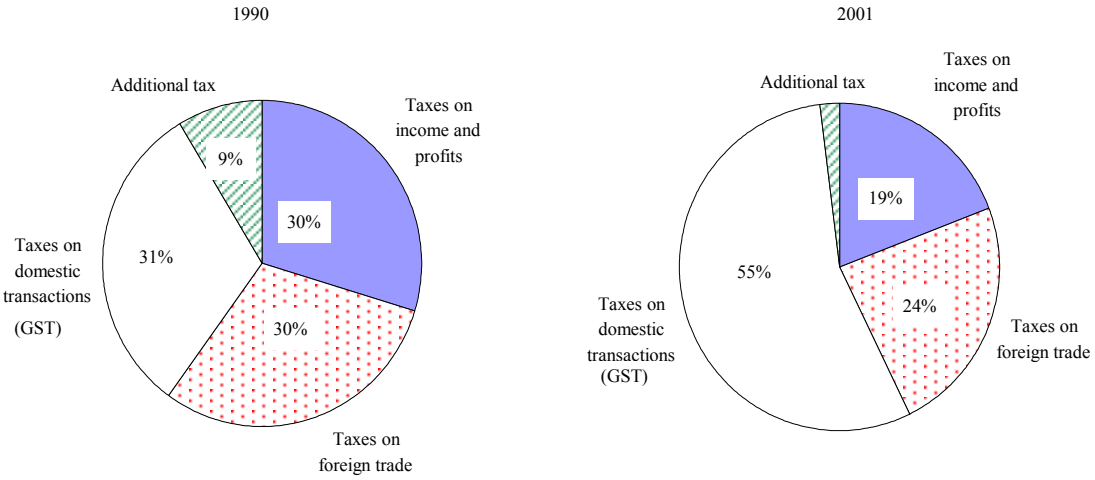
Efforts started in the early 1990s to extend the coverage of consumption taxes culminated in the introduction of the General Sales Tax (GST) and Special Sales Taxes (SST) Law in June 1994. The GST includes many of the basic features of a value added tax while SST is effectively a form of excise tax. The introduction and expansion of the GST base has raised the buoyancy of domestic consumption taxes from an average level of just under 0.8 in the early 1990s to 1.7 between 1996 and 2001. Revenues from GST and SST now amounts to 8.5 percent of GDP up from 3.3 percent of GDP in 1990.

At the time of its introduction, GST was applied only at the import and manufacturing levels and to certain services at a standard rate of 7 percent. Since 1994 various reforms have focused on improving the functioning of the GST and bringing it in line with a standard value-added tax. The September 1995 GST reform introduced tax rebates for exempted exports and a positive list of services subject to GST tax credits. The standard GST rate was also raised to 10 percent at the same time. In 1996, a separate GST directorate was created to administer the GST, while in 1997, exemptions for public enterprises were eliminated. Following these first-round reforms, receipts from consumption taxes rose to 6.3 percent of GDP in 1996 from 4½ percent of GDP in 1993. This gave a significant boost to the buoyancy of domestic taxes (see Table III.5).

The second round of reforms aiming to convert the GST into a full-fledged VAT began in 1999. Following the increase in the standard GST rate to the current rate of 13 percent in June 1999 and steps to widen the tax base,[1] the GST was extended to sale of goods at the retail level by businesses with sales above JD 250,000 and to a broader range of services. In 2002, the GST law was again amended to reduce the incidence of zero-rating and exemptions by imposing the GST on essential consumer and zero-rated goods (other than exports) at a new low rate of 2 percent. The lower GST rate has been increased to 4 percent in June 2003.

Figure III.5. Jordan: Changing Strucutre of the Tax Base Strucuture, 1990-2001

Taxes on domestic transactions (primarily GST) offset revenue losses from taxes on foreign trade and direct taxes



Source: IMF staff Calculations; Minstry of Finance.

Table III.5. Jordan: Revenue Performance Through the 1990s

	1990-91	1992-95	1996-2001	Full period	1990-91	19-1995	1996-2001	Full period
	(Period average in percent of GDP)				(Bouyancy)			
Total revenue and grants	36.2	34.9	31.2	33.3	0.3	0.6	0.6	0.7
Domestic revenue	26.7	31.0	27.1	28.3	1.2	0.6	0.6	0.9
Tax revenue	13.9	17.0	15.9	16.0	0.6	0.3	0.9	1.1
Taxes on income and profits	3.7	3.1	2.9	3.1	-2.9	1.2	0.4	0.7
Taxes on foreign trade	4.5	6.4	4.6	5.2	2.1	-1.7	0.4	0.8
Taxes on domestic transactions	4.4	6.0	7.9	6.7	1.1	2.1	1.7	1.9
General and special sales tax 1/	3.3	4.8	6.9	5.6	0.8	2.4	2.1	2.1
Other taxes	1.1	1.2	1.0	1.1	1.8	1.2	-0.9	0.7
Additional tax	1.3	1.5	0.5	1.0	3.6	0.4	-4.4	-1.1
Nontax revenue	12.8	14.0	11.2	12.4	1.8	0.9	0.3	0.7

Source: Fund Staff Calculations.

1/ Includes excises (special sales taxes).

E. Reform of Expenditure Policy

71. To address the large fiscal deficits and debt burden, expenditures in Jordan had to undergo a dramatic consolidation and change in composition. The pressures associated with the Gulf war had pushed spending to almost 50 percent of GDP. However, the scope to find savings was limited by the rigidity of the structure of expenditure. Since 1992, total central government spending (including spending through off-budget accounts) has fallen 3.2 percent of GDP to an average level of about 34½ percent of GDP. This adjustment was primarily attributable to savings on current outlays. In particular, a prudent debt management policy generated substantial reduction in the foreign interest burden. Subsidies were gradually phased out over the 1990s starting with the elimination of the net fuel subsidy and maize subsidy in 1992.[33] However, a large part of the overall savings were offset by the rising deficits on the civil and military pension systems. At the end of the 1990s, capital spending was close to its level in the early 1990s partly because of deliberate efforts to protect such outlays despite growing pressures from other sources. Nevertheless, it appears that the capital budget helped smooth year-to-year fluctuations in revenue inflows (see Figure III.6), especially toward the end of this period.

72. The government also worked to improve the quality of government spending, notwithstanding the reduction in overall expenditures. By replacing indirect transfers with direct transfers to poor families under the National Aid Fund (NAF), the government was better able to target its social program despite the shrinking budget envelope. Currently, assistance administered through the programs of the National Aid Fund amounts to about

[33] See Chapter VI for further discussion on the elimination of food subsidies.

1 percent of GDP. Total spending on health, education and social programs amounts to about 27 percent of total government expenditures (or 9.7 percent of 2001 GDP).

73. Despite substantial savings on interest and subsidy outlays, the composition of government spending remains rigid, with no progress being made in certain areas. The current budget has become increasingly inflexible over the 1990s. By end-2001, the share of wages and salaries for civil administration (18 percent of total outlays, excluding transactions on off budget accounts), pensions (14 percent), military outlays (26 percent), and interest payments (13 percent) increased to 83 percent of the current budget, up from 64 percent in 1992. Although savings on interest and indirect subsidies created room for a large increase in transfers, the share of total expenditures devoted to military and wage outlays also rose over the period (Figure III.7). Several factors have exerted mounting pressure on the structure of expenditure. Generous pension benefits and demographic factors have made the pension system—with pension outlays growing at almost 10 percent in real terms a year—increasingly burdensome. A difficult regional security environment has also limited the scope for a significant reduction in on-budget military outlays and military spending continues to exceed that in many other emerging market economies in more stable regions (see Figure III.8). The very high proportion of foreign debt to total public debt (about 80 percent) also limited the scope for recouping some of the interest payments in the form of taxation of domestic interest income (from banks and households), and indirectly through higher absorption resulting from the interest income of residents.

Figure III.6: Jordan: Year- on-Year Changes in Total, Current, and Capital Expenditure 1991–2000
(In percent)

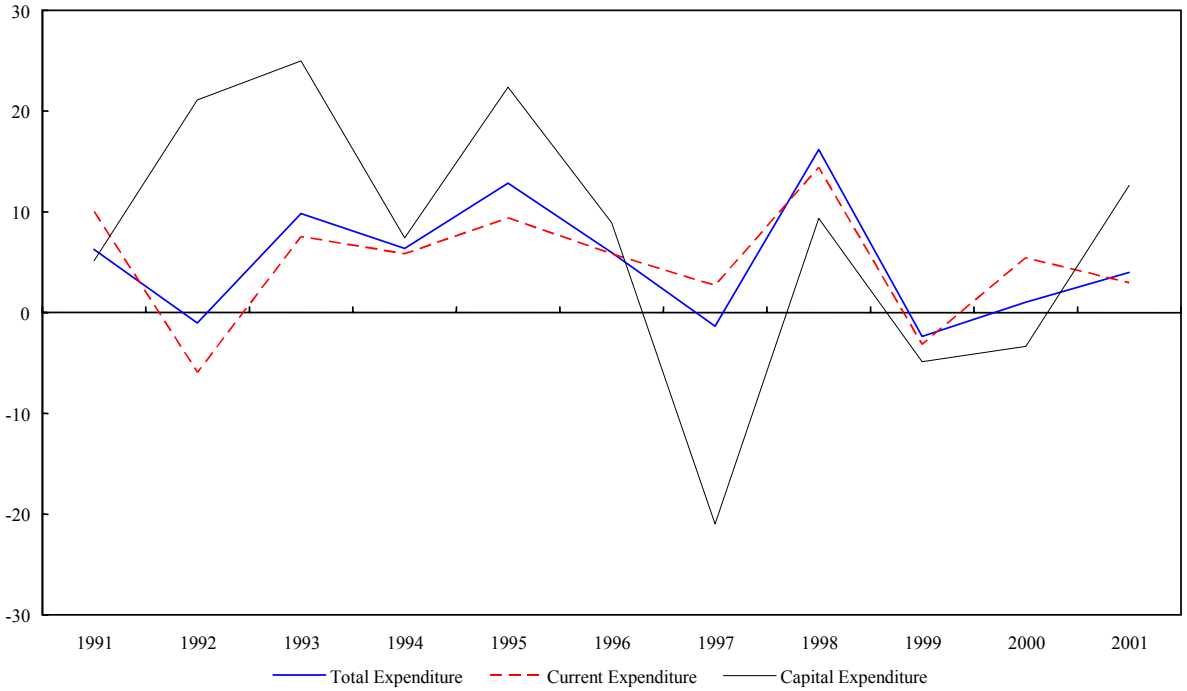
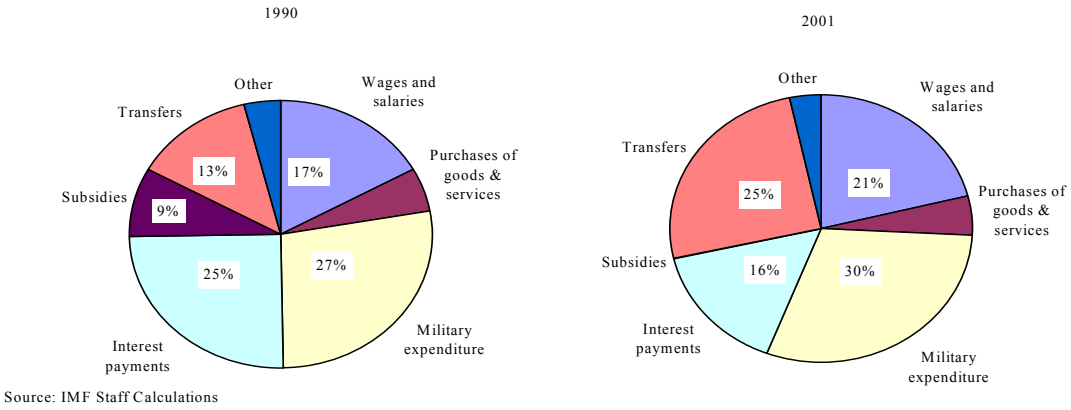


Figure III.7. Jordan: Composition of Current Expenditure, 1990-2001

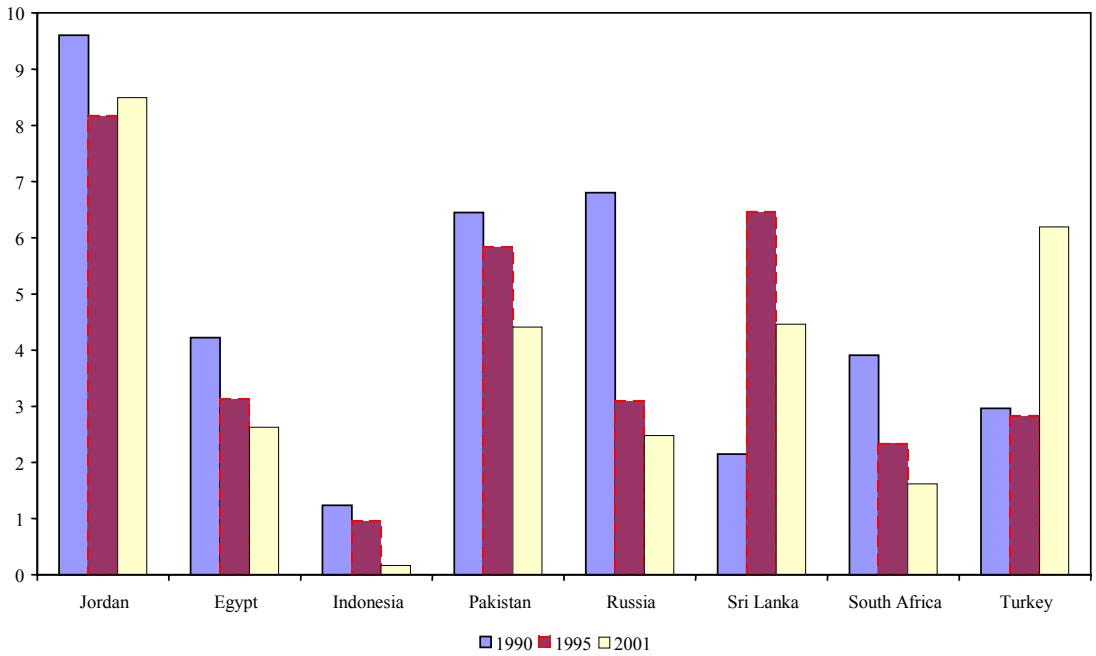
Interest obligations and subsidies declined substantially, but military spending remained high .



Source: IMF Staff Calculations

Figure III. 8: Jordan: Military Spending
(In percent of GDP)

Jordans military spending remains very high, despite some reduction.



The challenge of smoothing economic volatility

74. The objective of achieving debt sustainability had also to be balanced with the need to smooth the large shocks to economic activity that occurred during the 1990s. Economic activity in Jordan was extremely volatile during the 1990s reflecting the impact of several shocks (see Figure III.9).[34] During the Gulf war, per capita income fell sharply. In the post Gulf war boom, real GDP growth surged allowing real GDP per capita to rise by an average of 4.2 percent per annum between 1992 and 1995. The real growth rate has since decelerated to an average level of 3.6 percent per annum despite the substantial progress made toward macroeconomic stability. In a standard Keynesian world, fiscal policy can help smooth these fluctuations by expanding in economic downturns, and tightening during upturns. Figure III.9 shows that Jordan's overall fiscal deficit during the downturns in economic activity—associated with the Gulf war and the end of the post-war boom—were indeed accompanied by a widening of the overall fiscal deficit. However, this observed relationship could be a reflection of the automatic response of fiscal policy to the decline in economic activity rather than discretionary policy efforts to stimulate economic demand. The remainder of this section takes a closer look at the evolution of the overall deficit to disentangle the automatic policy actions from the discretionary ones in order to determine whether deliberate efforts were made to influence aggregate demand through fiscal policy at times of economic fluctuations.

75. The overall balance is decomposed to isolate the impact cyclical fluctuations in economic activity from other structural factors and discretionary policy actions.[35] The overall balance (B_t) in year t thus comprises four major components as follows:

$$B_t = (t_a - g_a)YP_t + t_a(Y_t - YP_t) + DPB_t - r_t D_{t-1}$$

The first term on the right-hand side of this equation represents the structural component of overall balance, that is, what the deficit would be if the economy were operating at its full potential. The second term captures the cyclical component of the deficit that reflects the deviation of actual economic activity from its potential. The third term (DPB_t) is the discretionary primary balance reflecting the net value of annual discretionary revenue and noninterest expenditure measures, and the final term is the interest bill. Thus the stance of fiscal policy could be described as expansionary relative to the average between 1990–2001, if the actual budget deficit in a particular year t, is greater than the cyclically adjusted deficit.

76. The objective of debt sustainability left little scope for discretionary fiscal policy for much of the 1990s. Fiscal policy consistently maintained a primary structural surplus of about 2.1 percent of GDP (see Table III.6). By aiming for the average annual primary surplus well

[34] The standard deviation of real economic growth between 1990 and 2001 was 4.1 percentage points.

[35] See Appendix II for further explanation.

above the average cyclical surplus of ½ percent of GDP, a conscious decision also appears to have been made to offset the operation of automatic stabilizers during economic downturns to aim for a more ambitious adjustment effort. This is not surprising given the share of expenditure devoted to interest costs, an average of 6.2 percent of GDP per annum, exceeded the average annual level of the deficit. Jordan's experience in this regard reflects that of many other countries facing high debt burdens. In a cross section of emerging and developing countries, Hemming and others (2002) find that the scope for countries with high debt burdens to pursue expansionary fiscal policy in economic downturns was limited.

77. As the lower debt burden began to yield savings on debt service in the late 1990s, the scope for discretionary fiscal action improved. As economic growth fell significantly below its potential from 1998, the average annual deficit widened by about 2¾ percentage points of GDP and the primary surplus fell by 3.8 percent of GDP relative to the average maintained during 1992 and 1997. However, just less than 40 percent of the reduction of the primary surplus reflected the automatic response of fiscal policy to the slowdown in economic activity. The bulk reflected the impact of discretionary fiscal measures, especially in 1998.

78. The effectiveness of fiscal policy in smoothing economic volatility and supporting output over the 1990s may also have been constrained by transmission lags which make fiscal policy in Jordan pro-cyclical. Talvi and Végh (2000) found that revenue and government spending in Jordan and other developing countries were positively correlated with movements in output rather than moving in a countercyclical fashion.[36] Figure III.10 illustrates the co-movement of the relationship between the primary balance and the output gap, which became more highly correlated after 1993. It also compares the demand impact of fiscal policy in Jordan as measured by the weighted budget balance with the actual annual fiscal impulse.[37] Although fiscal policy turned expansionary in the periods 1993–94, 1997–98, and again in 2000, in most instances the impact on aggregate demand was felt with a lag of about a year and was smaller than the original impulse. In addition, the impact of such a stimulus appeared to have diminished from the mid-1990s.

F. Conclusion

79. Throughout the 1990s, fiscal policy has been dominated by the need to target large fiscal primary surpluses to reduce the debt burden from unsustainable levels. Aided by a

[36] For the data reported in this paper between 1990 and 2001, the correlation coefficient between real outturn [do you mean output?]and real expenditure and revenues was 0.95 and 0.97, respectively, and the coefficients are statically [should this be statistically?] different from zero at the one percent level.

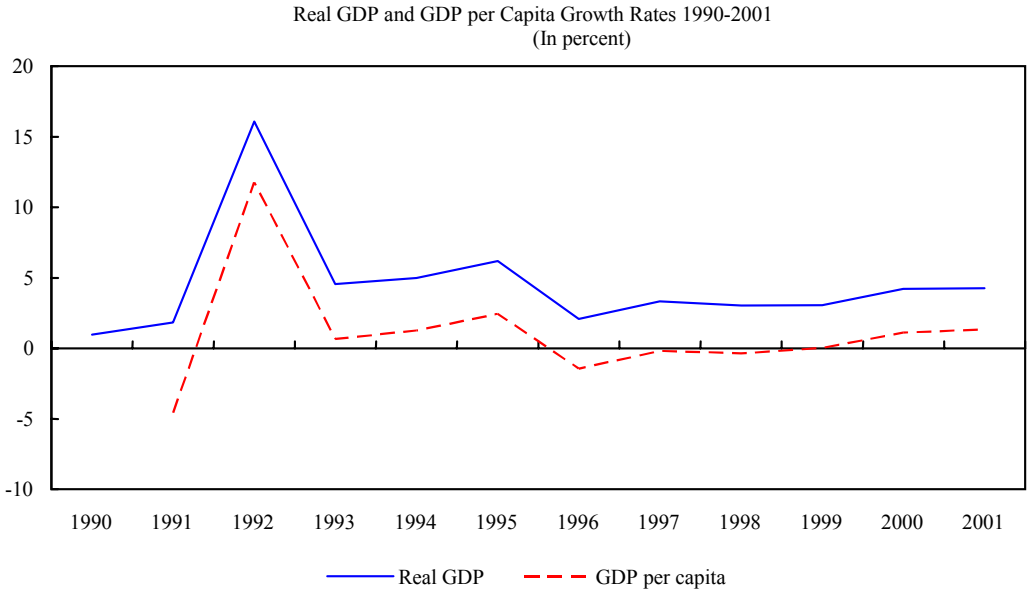
[37] The fiscal impulse used here is measured relative to the previous year. Following, Chalk (2002), the demand impact of fiscal policy is measured by the weighted budget balance (i.e., the change in fiscal aggregates weighted by their multipliers). The analysis assumes multipliers are 0.5 for changes in government savings and 1.2 for changes in government consumption and spending. The elasticities on consumption and investment reflect those estimated in other empirical studies. For example, Kneller and others (1999).

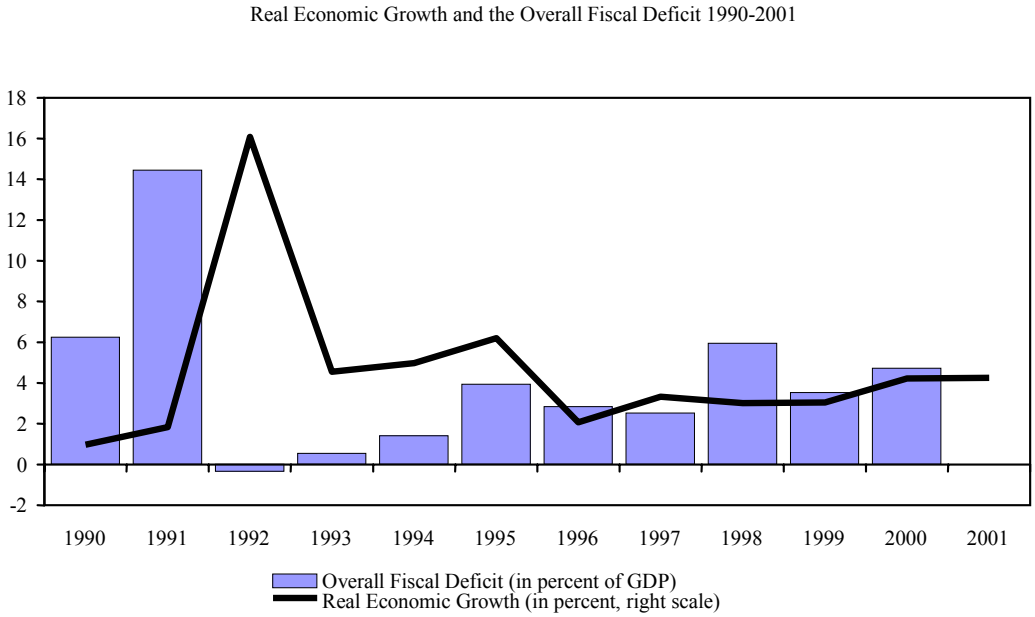
conservative debt management strategy, this policy has been largely successful. The debt burden has declined substantially from the peak of the late 1980s. This reduction was achieved despite somewhat higher overall fiscal deficits which, in part, reflected the negative impact of structural reforms such as trade liberalization and privatization on tax revenues and rigidities in budget expenditure. The easing in the debt burden has begun to yield substantial dividends in terms of lower debt service costs allowing for a gradual relaxation of the fiscal stance and the primary adjustment effort while still allowing for the debt burden to decline. The reduction in debt service costs and the replacement of indirect commodity subsidies with direct income transfers also created room for the government to improve the quality and effectiveness of public expenditure despite the on-going consolidation effort.

80. Looking ahead, Jordan's debt burden although high, appears consistent with debt sustainability and further reductions in the debt burden should be within the government's control. The government has established a revised medium-term goal for debt reduction under the revised Public Debt Management Law (2001). The law requires the total public debt stock to fall to 80 percent of GDP, and the external public debt stock to 60 percent of GDP by end-2006. Current fiscal policy appears to be broadly sustainable and should be sufficient to allow for the continued fall in the debt burden, absent large external macroeconomic shocks. However, maintaining the current stance of fiscal policy assumes that the government can continue to run a primary balance over the next five years. This will not be an easy task. Underlying structural characteristics of the budget system will require substantial reform if the stance of fiscal policy is not to deteriorate. A broad-based consolidation effort will be needed to reverse the secular decline in tax revenues and the underlying rigidities in government spending.[38] The new Public Debt Management Law formally signals the government's commitment to the goal of debt sustainability and the consolidation efforts needed to underpin it. The challenge now is to sustain and broaden the reform momentum.

[38] See Chapter V below, '*A Medium-Term Fiscal Strategy*' for a detailed discussion on fiscal reform priorities for the medium-term.

Figure III.9. Jordan: Economic growth and fiscal policy, 1990–2001





Sources: MOF and IMF Staff calculations.

Table III.6: Jordan—Estimates of Fiscal Impulse

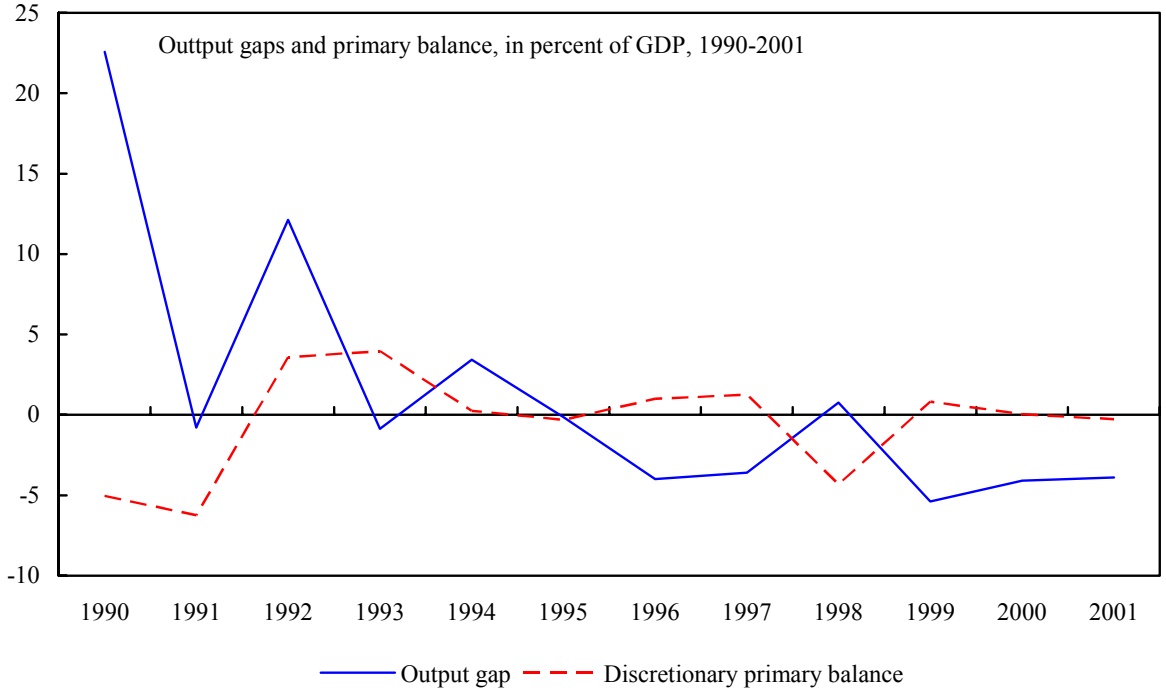
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Average 1990–2001
						(In millions of JD)							
Nominal GDP (current prices)	2,728.2	2,932.7	3,616.0	3,884.3	4,357.9	4,714.8	4,912.2	5,137.5	5,609.8	5,767.4	6,002.4	6,260.0	
Potential GDP (current prices) 1/	2,112.2	2,956.1	3,177.6	3,918.0	4,208.7	4,721.9	5,108.6	5,322.5	5,566.6	6,078.4	6,249.1	6,503.7	
Output gap	616.0	-23.4	438.4	-33.8	149.2	-7.2	-196.4	-184.9	43.2	-311.0	-246.8	-243.7	
Overall fiscal balance 2/	-170.4	-423.5	12.3	-21.3	-61.1	-185.4	-138.8	-129.2	-333.8	-202.8	-282.7	-235.2	
Primary balance	105.6	-122.7	330.2	229.6	173.4	62.2	96.8	108.6	-78.9	81.6	32.1	43.8	
Structural primary balance	44.6	62.5	67.1	82.8	88.9	99.8	107.9	112.5	117.6	128.4	132.0	137.4	
Cyclical component	205.1	-7.8	145.9	-11.2	49.7	-2.4	-65.4	-61.6	14.4	-103.5	-82.1	-81.1	
Interest charges	282.4	294.7	330.5	247.0	210.1	268.3	230.1	244.5	223.3	274.5	335.4	274.3	
Discretionary primary balance	-137.7	-183.4	129.8	154.1	10.4	-14.5	48.8	64.3	-242.5	46.8	2.8	-17.2	
						(In percent of GDP)							
Overall fiscal balance 2/	-6.2	-14.4	0.3	-0.5	-1.4	-3.9	-2.8	-2.5	-6.0	-3.5	-4.7	-3.8	-4.1
Primary balance	3.9	-4.2	9.1	5.9	4.0	1.3	2.0	2.1	-1.4	1.4	0.5	0.7	2.1
Structural primary balance	1.6	2.1	1.9	2.1	2.0	2.1	2.2	2.2	2.1	2.2	2.2	2.2	2.1
Cyclical component	7.5	-0.3	4.0	-0.3	1.1	-0.1	-1.3	-1.2	0.3	-1.8	-1.4	-1.3	0.4
Interest charges	10.4	10.0	9.1	6.4	4.8	5.7	4.7	4.8	4.0	4.8	5.6	4.4	6.2
Discretionary primary balance	-5.0	-6.3	3.6	4.0	0.2	-0.3	1.0	1.3	-4.3	0.8	0.0	-0.3	-0.4
Output gap	22.6	-0.8	12.1	-0.9	3.4	-0.2	-4.0	-3.6	0.8	-5.4	-4.1	-3.9	1.3

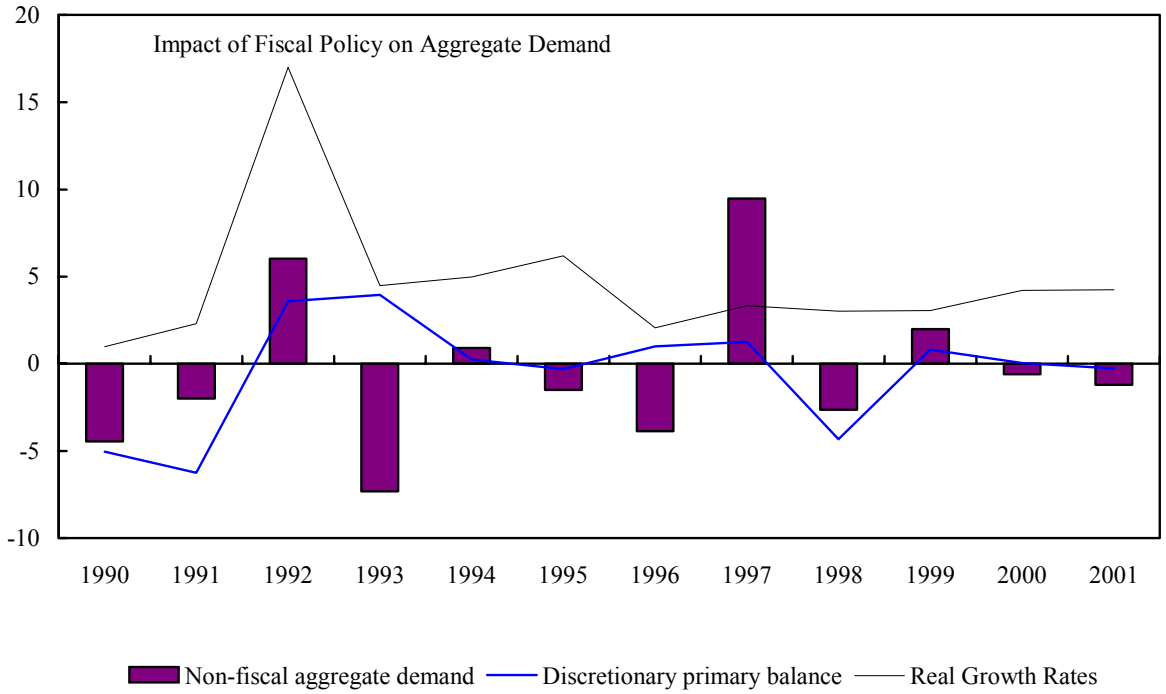
Source: IMF staff estimates.

1/ Assuming potential GDP is equal to the average nominal growth rate observed between 1990–2001 of 8.4 percent. Potential output in 2001 is such that the sum of the output gaps over the period is equal to zero.

2/ Overall fiscal balance, including grants as part of revenue, and transactions through off-budget accounts.

Figure III.10. Jordan: Macreconomic Impact of Fiscal Policy, 1990-2001





Source: Fund staff calculations.

Derivation of Primary Gap Indicators

The primary gap indicator is based on the primary deficit necessary to stabilize the debt ratio. The latter is given by:

$$\overline{d} = (n_t - r_t)b_t ,$$

where $b_t = \frac{B_t}{Y_t}$ is the target ratio of debt to GDP, n_t is the real growth rate and r_t is the real interest rate. Thus the primary gap indicator is:

$$\overline{d} - d_t = (n_t - r_t)b_t - d_t ,$$

where a negative value implies that the current level of the primary balance is too large to stabilize the debt burden and that fiscal policy is unsustainable. Similarly, the tax gap indicator is based on the tax-to-GDP ratio necessary to reduce the debt ratio to a target level. This is given by:

$$\bar{t} = g_t - (n_t - r_t)b_t ,$$

where g_t is the ratio of government noninterest spending to GDP. Thus the tax gap indicator is:

$$t_t - \bar{t} = t_t + (n_t - r_t)b_t - g_t .$$

Again, a negative value for this indicator implies that current taxes are too low to stabilize the debt to GDP ratio at b_t the target rate.

Methodology for Estimating the Cyclically Adjusted Fiscal Balance

The purpose of this annex is to describe the methodology used to assess the interrelationship between fiscal policy and growth. In particular the methodology makes a distinction between changes in government revenue and expenditure that are associated with cyclical fluctuations in economic growth and the changes that reflect policy changes. The analysis constructs a normative measure of fiscal policy by assessing how the actual fiscal deficit compares to a cyclically neutral deficit that is derived by assuming that revenues and expenditure are unit elastic with respect to growth.

We estimate the normative value of the deficit in any particular year using the average values in lieu of taking the normal base year approach. In the absence of reliable proxies, such as the unemployment rate, potential output (YP_t) is assumed to grow at a constant rate equal to the average nominal growth rate observed between 1990 and 2001, 8.4 percent. The initial level of potential output is adjusted iteratively in such a way that the sum of the difference between potential and actual GDP growth (Y_t) between 1990 and 2001 is zero. The starting point of the analysis is that the budget balance can be decomposed into two parts, the primary balance and interest payments.

$$B_t = PB_t - r_t D_{t-1},$$

where B_t, is the overall budget deficit, PB_t is the primary balance, r_t is the effective nominal interest rate and D_t is the public debt, all in period t.

The primary balance decomposes into total revenue and total primary expenditure

$$PB_t = T_t - E_t,$$

where T_t is the overall revenue ratio, including grants and E_t is total primary expenditure, including expenditure through off-budget accounts, all in period t. Tax revenue can be decomposed into three components, structural, cyclical, and discretionary components. Absent discretionary tax measures, tax revenue is a function of observed output and the average tax ratio. To isolate the structural component from the cyclical effect, potential output is substituted for actual output to determine structural tax revenue and the difference is the cyclical effect.

$$T_t = t_a YP_t + t_a\left(Y_t - YP_t\right) + IT_t,$$

where t_a is the average revenue to GDP ratio between 1990 and 2001 (33.3 percent) and IT_t is discretionary tax revenue in year t. Primary expenditure is decomposed in a similar way, as a

function of potential output and the average expenditure ratio with the exception that there is no cyclical impact, which is not an unrealistic assumption in the case of Jordan, given the absence of unemployment insurance.

$$E_t = g_a YP_t + IE_t ,$$

where IE_t is discretionary primary expenditure in period t.

Substituting these variables into the original equation leads to

$$B_t = (t_a - g_a)YP_t + t_a(Y_t - YP_t) + IB_t - r_t D_{t-1},$$

where IB_t is the discretionary primary balance.

Following Chand (1992), the annual primary fiscal impulse to aggregated demand used in Section V is given by:

$$FI = (\Delta E - g_a \Delta YP) - (\Delta T - t_a \Delta Y),$$

where Δ denotes first differences.

References

Alesina, Albert, and Silvia Ardagna, 1998, "Tales of Fiscal Contraction," *Economic Policy*, Vol. 27, October, pp. 489–545.

Alesina, Albert, and Roberto Perotti, 1995, "Fiscal Expansions and Adjustments in OECD Countries," *Economic Policy*, Vol. 21, October, pp. 205–48.

Blanchard, Olivier Jean, 1990, " Suggestions for a New Set of Fiscal Indicators" OECD Working Paper No. 79 (Paris Organization for Economic Cooperation and Development).

Buiter, Willem, H., 1985, " Guide to Public Sector Debt and Deficits," *Economic Policy*, Volume 1 (November), pp. 13–79.

Chalk, Nigel, "Structural Balances and All That: Which Indicators to Use in Assessing Fiscal Policy," *IMF Working Papers*, WP/02/101.

Chalk, Nigel and Richard Hemming, 2000, "Assessing Fiscal Sustainability in Theory and Practice," *IMF Working Papers*, WP/00/81.

Chand, Sheetal, K, 1992, "Fiscal Impulses and their Fiscal Impact," *IMF Working Paper, WP/38/*92.

Ebril, Liam, Michael Keen, Jean-Paul Bodin, and Victoria Summers, (2001) "*The Modern VAT*," International Monetary Fund, Washington, D.C.

Giavazzi, Francesco, and Marco Pagano, 1996, "Non-Keynesian Effects of Fiscal Policy Changes: International Evidence and the Swedish Experience," *Swedish Economic Policy Review*, Vol. 75, November, pp. 75–111.

Giavazzi, Francesco, Tullio Tappelli, and Marco Pagano, 2000, "Searching for Non-Linear Effects of Fiscal Policy: Evidence from Industrial and Developing Countries," NBER Working Paper No. 7460 (Cambridge, Massachussetts: National Bureau of Economic Research).

Goldsbrough, David, Sharmini Coorey, Louis Dicks-Mireaux, Balazs Horvath, Kalpana Kochhar, Mauro Mecagni, Erik Offerdal and Jianping Zhou, "Reinvigorating Growth in Developing Countries: Lessons from Adjustment Policies in Eight Economies", *IMF Occasional Papers, 139,* Washington, D.C.

Hemming, Richard, Selma Mahfouz, and Axel Schimmelpfennig, (2002) Fiscal policy and economic activity during recessions in advanced economies, IMF *Working Papers, WP/02/87.*

Kneller, Richard, Michael F. Bleaney, and Norman Gemmell, (1999) Fiscal policy and growth: evidence from OECD countries, *Journal of Public Economics*, Volume 74 (2), pp. 171–190.

Maciejewski, Mansur, Alonso-Gamo, Chauffour, Callatay and, McDermott (1995), Jordan: Strategy for Adjustment and Growth Strategy, Occasional Paper No. 136.

McDermott, C. John, and Robert F, Wescott, 1996, "An Empirical Analysis of Fiscal Adjustment," IMF Working Paper 96/59 (Washington: International Monetary Fund).

Public Debt Management Law (2001), Law No. 26, Amman, Jordan.

Talvi, Ernesto and Carlos Végh, 2000, Tax base variability and procyclical fiscal policy, NBER Working Paper Series, No. 7499: 1[36], January 2000.

IV. External Debt Dynamics and Sustainability[39]

A. Introduction

81. Jordan has made significant strides in lowering its external debt burden and strengthening its balance of payments position during the last decade. Between 1992 and 2003, the ratio of total external debt to GDP declined from roughly 120 percent to 78 percent of GDP. Similarly, debt service, on a commitment basis, has declined from 20 percent of GDP in 1992 to about 9 percent of GDP in 2003 (or from 33 percent to 15 percent of foreign exchange receipts). Lower interest payments, combined with an ambitious structural reform agenda that has engendered a rise in economic growth and trade activity, have also facilitated a notable improvement in the balance of payments position—significantly increasing Jordan's ability to withstand external shocks and to service its external obligations.

82. The objectives of this chapter are to (i) review the path of Jordan's external debt and its debt management strategy over the last decade; (ii) explain the dynamics behind Jordan's external debt in an effort to discriminate between "debt-creating" and "debt-reducing" factors; (iii) assess the relative scale of the external debt burden; and (iv) address the issue of sustainability over the medium term. The methodology for this exercise is based on accounting frameworks that illustrate the driving forces behind changes in Jordan's external debt over the period 1992–2002—from a balance of payments perspective. The assessment of Jordan's external debt burden is based on standard indicators and a comparison with other developing and lower middle-income countries.

83. In broad terms, the analysis suggests that external debt has not been driven by a need to finance external current account deficits. Successful demand management policies have in fact shifted the external current and capital account balances to levels consistent with a sustained reduction of external debt. Rather, the authorities' efforts to accumulate a comfortable reserve cushion—bolstering confidence in the Jordanian dinar and the peg to the U.S. dollar—and the related decision to finance development spending through external loans instead of domestic debt have been the main forces behind Jordan's external debt stock over the last decade. Further, from a sustainability standpoint, the growth in foreign exchange receipts over the last 10 years, and the impact of five successive Paris Club reschedulings strengthened Jordan's capacity to repay its external obligations. Looking forward, Jordan's debt burden appears manageable under all but the most extreme external shocks.

84. The remainder of this chapter is organized as follows: Section B reviews the origins of Jordan's external debt burden, and the strategy that was implemented to deal with debt and debt service in the context of structural adjustment; Section C reviews the results of the

[39] Prepared by Todd Schneider.

strategy by examining the trajectory of external debt and debt service; Section D examines the underlying dynamics of public debt from a balance of payments perspective; Section E examines the dimensions of Jordan's external debt through a cross-country comparison and by the use of a "solvency index." Finally, Section F addresses the issue of the future sustainability of external debt.

B. Jordan's Debt Management Policy

85. Jordan's economy expanded rapidly in the 1970s in the wake of a regional economic boom that opened up opportunities for Jordan's exports and the employment of Jordanians in other Gulf states. These developments were complemented by markedly higher grants from neighboring oil-exporting countries. This process continued through the mid-1980s, even when the region began to experience recessions from the collapse of international oil prices.[40]

86. Despite the substantial reduction in remittances and grants that accompanied the regional economic downturn, the Jordanian authorities maintained their economic policies during the period 1984–88. Instead of adjusting to lower inflows, the authorities resorted to foreign borrowing on commercial terms. As a result, Jordan's outstanding external public and publicly guaranteed debt built up to $8 billion by the end of 1988, while outstanding short-term debt reached $400 million. By that time, with the slowdown in economic activity and high real interest rates in the world market, the debt burden had reached unsustainable levels.

87. As payment difficulties emerged, the Jordanian authorities adopted domestic demand management policies supported by fiscal adjustment and a tighter monetary stance to reduce the external current account balance to a level consistent with a longer-term reduction of external debt. Simultaneously, the authorities initiated an external debt-management policy in 1989, aimed at alleviating debt service through a series of Paris Club rescheduling agreements, lengthening the maturity structure of debt, and reducing the debt-to-GDP ratio by containing domestic demand and enhancing growth. The strategy had four key elements:

- A rescheduling arrangement with Paris Club creditors in 1989 and normalizing relations with other bilateral creditors along the same terms.
- Negotiations with commercial banks to obtain a multiyear rescheduling of obligations and the option of debt conversion at a discount.
- Limiting all new borrowing to medium- and long-term maturities, mostly at concessional interest rates.
- Cancellation of most new commercial borrowings that were in the pipeline.

[40] For further details on the historical aspects of Jordan's debt dynamics see Maciejewski, Edouard and Ahsan Mansur, *Jordan: Strategy for Adjustment and Growth*, IMF Occasional Paper 13.

88. The Jordanian authorities, with the support of a series of IMF arrangements, have adhered closely to this four-point strategy. The first Paris Club rescheduling was followed by four additional reschedulings between 1992 and 1999. An exit rescheduling was granted in 2002 (Box IV.1). Taken together, these agreements facilitated the rescheduling of some $5 billion in obligations—significantly changing the debt service profile by a lengthening of maturities and restructuring of interest obligations on more favorable terms.

89. Negotiations with commercial creditors were also successful. Initially, an informal agreement was reached with the steering committee of commercial banks in 1990, under which Jordan agreed to pay all interest obligations in arrears through end March 1990, and the banks agreed to reschedule or refinance all remaining interest and amortization obligations. A final agreement was not reached before the Gulf crisis, but later negotiations led to a Brady Bond operation. Jordan concluded an agreement with commercial creditors in December 1993 to exchange $736 million in outstanding loans for $652 million in Brady bonds (par and discount bonds).[41]

90. The Jordanian authorities have exercised considerable prudence with regard to new debt obligations. The government currently has no obligations to commercial creditors and no short-term debt.[42] The structure of public external borrowing also reflected the change in strategy. Multilateral borrowing, in particular, has come to play a more important role, with the share of multilateral debt rising from 13 percent of the outstanding debt stock in 1992, to roughly 33 percent as of end-2002.

91. In addition to the four central pillars noted above, Jordan's debt reduction strategy has benefited from additional measures and operations. In the wake of the peace agreement with Israel, the United States unilaterally granted Jordan some $700 million in debt forgiveness. Debt for equity and debt for development swaps have also become a common feature in recent years, and have resulted in a face-value reduction of some $228 million between 1992 and 2002. The government also signed a debt for equity swap with a major bilateral donor in December 2003, resulting in a further reduction in external debt of $133 million. (1.2 percent of GDP) The Jordanian authorities have availed themselves of the opportunity to repurchase outstanding Brady Bonds at a discount. Through the end of 2002, the authorities retired a face value of $195 million at a cost of $146 million. In December 2003, Jordan bought back its

[41] An additional $83 million in interest arrears bonds were issued at the same time. Payment of principal on these bonds is due in nineteen equal, semi-annual installments starting December 1996, with annual interest set at LIBOR plus 0.8 percent. The stock of these bonds as of end-2001 was $50 million, with payment to be completed in 2005.

[42] Jordan also has remarkably little private sector external debt—due in large part to the high premium that most corporations would have to pay to access international financial markets. Only two firms—the Jordan Phosphate Mining Company (JPMC) and the Jordan Telecom Corporation (JTC)— have issued international debt instruments. A total of $150 million in Eurobonds were issued by these two quasi-public firms in the mid-1990s, with bullet payments due in the second half of 2002. Neither issue had a government guarantee.

outstanding stock of Brady bonds for an amount of $456 million, thereby recovering $180 million of collateral, of which $165 million of principal and $25 million of rolling interest guarantees.

C. External Debt Trajectory

92. While the nominal value of Jordan's external debt has remained relatively steady at around $7 billion, the size of the debt burden in relation to other variables has declined substantially (Table IV.1). External debt to GDP declined from 120 percent in 1992 to 77 percent by end-2003. The stock of Jordan's external debt also showed remarkable improvement relative to foreign exchange receipts[43]—reflecting the improvement in the balance of payments brought about by demand management and structural reforms. Total external debt as a share of foreign exchange receipts declined from 189 percent in 1992 to 114 percent by the end of 2003.

Table IV.1. Jordan: External Debt, 1992-2003

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
						(In millions of US Dollars)						
Total external debt 1/	6,456	6,617	6,841	7,000	7,413	7,335	7,868	8,117	7,413	7,296	7,733	7,654
Public and Publicly Guaranteed	6,456	6,617	6,841	6,950	7,363	7,185	7,718	7,967	7,263	7,146	7,683	7,604
Private	0	0	0	50	50	150	150	150	150	150	50	50
By Debtor/Creditor/Instrument												
Public and publicly guaranteed	6,456	6,617	6,841	6,950	7,363	7,185	7,718	7,967	7,263	7,146	7,683	7,604
Bilateral Creditors	3,949	4,165	4,623	4,521	4,584	4,357	4,706	4,787	4,336	4,231	4,595	5,056
Multilateral Creditors	815	870	1,047	1,341	1,707	1,841	2,125	2,322	2,253	2,317	2,521	2,457
Brady Bonds	0	0	876	842	797	755	721	712	551	497	492	25
Other	1,692	1,583	295	245	226	182	165	146	124	101	78	66
Private	0	0	0	50	50	150	150	150	150	150	50	50
						(In percent of GDP)						
Total	120.3	118.0	109.7	104.0	107.0	101.2	99.4	99.8	87.8	82.0	82.4	77.6
Public and Publicly Guaranteed \1	120.3	118.0	109.7	103.3	106.3	99.2	97.5	97.9	86.0	80.3	81.9	77.1
Private	0.0	0.0	0.0	0.7	0.7	2.1	1.9	1.8	1.8	1.7	0.5	0.5
						(In percent of current foreign exchange receipts)						
Total	188.8	175.6	171.9	151.8	146.3	144.2	158.6	160.6	142.0	130.0	124.1	118.7
Public and Publicly Guaranteed	188.8	175.6	171.9	150.7	145.4	141.3	155.6	157.6	139.2	127.3	123.3	117.9
Private	0.0	0.0	0.0	1.1	1.0	2.9	3.0	3.0	2.9	2.7	0.8	0.8
Memorandum Items												
GDP	5,367	5,607	6,237	6,731	6,928	7,246	7,912	8,134	8,447	8,901	9,383	9,860
Foreign Exchange Receipts	3,420	3,768	3,980	4,612	5,066	5,085	4,960	5,054	5,219	5,612	6,234	6,449

Source: Ministry of Finance; Central Bank of Jordan.

1/ Includes Brady Bonds at face value.

[43] Foreign exchange receipts are defined as the sum of exports of goods and nonfactor services and inward remittances.

Box IV.1. History of Jordan's Paris Club Operations

Jordan has had a total of six debt reschedulings through the Paris Club over the past 13 years—as many as some HIPC Initiative countries. Taken together, these agreements have rescheduled some $5 billion in debt service obligations. The terms have remained nonconcessional, however, reflecting Jordan's status as a lower-middle income country and stronger capacity to repay. Jordan has benefited, however, from the Club's changing approach to rescheduling operations. The most recent agreement, achieved in July 2002, was seen as an exit rescheduling. A general description of each agreement follows:

The 2002 agreement covers the period July 2002 to July 2007, and is intended as an exit rescheduling. It covers some $1.3 billion in debt relief over the consolidation period, and provides for a nonconcessional rescheduling of medium and long-term government and government guaranteed debt contracted before the cut-off date of January 1, 1989. The structure of the rescheduling follows Houston terms, but is unique insofar as it covers a consolidation period that extends three years past the end of the current IMF Standby Arrangement. The amount of relief is also digressive, gradually reducing the amount of pre-cutoff date debt subject to rescheduling in the outer years.

The 1999 agreement covered the period April 1 1999 to April 30, 2002. It treated some $821 million in debt service due to Paris Club creditors over the consolidation period. The agreement provided for a nonconcessional rescheduling of scheduled amortization and interest payments arising from medium- and long-term government and government-guaranteed debt contracted by the Jordanian public sector before January 1, 1989. The structure of Jordan's rescheduling followed Houston Terms: ODA loans were rescheduled over 20 years with a 10-year grace period; repayment schedule was flat. Non-ODA loans were rescheduled over 18 years with a three-year grace period; the repayment schedule was graduated.

The 1997 agreement covered the period June 1997–February 1999. It treated some $400 million of debt service to Paris Club creditors over the period. This agreement was assumed to be an exit rescheduling, and creditors consequently granted relatively favorable coverage and terms. The agreement covered 100 percent of principal and interest payments on nonpreviously rescheduled debt (NPRD), as well as those rescheduled debts under the 1989 and 1992 agreements. Payments on ODA loans were rescheduled over 20 years, with a 10 year grace period. The repayment schedule was flat. Payments on commercial loans were rescheduled over 18 years with a 3 year grace period; the repayment schedule was graduated. The agreement provided for, on a voluntary basis, bilateral debt swaps of ODA loans as well as up to 20 percent of other eligible loans.

The 1994 agreement covered the period July 1994–May 1997, and treated some $1.2 billion of debt service from Paris Club creditors over the period. The agreement covered 100 percent of principal and interest payments on NPRD, as well as those due as a result of the 1989 rescheduling agreement. Payments on ODA loans were rescheduled over 19 years with a 9-year grace period; the repayment schedule was flat. Payments on non-ODA loans were rescheduled over 17 years including a 2-year grace period, on a graduated schedule.

The 1992 agreement covered the period January 1992–June 1993, and treated some $771 million of debt service from Paris Club creditors. The agreement covered 100 percent of principal and 50 percent of interest falling due on NPRD during the consolidation period, as well as similar proportions of arrears outstanding as of end-1991. Payments on ODA loans were rescheduled over 19 years with a 10-year grace period. Payments on non-ODA loans were rescheduled over 14 years including an 8-year grace period. Repayment schedules were flat.

The 1989 agreement covered the period July 1989 to December 1990, and covered $587 million of debt service from Paris Club creditors over the period. The agreement covered 100 percent of principal and 50 percent of interest falling due on NPRD debt during the consolidation period, and 100 percent of principal and interest arrears due at end-June 1989. Payments on arrears were rescheduled over 8 years, with a 4 year grace period. Payments on other debt service were rescheduled over 9 years, with a 5 year grace period. Repayment schedules were flat.

93. Jordan's external debt has also shown a favorable trend in terms of the composition of creditors (Table IV.2). Commercial debt has virtually disappeared, replaced by an increased reliance on multilateral and concessional bilateral loans. In general, the terms and structure of new debt remain true to the original strategy. In 2001, new loans contracted by the government had an weighted average maturity of 20 years, and a weighted average grant element of almost 40 percent.[44] Terms were less generous in 2002, however, with a weighted average grant element of only 26 percent, and a weighted average maturity of 11 years, but improved again in 2003, with a weighted grant element of 33 percent and a weighted average maturity of 19 years.

Table IV.2. Jordan: Structure of External Debt, 1992-2002

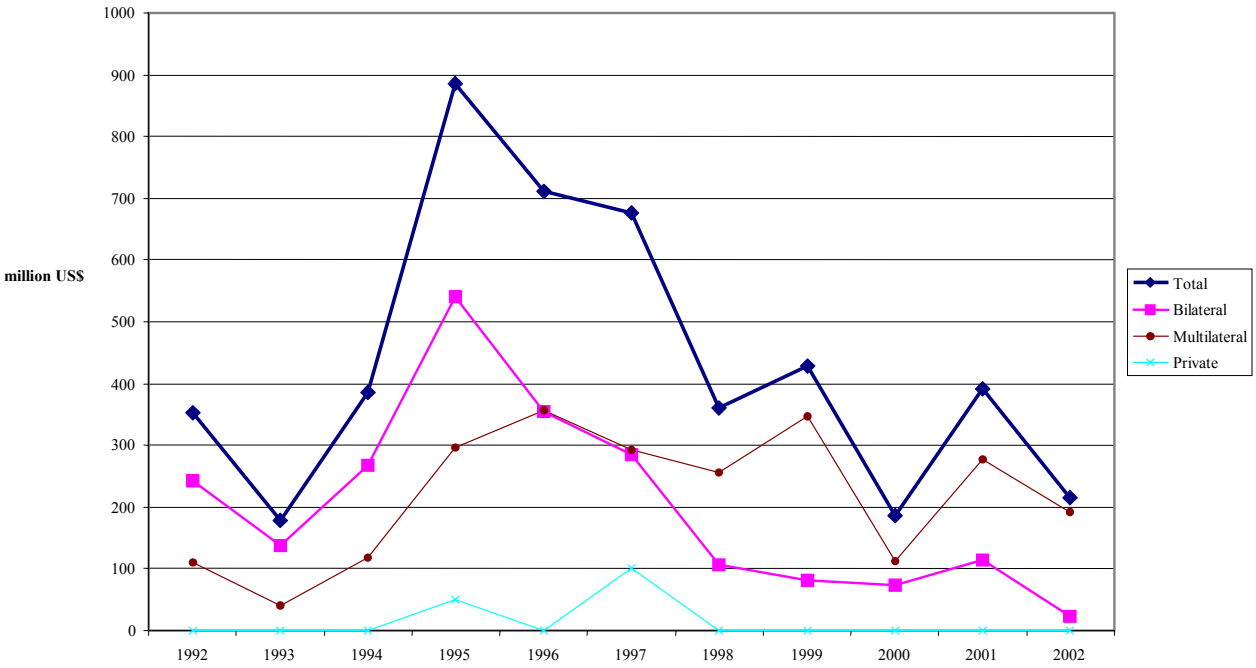
	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
						(Millions of US dollars)						
Total												
Public and Publicly Guaranteed	6,456	6,617	6,841	6,950	7,363	7,185	7,718	7,967	7,263	7,146	7,683	7,604
Private	0	0	0	50	50	150	150	150	150	150	50	50
By Debtor/Creditor/Instrument												
Public and Publicly Guaranteed						(In percent of public and publicly guaranteed external debt)						
Bilateral Creditors	61.2	62.9	67.6	65.1	62.3	60.6	61.0	60.1	59.7	59.2	59.8	66.5
Multilateral Creditors	12.6	13.1	15.3	19.3	23.2	25.6	27.5	29.1	31.0	32.4	32.8	32.3
Brady Bonds	0	0	12.8	12.1	10.8	10.5	9.3	8.9	7.6	7.0	6.4	0.3
Other	26.2	23.9	4.3	3.5	3.1	2.5	2.1	1.8	1.7	1.4	1.0	0.9
						(In percent of GDP)						
Bilateral Creditors	73.6	74.3	74.1	67.2	66.2	60.1	59.5	58.8	51.3	47.5	49.0	51.3
Multilateral Creditors	15.2	15.5	16.8	19.9	24.6	25.4	26.9	28.5	26.7	26.0	26.9	24.9
Brady Bonds	0.0	0.0	14.0	12.5	11.5	10.4	9.1	8.7	6.5	5.6	5.2	0.3
Other	31.5	28.2	4.7	3.6	3.3	2.5	2.1	1.8	1.5	1.1	0.8	0.7
						(In percent of current foreign exchange receipts)						
Bilateral Creditors	115.5	110.5	116.1	98.0	90.5	85.7	94.9	94.7	83.1	75.4	73.7	78.4
Multilateral Creditors	23.8	23.1	26.3	29.1	33.7	36.2	42.8	45.9	43.2	41.3	40.4	38.1
Brady Bonds	0.0	0.0	22.0	18.3	15.7	14.9	14.5	14.1	10.6	8.9	7.9	0.4
Other	49.5	42.0	7.4	5.3	4.5	3.6	3.3	2.9	2.4	1.8	1.2	1.0
Private						(In percent of private external debt)						
Eurobonds	0.0	0.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: Ministry of Finance; Central Bank of Jordan

[44] Source: Ministry of Finance and Fund staff estimates.

94. The burden of debt service has also declined (Table IV.3 and Figure IV.1). In 1992, service on scheduled public and publicly guaranteed external debt was just over 21 percent of GDP, 33 percent of foreign exchange receipts, and 65 percent of domestic revenue. By 2003, these ratios had declined to 9 percent, 13 percent, and 34 percent, respectively. On a cash basis, reflecting Paris Club reschedulings, external debt service was 7 percent of GDP and 10 percent of foreign exchange receipts. This performance compares favorably with developing countries as a group, which registered an average debt service equivalent to 6.1 percent of GDP and 19.3 percent of foreign exchange receipts in 2002.[45]

Figure IV.1. Gross Debt Related Capital Flows, 1992-2002



[45] Source: Staff estimates based on WEO data.

Table IV.3. Jordan: Scheduled External Debt Service, 1992-2003

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
						(In millions of U.S. dollars)						
Total	1133	1015	914	918	945	835	785	786	740	780	914	861
Principal	700	624	557	540	566	474	413	409	353	437	619	541
Interest	434	391	357	378	379	361	372	376	387	344	295	320
Public and publicly guaranteed	1133	1015	914	917	942	824	775	776	730	769	812	860
Principal	700	624	557	540	566	474	413	409	353	437	519	541
Bilateral Creditors	328	317	327	330	316	261	232	213	163	210	244	257
Multilateral Creditors	99	135	130	108	149	142	129	166	158	191	239	250
Brady Bonds	184	107	27	27	30	33	34	10	10	10	10	11
Other	89	66	73	74	71	39	18	20	22	26	26	24
Interest	434	391	357	378	376	350	362	366	377	332	293	318
Bilateral Creditors	201	201	201	201	201	201	201	201	201	201	201	201
Multilateral Creditors	69	68	59	78	84	95	98	107	117	112	103	116
Brady Bonds	88	88	88	88	88	88	88	88	88	88	88	88
Other	75	33	9	10	2	-34	-25	-30	-30	-69	-99	-87
Private	0	0	0	1	3	11	10	10	10	12	102	1
Principal	0	0	0	0	0	0	0	0	0	0	100	0
Interest	0	0	0	1	3	11	10	10	10	12	2	1
						(In percent of GDP)						
Total	21.1	18.1	14.7	13.6	13.6	11.5	9.9	9.7	8.8	8.8	9.6	8.8
Principal	13.0	11.1	8.9	8.0	8.2	6.5	5.2	5.0	4.2	4.9	6.5	5.5
Interest	8.1	7.0	5.7	5.6	5.5	5.0	4.7	4.6	4.6	3.9	3.1	3.2
Public and publicly guaranteed	21.1	18.1	14.7	13.6	13.6	11.4	9.8	9.5	8.6	8.6	8.6	8.7
Bilateral Creditors	9.9	9.2	8.5	7.9	7.5	6.4	5.5	5.1	4.3	4.6	4.7	4.6
Multilateral Creditors	3.1	3.6	3.0	2.8	3.4	3.3	2.9	3.4	3.3	3.4	3.6	3.7
Brady Bonds	5.1	3.5	1.9	1.7	1.7	1.7	1.5	1.2	1.2	1.1	1.1	1.0
Other	3.1	1.8	1.3	1.2	1.1	0.1	-0.1	-0.1	-0.1	-0.5	-0.8	-0.6
Private	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	1.1	0.0
Principal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
Interest	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0
						(In percent of current foreign exchange receipts)						
Total	33.1	26.9	23.0	19.9	18.7	16.4	15.8	15.5	14.2	13.9	14.7	13.4
Principal	20.5	16.6	14.0	11.7	11.2	9.3	8.3	8.1	6.8	7.8	9.9	8.4
Interest	12.7	10.4	9.0	8.2	7.5	7.1	7.5	7.4	7.4	6.1	4.7	5.0
Public and publicly guaranteed	33.1	26.9	23.0	19.9	18.6	16.2	15.6	15.3	14.0	13.7	13.0	13.3
Bilateral Creditors	15.5	13.7	13.3	11.5	10.2	9.1	8.7	8.2	7.0	7.3	7.1	7.1
Multilateral Creditors	4.9	5.4	4.7	4.0	4.6	4.7	4.6	5.4	5.3	5.4	5.5	5.7
Brady Bonds	8.0	5.2	2.9	2.5	2.3	2.4	2.5	1.9	1.9	1.8	1.6	1.5
Other	4.8	2.6	2.1	1.8	1.4	0.1	-0.1	-0.2	-0.1	-0.8	-1.2	-1.0
Private	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	1.6	0.0
Principal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
Interest	0.0	0.0	0.0	0.0	0.1	0.2	0.2	0.2	0.2	0.2	0.0	0.0
Memorandum Items												
Debt Service as a percent of official reserves	147.4	170.5	212.0	214.8	135.0	48.7	67.4	39.4	26.6	30.0	23.4	18.1
GDP	5,367	5,607	6,237	6,731	6,928	7,246	7,912	8,134	8,447	8,901	9,383	9,860
Current Foreign Exchange Receipts	3,420	3,768	3,980	4,612	5,066	5,085	4,960	5,054	5,219	5,612	6,234	6,449
Official Reserves	769	595	431	427	698	1,694	1,149	1,970	2,742	2,565	3,474	4,745
Actual Debt Service (in millions of US dollars)	-16	413	490	531	639	539	558	542	540	576	704	690
In percent of current foreign exchange receipts	-0.5	11.0	12.3	11.5	12.6	10.6	11.2	10.7	10.4	10.3	11.3	10.7
In percent of official reserves	-2.0	69.4	113.7	124.3	91.5	31.8	48.5	27.5	19.7	22.5	20.3	14.5

Source: Ministry of Finance; Central Bank of Jordan

95. The end-use of debt-creating inflows is also indicative of the government's approach to debt management. External borrowing for reserves buildup, balance of payments and budget support has constituted less of the total lending portfolio than might be expected—roughly 44 percent over the course of 1992–2002 (Figure IV.2). Rather, project lending has been the strongest force behind new loan inflows over the period, accounting for 50 percent of the total. This suggests that the authorities have sought to fill balance of payments needs through grants and rescheduling of existing obligations rather than through contracting of new debt. The fact that inflows on a net basis exceed those on a gross basis confirm this conclusion, as the bulk of scheduled repayments have been rescheduled over the past 10 years. New external debt has been used to fill the authorities' capital spending needs, substituting for the domestic debt, which remained relatively low at roughly 20 percent of GDP as of end-2002.

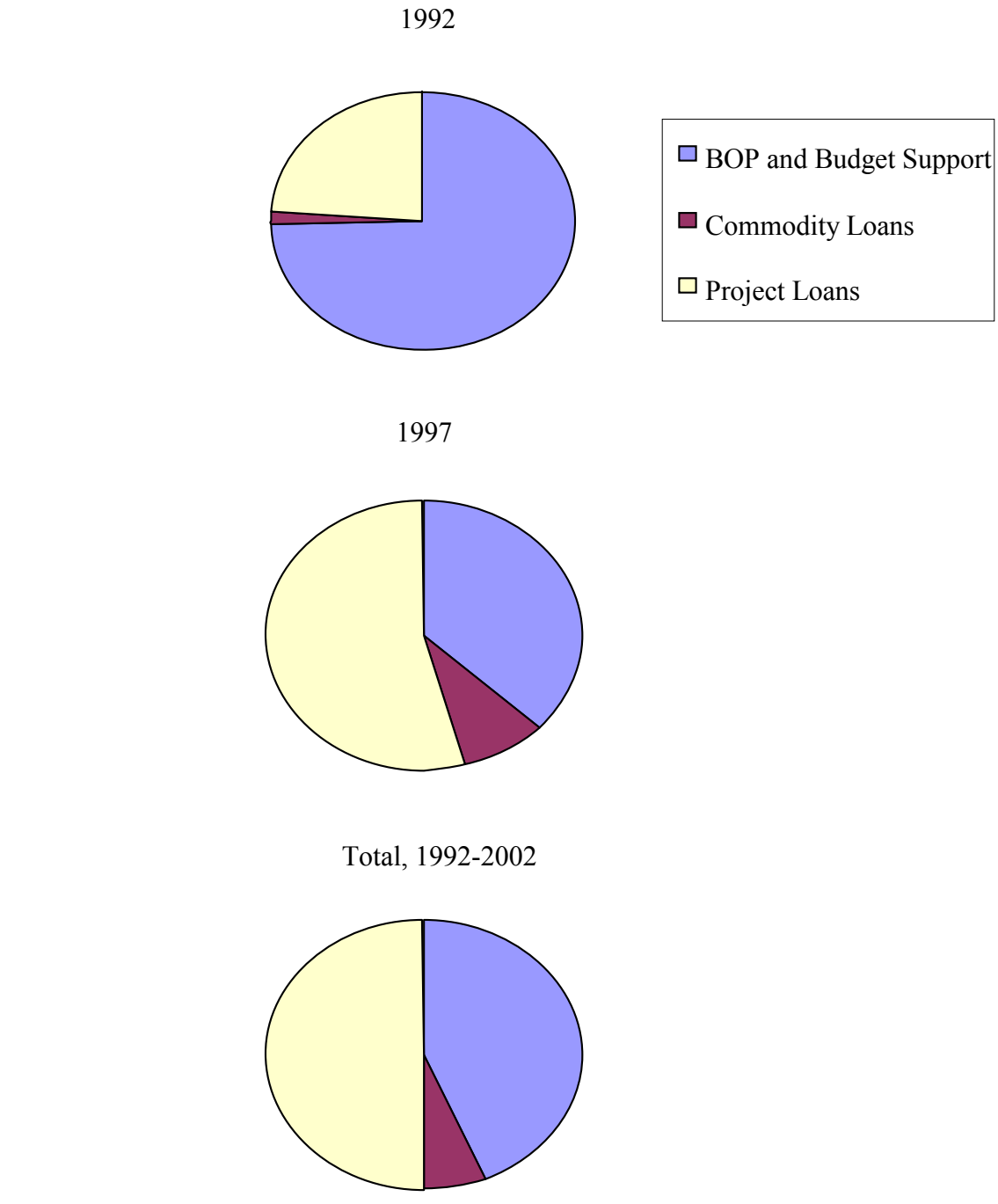
D. Debt Dynamics

96. The dynamics of Jordan's external debt profile is key to understanding the driving forces behind debt accumulation or reduction, and essential for policy prescriptions going forward. From an analytical standpoint, the mechanics behind Jordan's changing debt profile can be decomposed in two ways—the first, relative to the balance of payments, and the second relative to fiscal policy. The balance of payments dimension of debt creation and debt reduction can be broken down into an accounting framework that relates the major components of the BOP to the annual change in external debt:

$$\Delta \boldsymbol{D} = (CA + IF + KA) + (\Delta NFA + \Delta DA - DR + \Delta V + \Delta X),$$

Where ΔD represents the nominal change in external debt, CA is the noninterest current account; IF is the interest factor; KA is the private capital account; ΔNFA represents the change in net foreign assets of the banking system; ΔDA is the change in deferred assets; DR is debt relief; ΔV is change due to valuation; and ΔX is change resulting from factors not accounted for elsewhere. A more detailed explanation of these components is contained in Appendix I.

Figure IV.2. Jordan. Composition of Loans, 1992–2002



Source: Ministry of Finance and staff estimates.

97. The decomposition of Jordan's external debt dynamics during the 1990s according to the BOP framework can be found in Table IV.4. In the following discussion of the results, it is convenient to distinguish between debt creating and debt reducing factors.

Table IV. 4. Jordan: BOP Dynamics of External Debt

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	Total 1992-2002
	(In percentage points of current GDP)											
Change in External Debt Stock	-5.7	1.7	2.4	1.2	4.4	-1.9	5.7	2.7	-7.5	-1.2	5.7	7.4
Contribution of Determinants	-5.7	1.7	2.4	1.2	4.4	-1.9	5.7	2.7	-7.5	-1.2	5.7	7.4
Noninterest Current Account	3.3	2.5	0.1	-1.5	-2.0	-5.2	-5.0	-9.2	-6.1	-4.6	-8.6	-36.2
Interest Factor	4.9	4.4	4.1	4.2	4.4	4.9	4.7	4.9	5.5	4.7	3.7	50.3
Private Capital Account	-8.3	-7.7	-2.9	2.9	2.2	-2.7	0.5	-2.8	-13.1	-0.7	-0.2	-32.8
Change in NFA	0.5	-1.0	0.6	2.7	1.3	7.5	1.9	9.9	12.8	2.0	6.5	44.6
Change in Deferred Assets	7.0	1.2	0.0	-0.5	-0.7	0.0	-0.4	-0.3	0.0	0.0	0.0	6.3
Debt Reduction Operations	-6.5	0.0	-2.3	-4.4	0.0	0.0	0.0	-0.1	-2.4	-1.4	-0.7	-17.9
Valuation	-2.7	0.3	3.5	0.7	-3.6	-4.9	3.4	-0.3	-4.2	-2.8	4.7	-6.0
Other / Residual	-3.9	2.0	-0.7	-2.8	2.8	-1.5	0.5	0.5	0.1	1.6	0.3	-1.0
Memorandum Items												
Real GDP Growth	17.0	4.5	5.0	6.2	2.1	3.3	3.0	3.1	4.1	4.2	5.0	

Source: Ministry of Finance and staff estimates.

98. **Noninterest current account**: The improvement in the non-interest current account balance is the predominant force behind the reduction in Jordan's external debt. This reflects recent, sizeable improvements in the trade balance as a result of export growth, relatively low average import growth, sizeable grant inflows (an average of 4.4 percent of GDP annually over the period) and a steady rate of increase in inward remittances (an average growth rate of 10 percent).

99. **Interest burden**:. Interest payments were the clearest debt-creating factor in the balance of payments, contributing 50 percentage points of current GDP to the accumulation of debt in the 1992-2002 period. Although there are some fluctuations in debt service due as a result of rescheduling operations, interest payments have remained a relatively steady debt-creating component within the balance of payments.

100. **Private capital account**: The private capital account, which includes FDI and portfolio flows, private capital transfers, and errors and omissions, has also been a substantial debt-reducing factor over the last decade. FDI has shown considerable variation, with significant surges (reaching as high as 9 percent of GDP in 2000) driven by the government's privatization program. Portfolio flows have been relatively small, reflecting low foreign interest in the Amman stock exchange. Errors and omissions have also been sizeable in some years, reaching over 7 percent of GDP, but largely a wash over the period, with an average value of under 1 percent of GDP.

101. **Change in NFA:** The accumulation of reserves to bolster confidence in the Jordanian dinar has been a consistent force for debt accumulation, particularly during the second half of the 1990s. Jordan's gross official reserves were relatively low in the early 1990s, averaging about 2.5 months of imports and 9 percent of broad money. A more rapid accumulation of NFA since 1997, supported by IMF arrangements and Paris Club debt reschedulings, brought reserves up to 7 months of import coverage by end-2002, or 23 percent of broad money. Notably, the fact that reserve accumulation has been a driving force behind debt accumulation gives rise to an issue of how best to view the external debt burden. This would be on a gross basis, such as is usually the case, or net of reserves since reserves are presumably a liquid asset on which the authorities could draw for debt repayment.

102. **Debt reduction operations**: This category includes debt swaps, Brady Bond buyback operations, and bilateral debt relief. The results indicated in Table IV.4 show the impact of debt relief granted by Russia in 1992, and the United States in 1994–95 through debt write-off operations. Also important, however, have been the authorities' efforts to utilize debt swap operations and to repurchase outstanding Brady Bonds when suitable discounts were available. Taken together, debt swaps and buybacks contributed approximately 11 percent of current GDP toward debt reduction.

103. Valuation effects stemming from changes among the major currencies have had an appreciable impact on reducing the value of the stock of debt, particularly in recent years. The peg of the Jordanian dinar to the U.S. dollar, along with the steady appreciation of the dollar vis-à-vis the yen and the euro in the second half of the 1990s, contributed an aggregate 6 percent of GDP to debt reduction. Notably, the weakness of the dollar in 2002 reversed some of the valuation gains of previous years, contributing to an increase in the nominal value of Jordan's debt stock and debt service—an issue that will be treated in more detail in the section on external vulnerabilities.

104. Perhaps the most critical aspect of the preceding analysis is that Jordan's debt creation is driven neither by the noninterest current account or the private capital account. To the contrary, these two components of the balance of payments have generally contributed to debt reduction. Indeed, Jordan's external debt-to-GDP ratio could have declined by an additional 15 percent on the basis of current and capital account developments. This separates Jordan from a number of other developing country cases where the driving force behind external debt accumulation stemmed from the need to finance an external imbalance. For Jordan, the existing interest burden and the need to build up foreign reserves to a level deemed sufficient to defend the pegged exchange rate regime and withstand exogenous shocks were more the force behind Jordan's limited net debt creation, in nominal terms, during the past decade. The level of reserves was further boosted in 2003 to reach some $4.7 billion, owing to the surge of grants associated with the Iraqi conflict.

105. The BOP accounting framework helps to illustrate two important points. First, that the authorities' strategy of seeking interim debt service relief while strengthening external balances has been a success. Ten years of debt rescheduling has facilitated a host of structural

reforms that effectively shifted the key external accounts from a debt-creating to a debt-reducing position. Second, it also highlights that fiscal dynamics—particularly the need to simultaneously finance domestic spending while building a strong foreign exchange reserves position—have been at the heart of debt creation during the last ten years. As noted earlier, BOP and budget support lending did not constitute the majority of new loans disbursed during 1992–2002. Rather, project lending has been predominant, suggesting that external debt has been by driven by domestic spending, and the decision to finance fiscal deficits through accumulation of external debt, rather than domestic debt.[46] This decision does change the composition of the balance of payments by injecting capital inflows, while the counterpart is reflected in net foreign assets. The external current account balance would be invariant to a decision to finance projects through external or domestic resources.

E. Dimensions of Jordan's External Debt Burden

106. An assessment of external debt sustainability relies on a mix quantitative indicators, analysis of debt dynamics, and cross-country comparisons. The preceding analysis suggests that Jordan's external debt burden has to some extent been a matter of choice insofar as some key debt-creating factors are within the authorities' control. Accumulation of NFA, for example, is a policy choice rather than an endogenously determined result. The degree of fiscal consolidation and containment of off-budget lending operations also represent policy variables and issues of fiscal management rather than an exogenous gap which the government was forced to finance. However, Jordan's record on servicing its international obligations, and the fact that the nominal value of external debt has remained relatively steady, would tend to suggest that these choices—although facilitated by generous treatment from creditors and a windfall from international exchange rate movements—have been part of a successful strategy to ensure that Jordan's external debt burden remains sustainable.

Cross-country comparison

107. Table IV.5 compares various debt indicators for Jordan (a lower middle-income developing country) relative to different country groups. The comparison suggests a number of points.:

- The stock of debt relative to the economy remains large, making Jordan comparable to heavily indebted low income countries by this measure. This comes in spite of Jordan's current status as a lower middle income country and satisfactory economic performance, and testifies to the size of the original debt problem and the authorities use of successive debt rescheduling operations. While the stock of debt is not a problem *per se*, the image of a debt overhang may dampen investor confidence and

[46] Until recently, legal limits limited the ability of the government to finance fiscal deficits through issuance of domestic debt rather than through external borrowing.

also limits Jordan's ability to access international capital markets. As the economy continues to grow, however, and multilateral and bilateral lending presumably diminishes, the ability to tap capital markets may become a more pressing issue.

- The debt service burden is also relatively high at, roughly 8 percent of gross national income in 2000 on a commitment basis – similar to heavily indebted low income countries, but lower than middle income countries.

- Unlike many other developing country groups, Jordan's debt ratios have been on a steady downward trend. Jordan has shown a substantial improvement over the past decade, both in terms of the stock of debt and total debt service relative to GNI.

- The burden of external debt service is also less pronounced when compared to foreign exchange earnings. As a share of exports of goods and services, Jordan's stock of external debt remains comparable to developing countries as a group, but is far below heavily indebted low and middle income countries.

- With annual debt service, on a cash basis, at only 11 percent of foreign exchange receipts, Jordan also appears to have a relatively high degree of solvency compared to developing countries as a whole, and against virtually all subgroups.

108. The cross-country comparison suggests that Jordan's debt burden is not a one-dimensional issue. Rather, the weight of the burden depends very much on the scale involved. From a stock perspective, and relative to the size of the Jordanian economy, external debt is sizeable by virtually any cross-country comparison. This legacy of debt overhang is illustrative of the scale of debt accumulation which led to the crisis of the late 1980s, and why a steady succession of reschedulings and other restructuring operations have been necessary to alleviate the burden and provide room for stabilization and growth.

109. The burden of debt service is also considerable, particularly the interest component. While the debt service burden has followed a steady downward trend, it is still relatively high in comparison to other developing country groups, particularly interest payments. This suggests that, while Jordan has adhered to a policy of seeking concessional new inflows, the grant element in new borrowing may still be less than that obtained by other developing country groups.[47]

110. Table IV.6 compares the terms of new debt commitments of Jordan and various developing country groups. The table suggest several conclusions:

[47] The debt burden also highlights the impact of previously rescheduled debt, and why a series of reschedulings have been necessary to allow for adjustment.

- For a lower middle income country, Jordan has received relatively generous terms on new borrowing. The average interest rate on new borrowing has generally been below the average for all developing countries, and generally on par with heavily indebted low-income developing countries. Maturities have varied, but have also remained roughly comparable with heavily indebted low income countries.

- The overall grant element of new loans, which comprises the interest rate, maturity, and grace period of loans based on their currency of denomination, indicates that Jordan's portfolio of new commitments has generally been on par with low-income and heavily indebted low income countries—considerably higher than that obtained by middle income developing countries.

- The comparatively favorable performance in terms of interest rates that Jordan has achieved in recent years appears to stem from the absence of short-term and commercial debt. Middle income countries have made increasing use of private sector credit, particularly in recent years. Private credits as a share of total disbursements rose from 63 percent in 1990 to 83 percent in 2001 for middle income countries.[48] Jordan, on the other hand, has generally abstained from contracting commercial debt.

- For a lower middle income country, Jordan has received relatively generous treatment on the terms and conditions of new borrowing. The average interest rate on new borrowing has generally been below the average for all developing countries, and generally on par with heavily indebted low-income developing countries. Maturities have varied, but have also remained roughly comparable with heavily indebted low income countries.

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[48] Source: World Bank, Global Development Finance, 2003.

[49] Source: World Bank, *Global Development Finance*, 2003.

111. In contrast to the stock of debt overhang, however, Jordan's external debt and debt service appear less onerous from a liquidity perspective—that is, relative to the annual inflow of foreign exchange receipts. With a more aggressive opening of the economy and use of preferential market access arrangements to ensure Jordan's competitiveness, foreign exchange receipts have shown a sharp rise, increasing Jordan's capacity to meet external obligations and weather shocks. A key component in this process has been the growth in inward remittances. As opportunities for Jordanian professionals in the Gulf have increased, inward remittances have grown in importance as a source of foreign exchange earnings. Inward remittances rose from 15 percent of GDP in 1992 to 23 percent in 2002, and from 24 percent of total foreign exchange receipts in 1992 to 35 percent by end-2002—roughly equivalent to the present contribution of domestic exports.

Assessment

112. Taken together, the analysis of debt dynamics and the cross country comparisons of debt indicators suggest that Jordan's debt, while sizeable, has been sustainable because of the authorities' strict adherence to the external debt management strategy. More broadly, it is apparent that the course of debt reduction has depended critically on a number of policy variables that were generally within the authorities' control. A more rapid pace of debt reduction, for example, might have been achieved had the authorities been able to follow through with fiscal consolidation plans as conceived under successive IMF arrangements. Furthermore, were not the accumulation of a reserve cushion deemed sufficient to ensure confidence in the pegged exchange rate regime a pressing priority, the debt-creating impact of NFA accumulation might have been mitigated.

113. The nature of Jordan's debt dynamics is promising, but also subject to a number of downside risks. On the positive side, the fact that a sizeable portion of debt-creating factors are within the authorities' ability to control bodes well for future debt reduction. The authorities continued commitment to prudent debt management and debt reduction is embodied in the new Law on Public Borrowing, passed in 2001, which requires the government to limit external debt to less than 60 percent of GDP by 2006, while simultaneously allowing for increased domestic financing of the budget.

114. Assuming that the authorities continue to implement plans for fiscal consolidation, and make full use of the debt reduction options open to them, the downside risk to debt sustainability would stem largely from exogenous shocks. Although in recent years Jordan has benefited from some such external factors (e.g., strengthening of the U.S. dollar vis-à-vis other major currencies), much of these gains could be reversed in the coming years.

Table IV.5. Jordan: Cross-Country Comparison of Debt Burden Indicators

	1990	1999	2001
		(In percent of GNI)	
Total External Debt			
Jordan	219.0	101.6	84.6
All Developing Countries	35.2	44.1	38.9
Low-Income Developing Countries	49.5	58.3	50.4
Middle Income Developing Countries	31.4	41.0	36.4
Heavily Indebted Middle Income Countries	48.8	59.4	59.1
Heavily Indebted Lower Income Countries	84.6	105.2	91.4
Total Debt Service \1			
Jordan	16.5	6.9	7.6
All Developing Countries	3.9	6.5	6.3
Low-Income Developing Countries	3.8	4.8	4.1
Middle Income Developing Countries	3.8	6.9	6.8
Heavily Indebted Middle Income Countries	4.3	11.7	10.2
Heavily Indebted Lower Income Countries	6.8	8.4	7.5
Interest on External Debt \1			
Jordan	9.9	3.2	3.0
All Developing Countries	1.7	2.1	2.0
Low-Income Developing Countries	1.8	1.7	1.5
Middle Income Developing Countries	1.6	2.2	2.1
Heavily Indebted Middle Income Countries	1.5	3.7	3.8
Heavily Indebted Lower Income Countries	3.1	2.9	2.6
		(In percent of exports of goods and services)	
Total External Debt			
Jordan	270.8	147.4	120.0
All Developing Countries	170.8	148.1	118.5
Low-Income Developing Countries	293.5	229.1	176.6
Middle Income Developing Countries	145.0	133.4	107.9
Heavily Indebted Middle Income Countries	451.5	438.0	363.5
Heavily Indebted Lower Income Countries	315.6	295.3	236.9
Total Debt Service \1			
Jordan	20.4	10.0	10.7
All Developing Countries	18.7	21.9	19.2
Low-Income Developing Countries	22.8	18.7	14.4
Middle Income Developing Countries	17.8	22.4	20.1
Heavily Indebted Middle Income Countries	39.3	86.0	62.6
Heavily Indebted Lower Income Countries	25.4	23.5	19.4
Interest Payments on External Debt \1			
Jordan	12.2	4.6	4.3
All Developing Countries	8.1	7.2	6.0
Low-Income Developing Countries	10.8	6.5	5.1
Middle Income Developing Countries	7.5	7.3	6.2
Heavily Indebted Middle Income Countries	14.3	27.1	23.6
Heavily Indebted Lower Income Countries	11.5	8.2	6.7

Source: World Bank, Global Development Finance 2003.

1\ Cash basis.

Table IV.6. Jordan: Cross-Country Comparison of Terms of New Commitments

	1990	1999	2001	Average 1996-2001
Interest (annual rate)				
Jordan	4.5	5.0	2.2	4.3
All Developing Countries	7.0	6.3	5.8	6.4
Low-Income Developing Countries	4.8	3.0	2.6	3.7
Middle Income Developing Countries	7.7	6.9	6.4	7.0
Heavily Indebted Middle Income Countries	6.7	8.6	6.9	9.1
Heavily Indebted Lower Income Countries	5.3	3.6	2.7	3.9
Maturity (years)				
Jordan	19.9	18.3	21.8	19.7
All Developing Countries	16.9	13.8	14.2	15.2
Low-Income Developing Countries	26.5	24.6	27.1	30.0
Middle Income Developing Countries	14.6	12.0	12.3	12.0
Heavily Indebted Middle Income Countries	15.9	9.5	10.3	11.3
Heavily Indebted Lower Income Countries	22.4	19.7	23.2	19.8
Grant Element (percent)				
Jordan	39.0	31.6	48.7	36.9
All Developing Countries	19.7	21.1	23.6	18.8
Low-Income Developing Countries	35.8	49.9	55.2	42.4
Middle Income Developing Countries	13.8	16.3	17.8	14.2
Heavily Indebted Middle Income Countries	21.0	5.4	13.6	8.5
Heavily Indebted Lower Income Countries	34.5	41.8	50.7	41.3

Source: World Bank, Global Development Finance, 2003

F. Sustainability/Vulnerability

115. On the basis of current balance of payments projections, Jordan's external debt burden, while heavy, appears sustainable. As noted in the previous sections, the stock of Jordan's external debt is high by virtually any measure. For end-2003, the stock of external debt is estimated at 173 percent of exports of goods and nonfactor services, and almost 300 percent of domestic revenue. Recent analysis suggests that these ratios would be even higher in NPV terms, with the NPV of debt to exports ratio likely in excess of 200 percent—much higher than the 150 percent NPV of debt to exports targeted under the HIPC exercise.

116. Jordan's debt ratios should be taken from the proper perspective. The apex of Jordan's external debt crisis is now 14 years in the past and, reflecting a strong commitment to debt management and structural reforms to improve the balance of payments, the key debt ratios have declined steadily until 2001. While capacity to pay continued to improve since then, the ratio of external debt to GDP stopped declining during the last two years, owing to valuation losses of about 11 percentage points of GDP caused by the depreciation of the U.S. dollar to which the Jordanian dinar is pegged, against the other major currencies. These adverse developments will prolong the external debt reduction period. Jordan's external debt

should however gradually converge to more sustainable levels over the medium term, under relatively conservative assumptions regarding the external accounts and bilateral debt relief. On the basis of current BOP projections, and program assumptions regarding the use of debt swaps under existing arrangements, the nominal value of debt to exports of goods and nonfactor services is projected to cross the 150 percent threshold by end-2004 (Table IV.7). The debt-to-revenue ratio is also expected to drop below the 250 percent level (considered "sustainable" in the HIPC initiative) by 2006.

117. From a capacity to repay perspective, the outlook is also relatively positive. As a share of total foreign exchange receipts (i.e., exports of goods and nonfactor services plus gross remittances) Jordan's debt and debt service profile looks strong. Total external debt stood at 119 percent of foreign exchange receipts as of end-2003, with this ratio projected to drop below 100 percent by 2005. Net of Jordan's considerable foreign exchange reserves, the ratio of external debt to foreign exchange receipts drops to an estimated 45 percent at end-2003, and 22 percent by 2009.

118. Jordan's substantial progress in reducing the stock of debt over the past years, and its ample capacity to repay future obligations highlights that the stock of debt and debt service as they are presently projected are not a problem as such. Under current projections, and assuming continued adherence to the long-standing debt management strategy, Jordan's debt burden appears both manageable and sustainable. Rather, concerns about the sustainability of the external debt burden stem from the vulnerability of the balance of payments to potential shocks. Stress tests conducted within the Fund's standard debt sustainability framework illustrate some potential vulnerabilities, although under all but the most severe shocks, Jordan's debt burden would remain manageable.

119. Holding GDP, nominal interest rates, the non-interest external current account and other elements at their historical average during 2004-2008, flattens the downward path of the external debt-to-GDP ratio, but by a relatively small margin.[50] By 2008, the external-debt to-GDP ratio is only 1.5 percentage points above the ratio achieved that year under the balance of payments projections shown in Table IV.7. Lowering projected real GDP growth by two standard deviations below the historical average in 2004 and 2005, would increase the 2008 external debt-to-GDP ratio by some 3 percentage points relative to the stress-test baseline. The deviation above this baseline would increase to 4.7 percentage points, assuming the U.S. dollar GDP deflator is two standards deviations lower than the historical average in 2004 and 2005 (Table IV.8).

[50] Historical averages were taken over the ten-year period ending in 2002. The year 2003 was excluded from the averaging period, due to the fact that the truly exceptional level of the non-interest current account surplus achieved that year largely reflects the surge in grants associated with the Iraqi conflict. Including this large surplus under the stress-test baseline would have resulted in an excessively fast reference debt reduction path.

Table IV.7. Jordan. Medium-Term External Debt and Debt Service, 2002–09

	Est. 2003	Proj. 2004	Proj. 2005	Proj. 2006	Proj. 2007	Proj. 2008	Proj. 2009
	(In millions of U.S. dollars)						
Total External Debt	7,654	7,282	7,159	6,930	6,812	6,713	6,507
Total government external debt 1/	7,604	7,232	7,109	6,930	6,812	6,713	6,507
excl. market value of Brady collateral	7,604	7,232	7,109	6,930	6,812	6,713	6,507
excl. collateralized Brady bonds	7,604	7,232	7,109	6,930	6,812	6,713	6,507
Of which: obligations existing as of end-1999	7,412	6,506	5,912	5,329	4,783	4,317	3,885
Medium- and long-term debt	7,183	6,907	6,861	6,768	6,729	6,687	6,504
To bilateral and multilateral creditors 1/	7,092	6,869	6,837	6,748	6,713	6,672	6,490
To London Club creditors	25	15	4	3	2	2	2
Of which: collateralized Brady bonds	0	0	0	0	0	0	0
To other creditors	66	23	20	17	14	13	12
Use of Fund resources	421	325	248	162	83	26	3
Total private external debt	50	50	50	0	0	0	0
Service on External Debt	867	848	841	896	855	807	848
Service on government external debt 1/	866	847	840	843	855	807	848
Of which: to the Fund	112	107	85	92	82	58	24
Amortization	545	562	573	568	576	521	544
Of which: to the Fund	100	99	78	87	79	56	23
Interest	321	285	266	275	280	286	304
Of which: to the Fund	12	9	7	5	3	2	1
Service on Private External Debt	1	1	1	53	0	0	0
Amortization	0	0	0	50	0	0	0
Interest	1	1	1	3	0	0	0
	(In percent of GDP)						
Total External Debt	77.6	68.6	62.8	56.4	51.3	46.9	42.1
Total government external debt 1/	77.1	68.2	62.4	56.4	51.3	46.9	42.1
excl. market value of Brady collateral	77.1	68.2	62.4	56.4	51.3	46.9	42.1
excl. collateralized Brady bonds	77.1	68.2	62.4	56.4	51.3	46.9	42.1
Medium- and long-term debt	72.9	65.1	60.2	55.0	50.7	46.7	42.1
Use of Fund resources	4.3	3.1	2.2	1.3	0.6	0.2	0.0
Total Private External Debt	0.5	0.5	0.4	0.0	0.0	0.0	0.0
Service on government external debt 1/	8.8	8.0	7.4	6.9	6.4	5.6	5.5
Amortization	5.5	5.3	5.0	4.6	4.3	3.6	3.5
Interest	3.3	2.7	2.3	2.2	2.1	2.0	2.0
Service on Private Debt	0.0	0.0	0.0	0.4	0.0	0.0	0.0
	(In percent of exports of goods and nonfactor services)						
Total External Debt	172.7	152.0	140.5	126.9	116.7	106.5	95.3
Total Private Debt	1.1	1.0	1.0	0.0	0.0	0.0	0.0
Service on government external debt 1/	19.5	17.7	16.5	15.4	14.7	12.8	12.4
Amortization	12.3	11.7	11.3	10.4	9.9	8.3	8.0
Interest	7.2	6.0	5.2	5.0	4.8	4.5	4.5
Service on private external debt	0.0	0.0	0.0	1.0	0.0	0.0	0.0
	(In percent of total foreign exchange receipts)						
Total External Debt	118.7	105.8	98.8	89.5	82.5	75.7	68.1

120. A more challenging outcome would result from larger shocks to the external current account. In particular, decreasing the non-interest current balance by two standard deviation in 2004 and 2005 would cause the external debt-to-GDP ratio to spike in 2005, before gradually declining to a level still 14 percentage points higher than the stress-test baseline by 2008. A similar pattern would obtain from a combination of shocks (one standard deviation in 2004 and 2005 from the historical average for GDP growth, the current account balance and interest rates), leaving the external debt-to-GDP ratio some 21 percentage points above the baseline in 2008.

121. The most worrisome outcome would result from a large exchange rate shock. For instance, the standard simulation of a 30 percent depreciation of the JD against all currencies in 2004, would cause the external debt-to-GDP ratio to first jump slightly above 100 percent, and still be some 30 percentage points above the baseline in 2008. This standard simulation confirms the high vulnerability of Jordan's debt burden to exchange rates movements, including between major currencies and the U.S. dollar to which the JD is currently pegged.

122. This key vulnerability needs to be effectively reduced over time through both proactive public debt and international reserve management policies. Indeed, the exposure of Jordan's external debt to exchange rate risk could be partly offset by increasing the share of non-U.S. dollar currencies in international reserves. The CBJ has traditionally kept almost all of its international reserves in the currency to which the JD has been firmly pegged, namely the U.S. dollar. The CBJ started to adjust this policy, by increasing the share of international reserves denominated in euros from 1 percent at end-2002 to 10 percent at end-2003. Thus, the CBJ was able to take advantage of higher returns on short-term euro instruments, stemming from both higher short-term euro interest rates relative to U.S. dollar short-term rates and a substantial appreciation of the euro against the U.S. dollar in recent months. Nevertheless, the share of international reserves denominated in euros was still only about half the share of government debt denominated in the currency at end-2003. Similarly, only 1 percent of international reserves were held in Japanese Yen and the British Pound, while these two currencies account for close to 30 percent of the government's external debt. A greater portfolio diversification by the CBJ toward major currencies other than the U.S. dollar would provide a significant hedge against increases in external debt service arising from currency movements.

Table IV.8. Jordan: External Sustainability Framework, 2000–08
(In percent of GDP, unless otherwise indicated)

	2000	2001	2002	2003	Projections 2004	2005	2006	2007	2008
I. Baseline Medium-Term Projections									
External debt	**87.6**	**82.0**	**82.4**	**77.6**	**68.6**	**62.8**	**56.4**	**51.3**	**46.9**
Change in external debt	-12.2	-5.5	0.4	-4.8	-9.0	-5.8	-6.5	-5.0	-4.5
Identified external debt-creating flows (4+8+11)	-14.8	-6.7	-9.5	-18.4	-11.7	-7.2	-5.6	-5.4	-5.4
Current account deficit, excluding interest payments	-5.1	-4.9	-5.8	-12.9	-6.4	-3.0	-1.8	-1.6	-1.7
Deficit in balance of goods and services	20.7	19.5	14.9	16.0	16.8	16.8	16.6	15.6	15.2
Exports	41.8	42.8	45.4	44.9	45.2	44.7	44.4	44.0	44.0
Imports	62.5	62.2	60.3	61.0	61.9	61.5	61.0	59.6	59.2
Net non-debt creating capital inflows (negative)	-8.9	-0.9	-0.4	-3.4	-0.9	-0.9	-0.8	-1.3	-1.7
Net foreign direct investment, equity	8.9	0.9	0.4	3.4	0.9	0.9	0.8	1.3	1.7
Net portfolio investment,equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Automatic debt dynamics 1/	-0.9	-0.9	-3.3	-2.2	-4.4	-3.3	-3.0	-2.6	-2.0
Contribution from nominal interest rate 2/	3.1	2.7	1.6	1.8	1.1	1.5	1.6	1.6	1.8
Contribution from real GDP growth 2/	-4.0	-3.6	-3.7	-2.5	-3.6	-3.5	-3.5	-3.1	-2.9
Contribution from price and exchange rate changes 2/, 3/	0.1	0.0	-1.1	-1.5	-1.9	-1.2	-1.1	-1.0	-0.9
Residual, incl. change in gross foreign assets (2-3)	2.6	1.2	9.9	13.6	2.7	1.4	-0.9	0.4	0.9
External debt-to-exports ratio (in percent)	209.6	191.8	181.7	172.7	152.0	140.5	126.9	116.7	106.5
Gross external financing need (in billions of US dollars) 4/	0.2	0.1	0.0	-0.3	0.2	0.3	0.4	0.4	0.3
in percent of GDP	1.8	1.5	0.3	-2.8	1.7	2.4	3.2	2.8	2.0
Key Macroeconomic and External Assumptions									
Real GDP growth (in percent)	4.2	4.2	4.8	3.2	5.0	5.5	6.0	6.0	6.0
Exchange rate appreciation (US dollar value of local currency, change in percent)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
GDP deflator in US dollars (change in percent)	-0.1	0.0	1.4	1.9	2.5	1.8	1.8	1.8	1.8
Nominal external interest rate (in percent)	3.2	3.2	2.1	2.3	1.5	2.3	2.7	3.0	3.8
Growth of exports (US dollar terms, in percent)	0.1	6.8	12.7	4.1	8.1	6.3	7.2	6.9	7.9
Growth of imports (US dollar terms, in percent)	15.5	3.8	2.9	6.3	9.3	6.7	7.0	5.5	7.2
II. Stress Tests for External Debt Ratio									
1. Real GDP growth, nominal interest rate, dollar deflator, non-interest current account, and non-debt inflows are at historical average in 2004-2008				**77.6**	**73.4**	**67.9**	**60.2**	**54.0**	**48.4**
2. Nominal interest rate is at historical average plus two standard deviations in 2004 and 2005				**77.6**	**74.8**	**69.8**	**62.2**	**56.0**	**50.5**
3. Real GDP growth is at historical average minus two standard deviations in 2004 and 2005				**77.6**	**74.8**	**71.0**	**63.3**	**57.0**	**51.4**
4. Change in US dollar GDP deflator is at historical average minus two standard deviations in 2004 and 2005				**77.6**	**74.8**	**72.8**	**65.1**	**58.7**	**53.1**
5. Non-interest current account is at historical average minus two standard deviations in 2004 and 2005				**77.6**	**81.0**	**83.0**	**74.9**	**68.3**	**62.3**
6. Combination of 2-5 using one standard deviation shocks				**77.6**	**83.0**	**87.3**	**80.5**	**74.6**	**69.0**
7. One time 30 percent nominal depreciation in 2004				**77.6**	**103.4**	**98.2**	**91.1**	**84.9**	**78.8**

Historical Statistics for Key Variables (past 10 years)	Historical Average	Standard Deviation
Current account deficit, excluding interest payments	-3.5	3.9
Net non-debt creating capital inflows	1.9	2.6
Nominal interest rate (in percent)	3.4	0.6
Real GDP growth (in percent)	4.0	1.2
GDP deflator in US dollars (change in percent)	2.1	2.4

1/ Derived as (r-r(1+g)-g)/(1+g+r+gr) times previous period debt stock, with r = nominal effective interest rate on external debt; r = change in domestic GDP deflator in US dollar terms, and g = real GDP growth rate.
2/ The contribution from price and exchange rate changes is defined as -r(1+g)/(1+g+r+gr) times previous period debt stock. r increases with an appreciating domestic currency and rising inflation (based on GDP deflator).
3/ Does not capture the impact of cross-exchange rate movements between the US dollar and other major currencies in which Jordan's external debt is denominated.
4/ Defined as non-interest current account deficit, plus interest and amortization on medium- and long-term debt, plus short-term debt at end of previous period.

V. Medium-term Fiscal And Debt Reduction Strategy[51]

123. The primary challenge facing Jordan over the medium term is to reduce its high central government debt burden to a sustainable level. To address the problem, Jordan enacted the Public Debt Law in 2001 requiring the government to reduce total debt to no more than 80 percent of GDP and external debt to no more than 60 percent of GDP by 2006. In the context of the current Stand-by Arrangement, the authorities adopted a medium-term fiscal strategy for Jordan outlining the steps required to meet the Public Debt Law. In the event, as described below, adverse external developments have led to significant shortfalls in debt reduction relative to the baseline for the period 2001–03. Nevertheless, the authorities are committed to an updated fiscal strategy which would enable Jordan to significantly reduce its debt burden and achieve debt sustainability over the medium term. Key elements of this strategy are a sustained effort at fiscal consolidation and aggressive below-the-line operations in the form of accelerated privatization and debt reduction operations. This chapter reviews Jordan's success in reducing public debt in the 1990s; evaluates its recent performance relative to the original strategy; reassesses the outlook for the medium-term in light of recent developments; and identifies fiscal priorities in order to achieve the required debt reduction.

A. Developments in Public Debt over the 1990s

124. Jordan made significant progress in reducing its high debt burden during the 1990s. Central government debt[52] declined from 158 percent of GDP in 1992 to 101 percent by 2000. A decomposition of the change in debt into 'debt-creating' and 'debt-reducing' components[53] shows that even though fiscal deficits did not come down as fast as envisaged under the Fund supported programs, higher nominal GDP growth entailed a steady reduction in the debt ratio. GDP growth accounted for 60 percentage points of reduction in the debt-to-GDP ratio primarily due to real growth. The gains from GDP growth were mitigated in part by the effect of fiscal deficits during the period. Cumulative deficits during 1992–2000 added some 20 percent of GDP to the debt ratio.

125. Based on the experience of the 1990s, the strategy for debt reduction agreed with the authorities at the inception of the current Stand-by Arrangement emphasized three key elements. First, continued fiscal consolidation, albeit at a gradual pace, with fiscal deficit reductions averaging ½ percent of GDP annually over the medium-term. Second, active 'below-the-line' operations such as an acceleration of privatization and the use of most of the

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[51] Prepared by Tushar Poddar.

[52] The definition of debt used is total net debt including collateralized Brady Bonds.

[53] See Chapter III for a detailed discussion.

proceeds for debt reduction, as well as further debt reduction operations such as debt swaps from bilateral creditors. Third, sustaining macroeconomic stability and creating an environment conducive for higher economic growth. The strategy aimed at reducing total central government debt to about 78 percent of GDP by 2003 and to 62.4 percent of GDP by 2006.

Figure V.1. Jordan: Overall Fiscal Balance Including Grants and Net Government Debt, 1992–2003
(In percent of GDP)

Source: Jordanian authorities and Fund staff estimates.

B. Developments in Fiscal Consolidation and Public Debt under the SBA

126. The fiscal performance under the current program has been better than anticipated under the original baseline. Instead of a cumulative overall deficit of 8.8 percent of GDP for 2002–03, the deficit including grants has been contained at 6 percent of GDP, both due to fiscal consolidation efforts as well as a large inflow of grants in 2003. Fiscal consolidation has been driven by significant progress in: reforming the tax system, particularly the (GST); implementing an ambitious pension reform strategy; raising domestic petroleum product price, and increasing other taxes. Government savings during this two-year period surged to 8.7 percent of GDP compared with 2.9 percent envisaged under the original baseline scenario, in part reflecting lower current outlays. The sharply higher public sector savings also translated into higher capital spending entailing a qualitative improvement in the fiscal structure, while providing a boost to domestic economic activity.

127. There has, however, been a shortfall in reducing the debt ratio of about 19 percent of GDP relative to the original projections for the period 2001–03, largely due to adverse exogenous factors.[54] The main contributors were 'below-the-line' developments: adverse

[54] The original baseline envisaged a reduction in public debt of 17.7 percentage points of GDP (from 95.8 percent of GDP to 78.1 percent) over the period 2001–03. Instead there has been an increase of 1.5 percent of GDP over the same period. In nominal terms, total net debt has increased to JD 7.1 billion instead of JD 5.7 billion under the baseline.

valuation effects (7.3 percentage points); lower privatization proceeds (4.4 percentage points); and lower than projected nominal GDP growth (3.3 percentage points) (Table V.1). The valuation changes arose from a weakening of the U.S. dollar relative to other major currencies during the last two years. The lower GDP growth was primarily due to the negative impact of the war in Iraq. These developments taken together have left Jordan with a total central government debt-to-GDP ratio roughly unchanged at 101.5 at end-2003.

Table V.1. Jordan: Public Debt Dynamics, 2000-03
(In millions of Jordanian Dinar)

	2000	2003		2000-03 cumulative difference between Baseline & Actual (% of GDP) 2/
		Original Baseline	Current Program	
I. Total Central Govt. and Govt. Guaranteed Debt 1/	5,738.5	5,731.6	7095.0	
in % of GDP	95.8%	*78.1%*	*101.5%*	*19.2%*
II. Debt-creating factors				
Overall Fiscal Balance Including Grants	-282.7	-317.6	-73.0	-2.5%
Off-budget Onlending	44.9	33.7	33.7	0.1%
Assumption of Debt from other public entities	170.0	0.0	0.0	0.0
III. Debt-reducing factors				
GDP	5913.0	7,338.0	6,992.0	3.3%
Debt Reduction Operations	-136.0	-36.0	-40	-0.2%
Privatization Proceeds	-426.0	300.0	88.0	4.4%
Valuation Effect	-260.0	0.0	420.0	7.3%
Other / Residual Discrepancy 3/	72.0	16.5	-164.7	6.8%

Source: Fund staff estimates based on Ministry of Finance and Central Bank of Jordan data.

1/ Total net domestic and external debt (excluding collateralized Brady Bonds).
2/ Contribution to debt ratio is measured in percentage points. A minus (-) sign indicates debt reduction compared to baseline.
3/ Reflects a combination of factors, including debt reduction operations not captured in available data, incomplete data on onlending and debt assumptions, and exchange rate effects not captured by valuation estimates.

128. The consolidated public sector debt,[55] however, is substantially lower than central government debt because of the large surpluses generated by the Social Security Corporation (SSC) and to a lesser extent by the Central Bank of Jordan (Box V.1). Debt reduction at the consolidated public sector level has also been impressive over the last decade, although it has suffered from a lack of progress at the central government level during 2001–03. The consolidated public sector debt is conservatively estimated to be about 59.7 percent of GDP at end-2003, and is estimated to have declined by about ½ percentage points from its end-2000 level.

[55] Comprising the consolidated operations of the central government, autonomous public agencies, public financial institutions, nonfinancial public enterprises and local governments.

129. Jordan's capacity to repay its debt, in terms of debt-service ratios and the interest bill remains strong, and very similar to the original baseline. Debt-service related indicators point to the fact that despite a very high debt ratio at the central government level, Jordan's debt-service burden has been declining in recent years (table V.2).[56] Current program projections suggest that debt service as a percent of GDP will fall to 7 percent by 2006 and debt service as a percent of exports of goods and non-factor services will decline to 16.1 percent. The interest bill will continue to decline to 3.4 as a percent of GDP and to 9.9 as a percent of total expenditures.

Table V.2. Measures of Central Government Debt

	2001	2002	2003	2006	
				Baseline	Current Program
Total government net debt (excl. Brady Bonds)	5818.2	6459.5	7095.0	5761.5	6976.0
Total Net Debt Ratios					
As a percent of GDP	93.4	97.1	101.5	62.4	79.7
As a percent of total revenues	305.7	321.4	282.6	208.2	294.6
As a percent of exports of goods and NF services	217.3	214.1	225.6	123.0	182.5
Debt Service (excl. IMF repayments)					
As percent of GDP	8.4	7.7	12.4 1/	7.0	7.0
As percent of total revenues	27.5	25.6	34.5 1/	24.0	26.1
As percent of exports of goods and NF services	19.5	17.1	27.6 1/	17.0	16.1
Interest Bill					
As percent of GDP	4.5	3.8	3.9	3.7	3.4
As percent of total expenditures	13.3	10.9	10.1	11.2	9.9

Source: Fund Staff Estimates based on Ministry of Finance and Central Bank of Jordan data
1/ The debt service figures for 2003 are inflated due to the prepayment of Par Brady Bonds ($456 million or about 4.6 percent of GDP).

[56] For 2003, the debt-service payments are inflated due to the pre-payment of Par Brady Bonds.

Box V.1. Jordan—Consolidated Public Sector Operations and Debt

While the central government dominates the public sector, the fiscal or quasi-fiscal operations of other institutions are significant both at a macroeconomic level and in the provision of public services. The net debt of the public sector at 59.7 percent of GDP in 2003, is significantly lower than at the central government level.

The own-budget agencies have their budgets approved by the cabinet. There are 32 autonomous agencies and most of their fiscal operations are fully funded (generating balanced fiscal outturns), after taking account of the transfers from the central government. The CBJ earns seigniorage and interest on its foreign exchange reserves, but pays interest on certain liabilities, most importantly the large volume of central bank certificates of deposit (CDs). The SSC is an autonomous agency charged with providing old-age and disability pensions to private sector workers and civil servants hired after 1995.

Summary Operations of the Consolidated Public Sector 1999-2003.

	1999	2000	2001	2002	2003
Consolidated public sector 1/					
Revenue and grants	41.3	40.7	41.4	39.9	46.2
Expenditure	42.4	43.0	42.7	43.6	44.8
Balance	-1.1	-2.4	-1.3	-3.7	1.4
Net debt/assets (-)	71.5	60.2	57.9	60.7	59.7
Central government					
Total revenue and grants	31.0	30.1	30.5	30.2	35.9
Expenditure	34.5	34.8	34.2	35.2	37.0
Balance	-3.5	-4.7	-3.7	-5.0	-1.1
Net debt/assets (-)	111.3	100.0	97.0	100.5	101.5
Own-budget agencies					
Total revenue and grants	6.4	5.5	5.4	5.3	5.6
Expenditure	6.1	5.7	5.8	5.9	5.8
Balance	0.3	-0.2	-0.5	-0.6	-0.2
Net debt/assets (-) 2/	-0.3	-1.6	-0.8	-0.3	-0.1
CBJ					
Revenue	1.9	2.6	2.6	1.4	1.9
Expenditure	2.4	2.1	2.3	1.6	1.2
Balance	-0.5	0.5	0.3	-0.2	0.7
Net debt/assets (-) 2/	-12.2	-11.3	-9.6	-9.6	-12.1
SSC					
Revenue	3.9	3.6	4.3	4.2	4.4
Expenditure	1.3	1.4	1.8	2.2	2.4
Balance	2.7	2.2	2.7	2.1	2.0
Net debt/assets (-)	-22.9	-24.5	-26.2	-27.0	-26.4
Memorandum item					
Public sector net debt, excl. currency in circulation 3/	52.3	40.2	38.8	41.8	39.1

Sources: data provided by the Jordanian authorities; and IMF staff estimates. Latest data available.
1/ Excludes municipalities and some minor public enterprises. Transfers and common debt obligations between sectors are eliminated. CBJ accounts are on a commitment basis.
2/ Own-budget agencies domestic banking system debt only. Domestic and external debt of these agencies are captured under the central government debt. CBJ assets are net foreign assets plus net domestic assets less currency in circulation.
3/ This definition is used by credit rating agencies to evaluate Jordan's credit worthiness.

130. Against the background of the substantial shortfalls in debt reduction relative to the original baseline, three issues are important for analyzing Jordan's medium-term debt

sustainability. First, are the original debt-ratio targets likely to be met under the current program? Second, what is the likely evolution of debt over the medium-term? Third, what is the proposed phasing of the debt reduction in the revised strategy relative to the baseline?

131. The authorities' current program projections suggest that Jordan should be able to substantially reduce its central government debt burden to 80 percent of GDP by end-2006 and to 61.6 percent of GDP by end-2010. The overall debt ratio is projected to be exactly at the debt ceiling mandated by the Public Debt Law. Compared to the original baseline, the central government debt burden will be about 11 percent of GDP higher at end-2010 relative to the original baseline (see Table V.3). In order to gain some of the lost ground, the program envisages a slightly higher rate of reduction in the debt ratio over the period 2004–10 (see Figure V.2).

132. In terms of the composition of the debt reduction, the authorities' current program projections have a slightly lower rate of nominal GDP growth relative to the baseline,[57] but a similar fiscal deficit path[58] (see Figure V.3). Significant gains are expected to come from higher privatization proceeds relative to the original baseline due to the envisaged acceleration of the delayed privatization program (entailing an additional JD 80 million per annum). Overall proceeds from the privatization program, however, is assumed to be broadly similar to the original baseline.

133. While the fiscal deficit path is largely in line with the original program, the negative impact of the war in Iraq means that a stronger fiscal effort would be required to achieve medium term targets. The cumulative fiscal effort, measured by the change in the primary balance excluding grants between 2004 and 2007, amounts to 7.7 percent of GDP under the program, compared to 1.4 percent of GDP under the original baseline scenario. To achieve the targeted fiscal deficit path, the authorities would need to take additional measures in revenue and expenditure averaging about 1½ percent of GDP annually. The remainder of this chapter outlines fiscal priorities for the medium-term which will be necessary for Jordan to achieve the desired fiscal consolidation.

[57] 9.7 percent in program versus 10.2 in the baseline.

[58] 3.2 percent for the period 2004-07.

Table V.3. Jordan: Original Baseline and Program Projections

			Original Baseline Projections					Current Program Projections				
	2000	2001	2002	2003	2004	2006	2010	2002	2003 Prel.	2004	2006	2010
						(In percent of GDP)						
Total budgetary revenue and grants	30.1	30.6	32.0	31.1	30.7	29.9	27.4	30.2	35.9	32.3	27.2	26.2
Budgetary revenue	25.9	26.3	25.6	25.2	25.3	24.9	24.6	25.1	23.8	23.6	24.2	24.6
Grants	4.2	4.3	6.4	6.0	5.4	5.0	2.8	5.2	12.1	8.7	3.0	1.6
Total budgetary expenditure	34.1	33.7	36.5	35.5	34.7	32.9	27.7	34.7	38.3	35.2	33.4	28.2
Current expenditure	29.1	28.4	30.7	29.6	29.0	27.3	22.6	27.8	29.4	27.2	26.4	22.5
Of which: interest payments	4.9	4.2	4.4	4.5	3.9	3.7	3.0	3.8	3.9	3.4	3.4	2.6
Capital expenditure	4.9	5.2	5.9	5.8	5.7	5.6	5.2	6.5	8.6	7.4	6.8	5.4
Overall balance, excluding grants	-8.9	-7.9	-10.9	-10.3	-9.4	-7.9	-3.3	-10.1	-13.1	-12.5	-5.8	-3.6
Overall balance, including grants	-4.7	-3.7	-4.5	-4.3	-4.1	-2.9	-0.4	-5.0	-1.1	-3.9	-2.8	-2.0
Financing	4.7	3.7	4.5	4.3	4.1	2.9	0.4	5.0	1.1	3.9	2.8	2.0
Foreign financing (net)	-1.5	1.5	1.3	1.3	1.8	-0.3	0.0	1.2	-4.6	-2.3	-0.6	1.1
Privatization receipts (net)	7.2	-0.1	3.0	4.1	2.5	1.1	0.0	1.2	1.3	4.0	2.3	0.8
Domestic financing (net)	-1.0	2.3	0.2	-1.0	-0.3	2.2	0.4	2.6	4.4	2.2	1.1	0.1
Memorandum items												
Primary balance	0.3	0.5	-0.1	0.2	-0.1	0.8	2.6	-1.2	2.8	-0.5	0.4	0.6
Government savings	0.6	2.2	1.4	1.5	1.7	2.7	4.8	2.4	6.3	4.9	0.6	3.6
Total net debt including guarantees	95.8	93.4	87.1	78.1	71.7	62.4	50.4	97.1	101.5	93.0	80.0	61.6
Of which: external (w/o Brady bonds)	80.1	75.2	70.1	63.5	58.5	48.4	36.0	77.0	77.1	68.2	56.4	43.5
Interest/total revenues	16.4	13.7	13.8	14.5	12.8	12.2	11.0	12.5	10.9	10.5	12.5	9.9
GDP at market prices (in JD million)	5,915	6,229	6,742	7,338	7,948	9,240	12,560	6,653	6,992	7,524	8,719	11,864

Sources: Jordanian authorities; and Fund staff estimates.

D. Fiscal Priorities

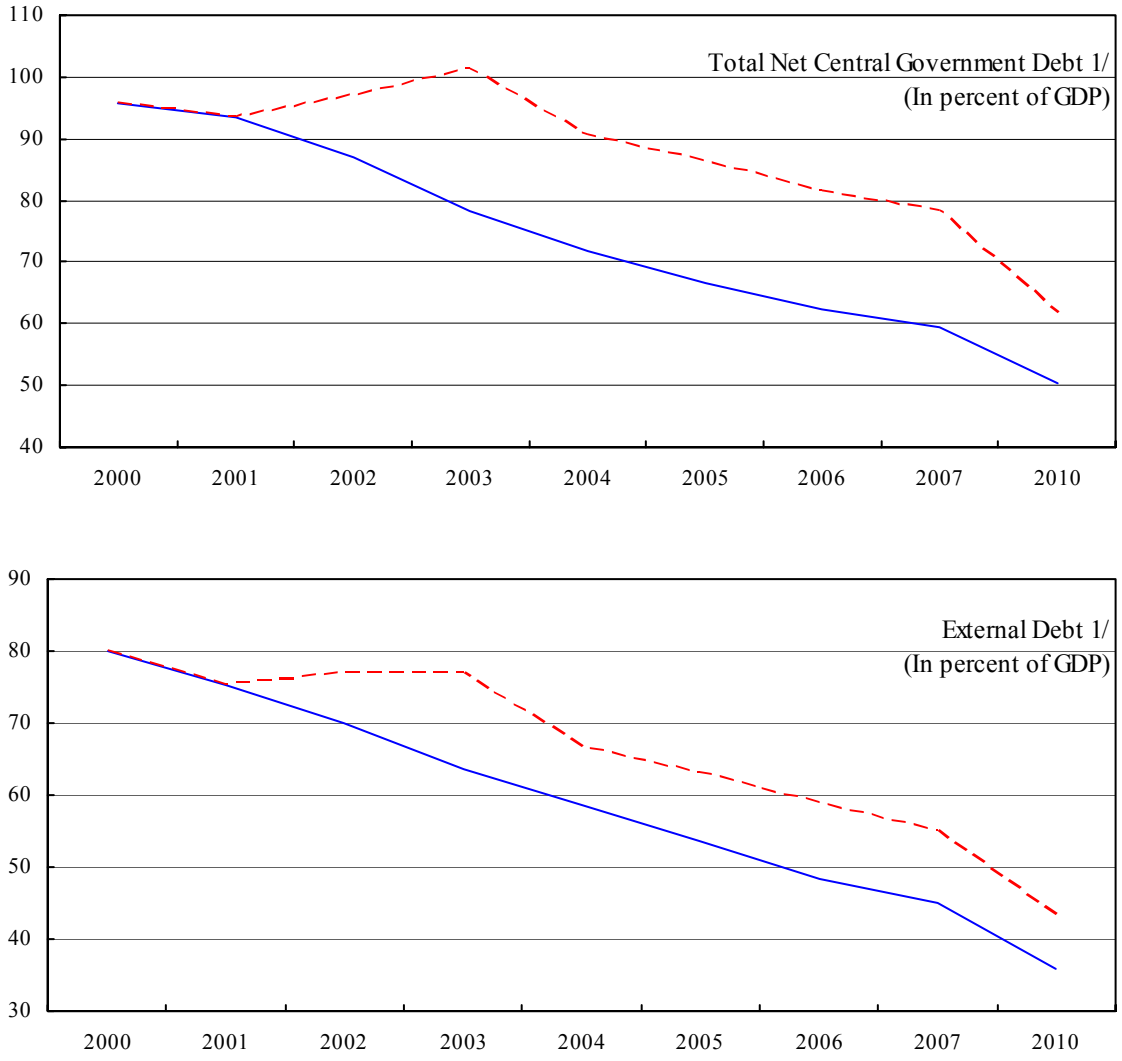
The achievement of the debt targets under the Public Debt Law will require substantial fiscal efforts on the part of the Jordanian authorities. The following are a set of priorities for further fiscal reforms to achieve the debt targets:

- Jordan needs to increase buoyancy in tax revenue and reduce its dependence on inelastic and volatile revenue sources, such as nontax revenues and external grant assistance. In addition, it will have to recoup the permanent loss of the Iraqi oil grant (about 3 percent of GDP annually). Key priorities on the revenue side will be to reform the GST and income tax systems, and to align domestic petroleum product prices with international levels.

- On the expenditure side, Jordan needs to increase flexibility in the budget by reducing current outlays, especially by containing the growth of the wage bill and military spending, continuing with pension reform, and increasing the efficiency of social spending on health and education.

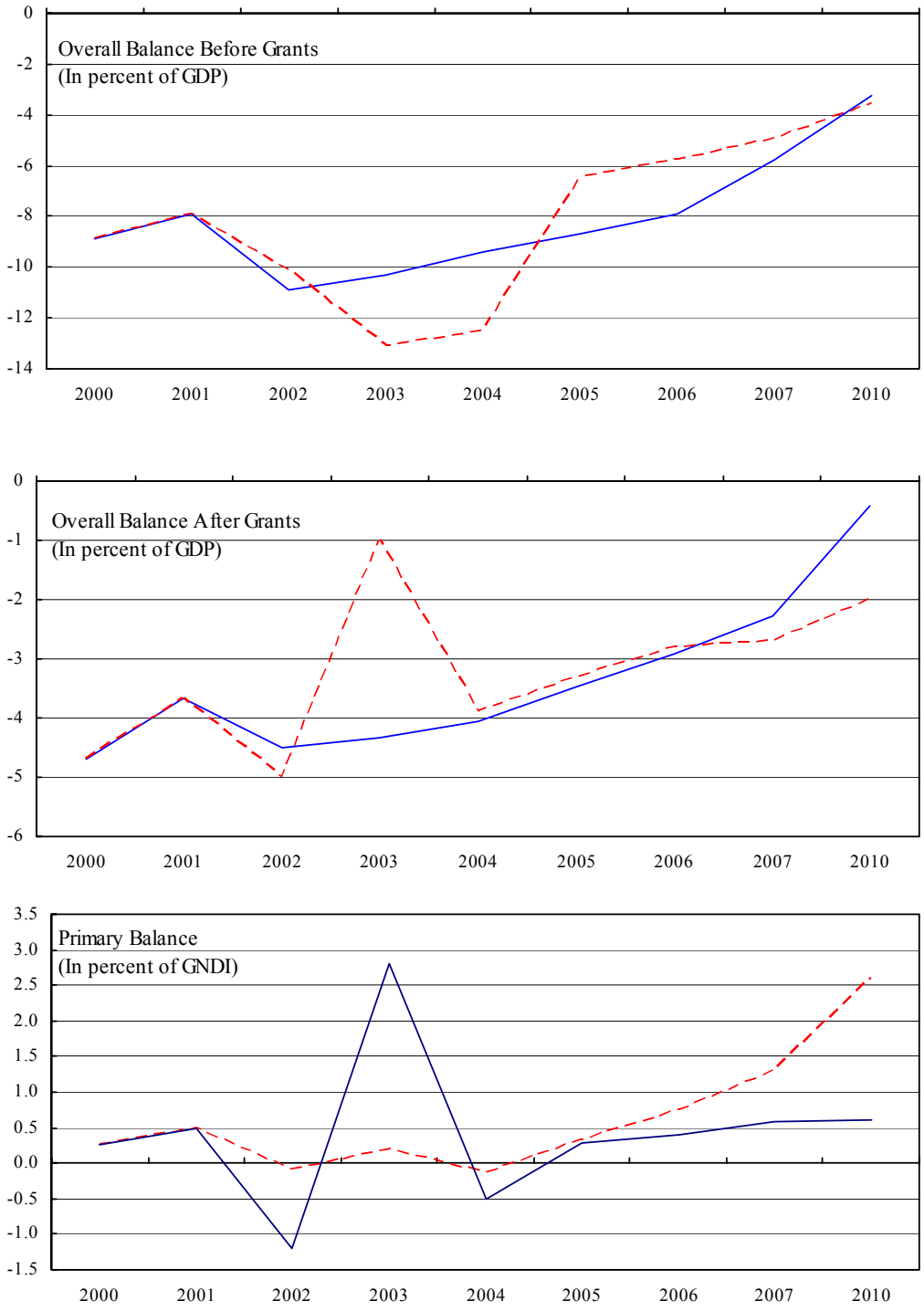
- Sizable below-the-line operations will be needed to complement revenue and expenditure reforms. These would include an acceleration of privatization, a continuation of special debt operations such as debt swaps, and an adherence to the fiscal funding strategy.

Figure V.2. Jordan Medium-Term Debt Projections, 2000–10



Source: Jordanian authorities; and Fund staff estimates.

Figure V.3. Jordan Medium Term Government Balance Projections, 1998–2010



Source: Jordanian authorities; and Fund staff estimates.

E. Revenue

134. Reforming the **income tax** should be a key priority. The current income tax system remains overly complex, inequitable, and inefficient. As a result, Jordan's income tax performance lags significantly behind other countries in the region. The priorities for reforms in this area include: broadening the tax base by eliminating the numerous exemptions, especially on rental income and export profits; replacing the current system of deductions with a simple system of tax credits; having provisions for accelerated depreciation instead of the present system of partial tax holidays; subjecting capital gains received on all assets by all taxpayers to a similar tax; and reducing the number of tax rates to reduce the complexities of the current rate structure.

135. Enhancing the efficiency and elasticity of the GST system will require unifying the lower GST rate with the basic rate over time by increasing the basic rate. It will also be important to broaden the GST base by extending it to electricity and transportation. In addition, improving compliance and simplifying tax administration would help improve the elasticity of the GST system.

136. The permanent loss of the Iraqi oil grant and the associated oil price discount underscore the importance of aligning domestic petroleum product prices with international levels. The strategy should include a transition period during which discretionary price adjustments will gradually eliminate the gap between domestic and international petroleum product prices by 2006. Furthermore, the current system of implicit tax revenues from pricing some products above market levels should be replaced by a transparent system of GST and specific excises.

F. Expenditure

137. To gain much needed flexibility on the expenditure side, Jordan needs to limit its current outlays. Wages, pensions, military outlays, and interest payments account for about 70 percent of budgetary outlays. While progress on pension reforms has been commendable, it will be important to consolidate the gains over the medium term to limit wage and pension outlays and to reduce future contingent liabilities.

138. The growing burden of military spending needs to be contained to ensure the sustainability of Jordan's fiscal position. Military spending remains the largest single expenditure category, accounting for about a quarter of total expenditure. Jordan spends more on military than any other country in the region in percentage of GDP and almost triple that of the major industrial countries. Further, Jordan has lagged behind its regional comparators in reducing military spending relative to GDP over the past decade. While its neighbors have been successful in significantly reducing military spending relative to GDP between 1995–2001, Jordan's military spending increased by over ½ percent of GDP during the same period.

Figure V.4. Cross-Country Comparison of Military Expenditures.

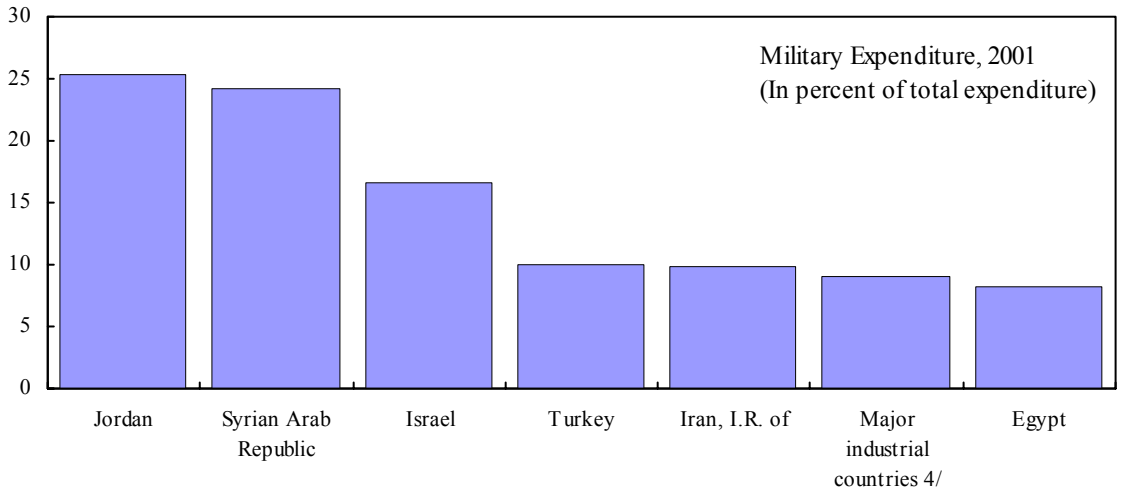
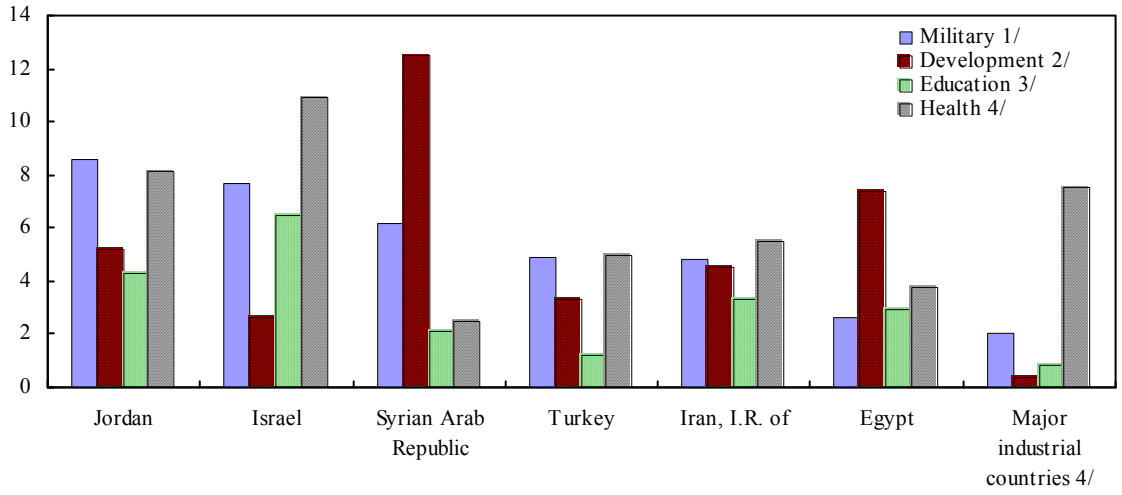


Figure V.5. Cross-Country Comparison of Expenditures by Function



139. The recent completion of the comprehensive pension reform agenda will strengthen significantly Jordan's fiscal position in the coming years by containing the increase of pension liabilities. In this context, it would be important to reform the contribution and benefit rules of the Social Security Corporation (SSC) to ensure its long-run financial solvency, based on the findings of the ongoing five-year actuarial review.

140. Spending on health and education compares favorably with other countries in the region and even with industrial countries. At 5 percent of GDP, Jordan's spending on

education exceeds industrial countries' average (4.7 percent of GDP). Similarly, at 4.2 percent of GDP Jordan's spending on health compares favorably not only to the regional average of 2.8 percent of GDP, but also to the industrial country average of 6.5 percent of GDP. However, there is a need for improving the effectiveness of public expenditure to achieve the government's social objectives rather than increasing the size of spending.

141. Effective implementation of the ongoing public expenditure management reform, including the establishment of a Treasury Single Account (TSA), would greatly aid in improving budget coverage, execution, and reporting.

G. Below-the-Line Operations

142. Given that lower privatization proceeds has been a primary cause for the shortfall in debt reduction over the past two years, the government's debt-reduction goals for the medium-term will depend critically on accelerating the privatization program and using all privatization proceeds for reducing debt. First, additional proceeds are required to compensate for the significant shortfalls in debt reduction over the past two years. Second, to the extent that lower privatization meant higher borrowing to finance the fiscal deficit, the associated debt service payments are an additional fiscal burden. Third, considering the one-off nature of privatization receipts, any use of them to finance expenditures which may have a recurrent component or call for any budgetary spending in the future, further jeopardizes the fiscal program. Fourth, over the longer run, privatization should potentially raise productivity and growth and some of these gains would accrue to the budget in the form of tax revenue. The current program envisages average annual privatization receipts of JD 200 million for the period 2004–08 and the use of all proceeds for debt reduction purposes.

143. The pre-payment of Brady Par Bonds is a step in the right direction. Financing the Brady Bond buyback by the issuance of domestic public debt and a drawdown of international reserves is consistent with the need to reduce Jordan's external debt and debt service payments and its vulnerability of the public debt service burden to adverse exchange rate movements.

144. The pre-payment of high cost external debt should continue along the lines discussed in the fiscal funding strategy aimed at decreasing the proportion of external debt and increasing the reliance on domestic financing in consultation with the Paris Club Secretariat (see Box V.2). Sustained implementation of such a policy will result in an accelerated reduction of external debt and domestic excess liquidity, interest savings, and the establishment of a domestic yield curve, facilitating long-term lending to the domestic private sector. In addition, the authorities could continue in their efforts to seek debt swaps and debt for development deals from various bilateral official creditors to the extent possible.

Box V.2. Jordan—A New Fiscal Funding Strategy

The government's fiscal funding strategy since the late 1980s has been characterized by a bias towards external financing due to efforts to secure the maximum possible financing from official donors and creditors. Central government net external financing averaged the equivalent of 6.0 percent of GDP per year in 1993–2002, about one-third of which was debt-creating. At end-2003, the gross external debt stock of the central government stood at the equivalent of about $7.5 billion, 83 percent of GDP. Domestic debt financing has generally been treated as a residual item, aimed at filling the gap between overall financing requirements and funds raised from external creditors or through privatization. In 1993–2002, net domestic borrowing by the central government averaged the equivalent of 0.7 percent of GDP per year. At end-2002, the gross domestic debt stock of the central government was equivalent to about 20 percent of GDP.

Despite progress in fiscal consolidation, Jordan remains one of the most externally overleveraged economies in its income group[59] which constrains its foreign currency sovereign credit ratings to within the speculative grade. The fact that Jordan's external financial liabilities are almost exclusively denominated in foreign currencies results in an element of financial fragility, insofar as government, financial institutions, and corporate balance sheets are exposed, to varying extents, to interest rate or exchange rate shocks. As discussed earlier, Jordan's public debt has already suffered the consequences of valuation effects in 2002–03 and one of its critical macroeconomic vulnerabilities is the susceptibility of its public-debt profile to exchange losses in the event of depreciation of the Jordanian dinar (JD).

Balance of payments considerations have traditionally necessitated a certain minimum quantum of external borrowing. More than 77 percent of the government's net borrowing requirements were funded from external sources during 1993–2002. Though necessary from a balance of payments perspective, the funding strategy was not free of fiscal cost. The interest rate on government domestic debt averaged about 3.7 percent per year during this period, while that on public and publicly-guaranteed external debt averaged about 5 percent. In addition to this, external borrowings had to be sterilized through CD issuance by the CBJ. On a consolidated basis, therefore, the true cost of external borrowing averaged some 8.5 percent per year during 1993–2002. Stated differently, every additional 1 percent of GDP worth of annual net domestic borrowing in lieu of net external borrowing during 1993–2002 would have resulted in fiscal savings worth up to JD 2.5 million per year.

The recent strengthening of the balance of payments and increase in gross usable international reserves has afforded Jordan the opportunity for a more selective external borrowing policy. A new fiscal funding strategy with increased emphasis on domestic borrowings is now a possibility, holding out the prospect of accelerated external debt reduction, domestic debt market development, and significant interest savings.

Beginning in 2002, the Jordanian authorities started to take steps to adjust the fiscal funding profile in favor of larger magnitudes of JD-denominated bonds. This process has been intensified in 2003 through the pre-payment of Brady Bonds, the issuing of larger quantities of 5-year government bonds to finance government expenditures, and by not drawing on much of the World Bank Public Sector Reform Loan (PSRL). Sustained implementation of such a policy would help achieve a more balanced distribution between local currency and foreign currency liabilities in the public debt; absorb excess liquidity; develop a longer yield curve; and facilitate longer-term bank lending to the domestic private sector. Such a policy would support the development of Jordan's domestic financial and nonfinancial private sectors while also reducing Jordan's vulnerability to external shocks.

[59] Jordan's external debt of 80.4 percent of GDP at end-2002 compares unfavorably with Lebanon (31.9 percent

(continued…)

H. Potential Vulnerabilities

145. The debt reduction path envisaged in the program faces significant risks in the event of adverse shocks. One of the most important risks is from **valuation effects** in case the Jordanian dinar were to depreciate. Given the high proportion of external debt, the initial impact on the stock of debt could be substantial, leading to a debt-to-GDP ratio which would remain markedly above the baseline, entailing a continued heavy burden on the budget, and a significant delay in meeting the targets specified under the Public Debt Law.

146. Any reduction in the GDP growth assumptions under the medium-term baseline scenario would make the debt targets difficult to achieve. The program assumes a growth rate of GDP of 5 percent in 2004, accelerating to 6 percent over the medium term. These are predicated on a sharp recovery from the Iraq conflict and a continued rapid expansion of exports.

147. Shortfalls in external grants from program levels could have a negative impact on the debt reduction strategy. The fiscal program for the medium term is based on fairly conservative assumptions about external grants, given Jordan's past success in mobilizing grants. Hence, there should be limited downside risk of shortfalls in grant receipts. Other sources of vulnerability include higher than programmed **real interest rates**, and a deterioration in the security environment.

I. Conclusions

148. Even though there have been substantial shortfalls in debt reduction relative to the original baseline in recent years under the current SBA, the debt path for the medium term envisaged in the program is consistent with debt sustainability. Reducing the debt burden, particularly in the light of recent shortfalls and the impact of the war in Iraq, would require a strengthened commitment by the authorities to adhere to the fiscal deficit path in the program.

149. The lack of any cushion suggests that there are risks to the attainment of debt targets in case there are adverse valuation effects, slower growth, loss of external grants, or any political and regional instability which have not been explicitly factored in the baseline scenario. Nevertheless, by pursuing a medium-term fiscal strategy based on the priorities outlined above, the authorities should be able to considerably improve Jordan's prospects for eventual debt sustainability.

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of GDP), Egypt (31.6 percent of GDP), and Indonesia (35.3 percent of GDP) as of end-2002.

VI. Development of Social Protection Institutions[60]

A. Introduction

150. In the aftermath of the 1989 crisis, Jordan was confronted with a large devaluation and a contraction in output, a decline in real income, and a sharp deterioration in the level of poverty. However, the lack of an adequate social safety net significantly inhibited the effectiveness of the government's response to these mounting challenges. Prior to the crisis, Jordan had largely relied on the informal family-based social protection system. While the family-based system was useful in smoothing occasional idiosyncratic welfare shocks, it was inadequate in coping with a systemic crisis that dramatically reduced the welfare of all segments of the Jordanian society.

151. Faced with the rapidly deteriorating public welfare and rising poverty, the government responded by reinstating price controls on basic food items and petroleum products. While the price controls helped alleviate the impact on the poor of sharp increases in food and fuel prices, they were poorly targeted, vulnerable to adverse external shocks, and burdensome on the budget. The government attempted to contain expenditure on subsidies associated with the price controls by introducing commodity rationing schemes. However, these schemes were only marginally successful in limiting the subsidies that remained vulnerable to import price volatility.

152. The inefficiency and fiscal unsustainability of price subsidies underscored the need for establishing a comprehensive formal social protection program with three pillars: a state-funded social safety net for the poor and vulnerable segments of the society; a basic self-funded social security system that would provide a comprehensive coverage for all workers in the economy; and a well-targeted and efficient expenditure program for health and education, ensuring equal access to all citizens with the emphasis on underdeveloped areas.

153. Over the past decade, the Jordanian government made substantial inroads in all three areas. In the late 1990s, the government successfully replaced generalized and open-ended subsidies with a system of means-tested cash transfers administered through the National Aid Fund (NAF). Despite some coverage limitations, the cash transfer scheme was much more successful in reaching the poor than the system of generalized subsidies. At the same time, the government restructured pricing of petroleum products with a view to cross-subsidizing the energy products consumed by the poor, while generating net revenue for the budget. Regarding old-age and disability pensions, the government's strategy focused on consolidating various types of pension plans into an expanded, broad-based, and uniform social security system. Finally, despite the ongoing fiscal consolidation, Jordan maintained a respectable level of social spending, while pursuing an active poverty-alleviating strategy by

[60] Prepared by Daria Zakharova.

allocating more resources to areas with high poverty incidence and restricted access to primary health care and public education system.

154. This chapter tracks the progress that Jordan achieved over the past decade in developing social protection programs and the resulting gains in social indicators and alleviation of poverty, despite the difficult economic and geopolitical environment. It begins by providing a historical context for the weak state of institutional arrangements prevailing at the time of the 1989 crisis and sets the stage for discussing the government's initial response to the deterioration in poverty levels brought on by the crisis (Section B). Section C of the paper examines the evolution of the NAF and the key social safety net systems in Jordan. It starts by describing the introduction and reform of price subsidies and offers a cross-country comparison of subsidy reforms in the MENA region. It proceeds by reviewing the evolution of petroleum product subsidies, including the most recent reforms in this area that were triggered by the loss of the Iraqi oil grant. The section concludes by examining the evolution of the NAF. Next, the paper examines the government's approach to expanding the social security coverage and making it more equitable by gradually phasing out separate pension schemes for civil servants and the military and consolidating them with the social security system for nongovernmental employees (Section D). Section E discusses the improvements in the effectiveness of health and education spending in Jordan, which helped in economic integration of the poor and the population residing in underdeveloped areas of the country. The paper concludes by outlining challenges ahead and sketching the future reform road map.

B. Social Protection Arrangements Prior to the 1988–89 Crisis

155. In the 1980s, Jordan lacked comprehensive and well-defined social protection institutions. Jordan's social safety net systems consisted mainly of the traditional family-based social protection networks, generalized food subsidies, and the civil service and military pension systems for government employees and the military. In 1981, the pension system for government employees and the military was augmented by the introduction of state-operated contributory pension scheme for nongovernmental workers, administered through the SSC.

156. Food subsidies constituted a relatively insignificant share of Jordan's budget until the economic crisis of 1989. In 1983–85, food subsidies accounted for less than 1 percent of total central government expenditure. The reduction in subsidy outlays in the early and mid-eighties followed the steady decline in the share of the population living below the poverty line during the economic boom of 1980–1986. As poverty declined steadily from 24 percent in 1980 to less than 3 percent in 1986–87, food subsidies were reduced from about 1 percent of total expenditure in the early eighties to less than half a percentage point of total expenditure in 1985 and were eliminated completely in 1986. With the elimination of the food subsidies in 1986, the NAF was established to provide a more formal social safety net for the unemployable poor.

157. The 1989 crisis led to a large devaluation of the Jordanian dinar and contraction of real economic activity, and resulted in a sharp increase in poverty. The devaluation caused market prices for food to increase by 78 percent between 1986 and 1992. At the same time, nominal wages did not keep up with the rise in inflation, resulting in a sharp decline in real income. Between 1987 and 1992, average per capita expenditure fell by 22 percent. By 1992, 14.4 percent of population lived below the poverty line, while the poverty gap, measured as the percentage of the national income by which expenditure of the poor would have to be increased to bring them up to the poverty line, widened from 0.3 percent in 1987 to 3.6 percent in 1992.[61]

158. The Jordanian government responded to these developments by increasing expenditures on welfare programs. Since the coverage of the NAF was inadequate to address the systemic welfare shock brought on by the crisis, the government reinstated food subsidies in 1988. By 1989, food subsidies made up 7 percent of government expenditure (3.3 percent of GDP).

C. Social Safety Net Systems

159. The sharp deterioration in poverty levels brought on by the 1989 crisis underscored the need for a more comprehensive state-funded social safety net. The government's initial response was to reinstate the generalized subsidies on basic food stuffs and petroleum products. However, these subsidies proved to be inefficient in reaching the poor and costly for the budget and were gradually replaced by means-tested cash payments administered by the NAF. By the late 1990s, the NAF emerged as the single comprehensive state-funded social safety net for the poor and most vulnerable segments of society. Recent empirical evidence indicates that the expanded NAF played a key role in alleviating poverty in the second half of the 1990s.

The evolution and reform of food subsidies

160. Food subsidies were initially designed to reach the entire population through a direct control of the cost of basic foodstuffs to consumers. The foodstuffs (including wheat, barley, sorghum, rice, sugar, fresh meat, frozen chicken, olive oil, and lentils) were imported solely by the Ministry of Supply and distributed through its outlets to wholesalers and retailers at fixed prices. Other foodstuffs, such as milk, maize, and chickpeas were imported both by the Ministry of Supply and the private sector and also sold at fixed prices to final consumers. In introducing the subsidy, the government did not set a limit on the quantities of goods that could be purchased, nor did it differentiate across consumers based on their income. While most subsidized goods entailed consumer subsidies, the price controls on barley, sorghum, and maize were meant to aid producers of livestock.

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[61] R. A. Shaban et al., *Poverty Alleviation in Jordan: Lessons for the Future*, World Bank, 2001.

161. The system of generalized open-ended food subsidies had a number of serious drawbacks. First, by lowering the relative price of the subsidized foodstuffs without setting any limit on the quantity of purchases, it encouraged the substitution of those goods for other food items, thus increasing demand for the subsidized foodstuffs. In order to avoid shortages caused by the high demand, the Jordanian government had to import large quantities of foodstuffs. Second, since the subsidy was not targeted to the poor, all income groups could benefit from the low prices, resulting in perverse income distribution effects. For example, the 1994 Fund technical assistance (TA) report concluded that the subsidy for wheat largely benefited the upper-income groups, who consumed more bread per capita than the poor. Similarly, generalized producer subsidies for barley provided little benefits to the poor, as most meat is consumed by upper-income groups. Third, since the subsidy was open-ended, in the sense that there was no mechanism in place to put a cap on the subsidy per unit of product, the size of the subsidy was subject to wide fluctuations, depending on the level of international market prices of the imported foodstuffs. As a result, the food subsidy became increasingly burdensome with the continuing depreciation of the Jordanian dinar in 1989–90 and the rise in international commodity prices.

162. Concerned with the pressure of subsidies on the budget, the Jordanian government introduced a number of measures to address some of the above-mentioned drawbacks in 1990. In particular, meat subsidies were eliminated and a rationing system was introduced for sugar, rice, and powdered milk. Under the new system, fixed quantities of these commodities were made available through coupons at subsidized prices. Additional quantities of these commodities were offered at controlled, but nonsubsidized prices. While the new system addressed the problem of excess demand to some extent, it did not resolve the income distribution problems, nor did it completely address the open-ended nature of the subsidy.

163. The subsidy reform of the early nineties, combined with the beneficial developments in the world markets for foodstuffs, resulted in substantial savings to the budget. Following the full implementation of the food coupon system and a decline in the international prices for wheat, the total food subsidy bill fell by 1 percent of GDP to about 2 percent of GDP in 1991. In 1992, the government made further changes to the system by eliminating producer subsidies on maize and sorghum and raising the subsidized price for rice. In addition, the subsidized price of wheat was increased by 12 percent in 1993. The resulting savings, combined with the additional savings realized through the decline in import costs and increases in surpluses on nonsubsidized sales controlled by the Ministry of Supply for imported commodities, led to a further decline in the subsidy bill to 1 percent of GDP by 1994 (Table VI.1).

Table VI.1. Jordan: Food Subsidies 1990–96 1/
(In millions of Jordanian Dinars)

Item	1990	1991	1992	1993	1994	1995	Est. 1996
Wheat	-42.4	-34.7	-38.8	-43.3	-39.5	-53.7	-49.1
Barley	-9.4	-7.0	-8.3	-9.0	-3.3	-1.8	-15.4
Rice	-8.3	-5.2	-5.3	-6.7	-4.8	-7.1	-10.0
Sugar	-18.6	-2.4	1.8	2.7	-0.5	-4.1	-8.8
Meat	-1.4	...	...	...	...	...	...
Other	-3.4	-11.9	-6.8	2.7	4.9	2.9	2.1
Cash Payments	...	...	...	...	...	...	-20.5
Surplus (+) or subsidy (-)	-83.5	-61.2	-57.4	-53.6	-43.1	-63.8	-101.8
Memorandum item:							
Total food subsidies (As percent of GDP)	3.1	2.1	1.6	1.4	1.0	1.4	2.0

Sources: Ministry of Supply, and Ministry of Finance and Customs.
1/ Negative sign indicates subsidy.

164. Despite the authorities' efforts to curtail the subsidy bill, it remained vulnerable to adverse external developments. The authorities managed to temporarily restrain the expenditure on subsidies by reducing the number of subsidized commodities and adjusting controlled prices to reflect changes in the prices of imports. Nevertheless, the total subsidy bill doubled by 1996, reaching 2 percent of GDP following substantial increases in international prices for wheat and barley. In 1996, the subsidies for these two commodities accounted for two-thirds of the total subsidy bill.

165. Recognizing the need for a swift action to contain the subsidy bill, the authorities launched a comprehensive reform of price subsidies in 1996. With the assistance of Fund technical assistance, the authorities developed an ambitious reform program. In August 1996, the prices of bread and barley were increased sharply to the level of average economic cost and the private sector was permitted to import wheat directly. The short-term impact of the price increase on the poor was ameliorated by compensatory cash payments, amounting to some JD 20 million (0.4 percent of GDP) in 1996.

166. At present, Jordan employs international in-kind grant assistance to subsidize bread consumption. The subsidy is financed through an off-budget, in-kind wheat grants from the United States. In 2001, these grants amounted to $34 million. Despite these quasi-fiscal operations, Jordan's progress in reforming food subsidies compares favorably to other countries in the region (Table VI.2 and Box VI.1).

Table VI.2. Jordan: Wheat Grants
(In millions of U.S. dollars)

	1999	2000	2001
Grant	18.0	65.0	34.0
(In percent of GDP)	0.2	0.8	0.4

Source: Jordanian Embassy in Washington D.C.
http://www.jordanembassyus.org

Petroleum product subsidies

167. As part of its poverty alleviation strategy in the aftermath of the 1989 crisis, the government introduced petroleum product subsidies for select products. While initially the system resulted in net fuel subsidy, by 1992 the government managed to collect net revenue on its fuel sales by introducing a cross-subsidization scheme, which was combined with a periodic adjustment of local fuel prices to reflect increases in world oil prices. Cross-subsidization maintained the low prices for energy products used for mass transit and electricity generation and for energy products consumed mostly by the poor (e.g., diesel, fuel oil, and kerosene) by setting local prices for these products below world market levels and subsidizing their consumption by charging above-market prices for gasoline.

168. Another factor that allowed Jordan to subsidize select petroleum products, while generating net revenue for the budget, was its oil agreement with Iraq. Since the Gulf War and until the recent war in Iraq, Jordan relied almost exclusively on Iraq to meet its oil needs. Of the total crude oil and refined products imported from Iraq under the food-for-oil program, approximately half took place in the form of a grant (amounting to 3 percent of GDP in 2002), while the other half was sold at preferential below-market prices negotiated each year between the respective governments. The government then sold the oil at preferential prices to the Jordan Petroleum Refinery Company.[62] The wholesale and the retail prices were set by the government. The distribution sector was state-operated, while the retail sector was privately owned and competitive. Since 1992, the cross-subsidization scheme coupled with the preferential oil agreement with Iraq produced a net revenue for the government that was classified as oil surplus under the nontax revenues in the budget. In 2002, the government collected JD 110 million (1.7 percent of GDP) in oil surplus.[63]

[62] The Jordan Petroleum Refinery Company (the Zarqa refinery) operates under a 50-year concession agreement scheduled to expire in 2008.

[63] The oil grant was recorded under budgetary grants and the oil surplus, defined as an operating profit of the Zarqa refinery, was recorded as a nontax revenue.

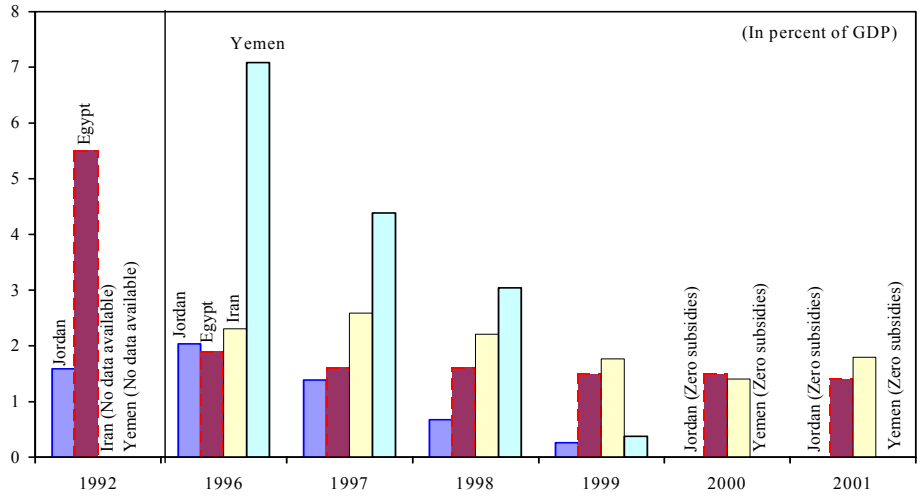
Box VI.1. Subsidy Reform in Jordan—Comparison With Selected Countries in the Region.

Jordan achieved significant success in implementing its reform of food subsidies compared to other countries in the region. Many countries in the region introduced food subsidies at about the same time as Jordan to counteract the negative economic impact of the Gulf War on the poor. In the early nineties, just like Jordan, most countries experienced problems in maintaining control over the rising subsidy bill (Figure VI.1). For example, in 1992 subsidies accounted for 16 percent of total expenditure in Egypt (5.5 percent of GDP). By 1996, Yemen faced a subsidy bill of over 7 percent of GDP, while Iran maintained its subsidies at slightly over 2 percent of GDP.

While significant progress has been made in all the regional countries, performance of Jordan and Yemen stands out. At about 18 percent of total expenditure in 1996, Yemen's subsidy bill was prohibitively high. Domestically administered wheat and flour prices were 75 percent below their world market levels. The subsidies were supposed to ensure impoverished families access to basic food items at low prices. However, according to World Bank staff estimates, only one-third of the subsidies reached consumers; the rest was captured by importers, distributors, and smugglers to neighboring countries. In addition, just like in Jordan, the poorest groups benefited very little from the subsidies because they spent disproportionately less on wheat and wheat flour than did high-income groups.

In 1996, the Yemeni government initiated a gradual reform of price subsidies through several rounds of administered price increases. Increases, ranging from 10 to 30 percent, took place between the second half of 1996 and January 1999, following a large increase (150 percent) in January 1996. As a result, food subsidies were eliminated entirely by mid-1999. In order to alleviate the negative impact of the subsidy reform on the poor, in 1997 the government established the Social Welfare Fund (SWF)—along the lines of the successful model of the Jordanian NAF—to provide targeted cash assistance to the poorest segments of the population. The SWF was successful in reaching the poor with its coverage increasing dramatically over the years from about 39,000 cases in 1997 to over 400,000 cases in 2001.

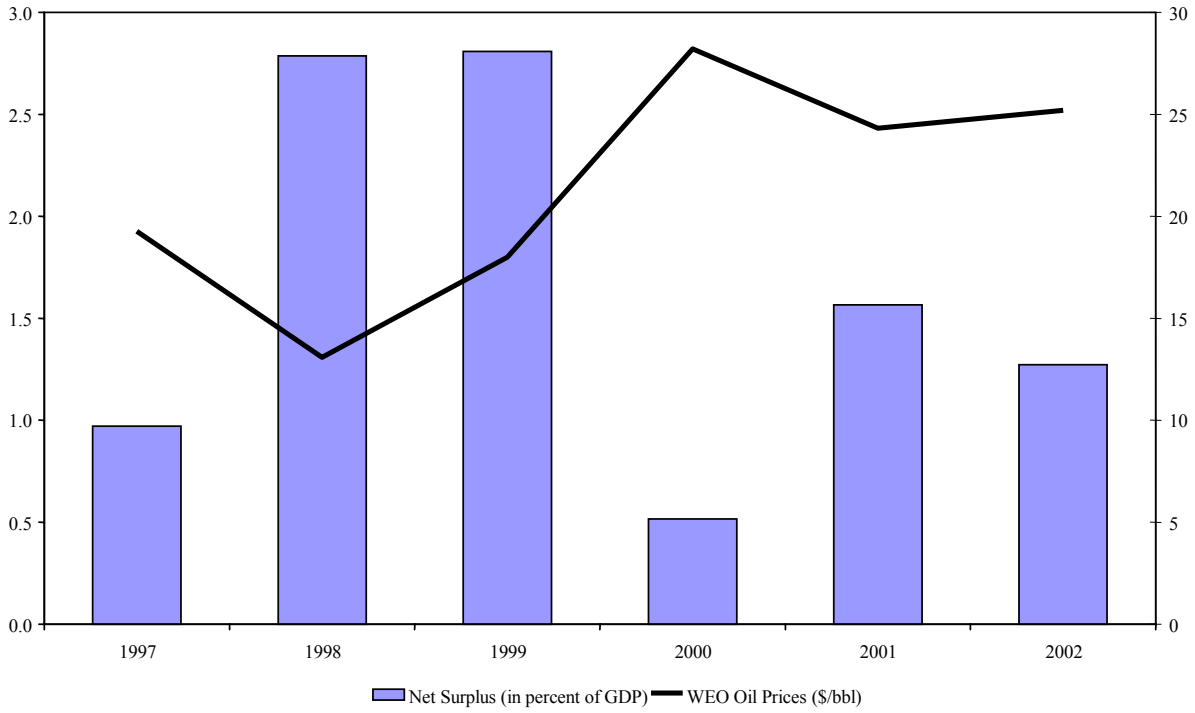
Figure VI.1 Jordan. Cross-Country Comparison of Food Subsidies, 1992–2001



169. The oil surplus has been an unpredictable source of budgetary revenue. The revenue from oil surplus fluctuated widely over the years, reflecting the volatility of international oil prices (Figure VI.1). In addition, the complex system of implicit subsidies and taxes that the

cross-subsidization scheme entailed was difficult to analyze and forecast. In November 2000, the authorities requested technical assistance from the Fund to advise them on petroleum product pricing. The mission recommended to replace the oil surplus with a system of GST and excises. In 2002, the authorities introduced a 2 percent GST on petroleum products that was raised to 4 percent in May 2003. Nevertheless, administered prices for petroleum products and the extensive system of cross-subsidization remain in place to this day (Table VI.3).

Figure VI.2. Jordan: Oil Surplus, 1997–2002



170. Cross-subsidization causes a number of market inefficiencies. First, it distorts the market price structure and creates perverse incentives for consumers to substitute cheaper subsidized products for potentially more suitable and effective, but artificially relatively overpriced products. For example, Jordanian consumers are likely to substitute diesel for gasoline by purchasing diesel-powered vehicles, which may be harmful for the environment and may result in inefficient product allocation. In addition, ready availability of cheap fuel for water pumps may lead to over-extraction of water for farming purposes. Furthermore, subsidized diesel is widely used for self-generation of electricity. This may lead to a substantial decline in demand for the more cost-effective centrally generated electricity, possibly resulting in a sizable loss to the electricity company. Finally, since the price of diesel does not reflect its production costs, it is likely to result in a substantial overuse by consumers, exacerbating the required subsidy from the budget.

Table VI.3. Jordan: Cross-Subsidization of Petroleum Products, 2003

	Local price (US $ per ton)	Reference price (US $ per ton) 1/	Volume (tons)	Value (thousand US $)	Implicit subsidy(-)/tax	Percent
Total	...	...	3971	723	43	...
Subsidized products	...	...	3810	608	-137	100
Gas Oil (diesel)	212	256	1336	283	-59	43
Fuel oil (electricity)	98	131	1657	162	-54	40
LPG	273	303	304	83	-9	7
Kerosene	222	271	179	40	-9	6
Fuel oil (other)	120	139	334	40	-6	5
Taxed products	...	...	161	115	180	100
Gasoline (regular)	560	314	503	282	124	69
Gasoline (super)	712	360	161	115	57	31

Source: Jordanian authorities; and Fund staff estimates.

1/ Projected Italian ex-refinery price.

171. In 2003, the oil surplus system was further complicated by the loss of the Iraqi grant and preferential oil price agreements on account of the war in Iraq. With the commencement of the war in March 2003, oil deliveries from Iraq have ceased, and Jordan had to start purchasing oil at world market prices. In May 2003, the authorities responded to the rising pressure on the budget from the increase in the world oil prices by raising local fuel prices by 4–20 percent. Furthermore, in anticipation of the war, the Jordanian government built up a substantial oil reserve during late 2002 and the early months of 2003. In addition, the government secured agreements with other Arab countries to supply oil to Jordan on preferential terms, essentially satisfying the country's oil needs until the end of the year.

172. While the generous international assistance provided temporary relief, the medium-term need to recoup the revenue associated with the loss of the Iraqi grant and the oil price discount remained. The authorities recognized the need to adopt a comprehensive strategy to phase out the remaining petroleum subsidies and to reduce the vulnerability of the budget to world oil price fluctuations. As part of the strategy, the government intends to eliminate the subsidies on diesel, fuel oil, liquefied petroleum gas, and kerosene and to liberalize the domestic market for petroleum products. At present, the government anticipates a multi-year transition period during which discretionary price adjustments will gradually eliminate the existing gap between domestic and international prices for the subsidized products. Once the gap has been closed, a symmetric automatic price adjustment mechanism based on international prices will be introduced. The government is also planning to introduce competition into the distribution market in order to speed up the process of the full liberalization of the oil sector.

173. Table VI.4 shows for each petroleum product the price increase that would be required to bring the local price in line with the world reference price made up by the corresponding price from a refinery in Italy to which are added the marketing margin and the GST at a basic rate of 15 percent. Since the gasoline prices are already above the reference prices, an implicit excise tax rate is calculated under the assumption that the GST is levied on the reference price inclusive of the marketing margin and the excise tax; zero excises are assumed on all other products.

174. A weighted average price increase of about 32 percent would be required for subsidized petroleum products to bring their prices to world market levels plus a fair marketing margin and a 15 percent GST all in one step in 2004. Such a sharp increase in domestic petroleum prices would not be politically feasible and would also have a substantial relative price shock for the real sector. Accordingly, the authorities plan to phase-in the required increases in annual steps over a three-year period through 2006. Since the reference prices move in tandem with the world oil prices, a lower projected oil price in 2006 results in lower projected reference prices, and therefore, smaller petroleum product price increases required to reach the reference prices if the envisaged elimination of all subsidies is to be achieved by 2006. The required increase could be even less if much of the domestic electricity generation is converted to natural gas by 2006.

National Aid Fund

175. The National Aid Fund (NAF) was created in 1986 with the objective to protect the poor unable to participate in the labor market by providing cash transfers and subsidized loans. The NAF target group was made up of households with heads who were unemployable because of age, social status, or disability. To be eligible, households could not have income, own assets, nor receive assistance from other sources, including the extended family. The amount of monthly assistance provided to eligible households began at JD 20 in 1987 and increased with household size to a ceiling of JD 40 per month. This ceiling was gradually revised to reach JD 156 per month for a family of six in 2003. Supplemental in-kind assistance was provided to disabled members of needy households as well.

Table VI.4. Jordan: Petroleum Product Pricing

	Local price in 2004 (US $ per ton)	Reference price in 2004 (US $ per ton) 1/	Reference price in 2006 (US $ per ton) 1/	Additional trasportation mark-up (percent) 2/	Implicit excise tax in 2003 3/	Targeted price in 2004 (US $ per ton)	Required price increase in 2004 (percent) 4/	Targeted price by 2006 (U.S. $ per ton)	Required cumulative price Price increase through2006 (percent) 4/
Gas Oil (diesel)	212	247	208	10	0	288	36	243	15
Fuel oil (electricity)	98	126	106	10	0	147	50	124	27
LPG	273	292	246	10	0	341	25	287	5
Kerosene	222	262	221	10	0	306	37	258	16
Fuel oil (other)	115	134	113	10	0	156	36	132	15
Gasoline (super)	712	348	293	10	62	656	0	553	0
Gasoline (regular)	560	303	256	10	46	516	0	435	0
Weighted average 5/	124	...	...	...	...	171	32	144	15

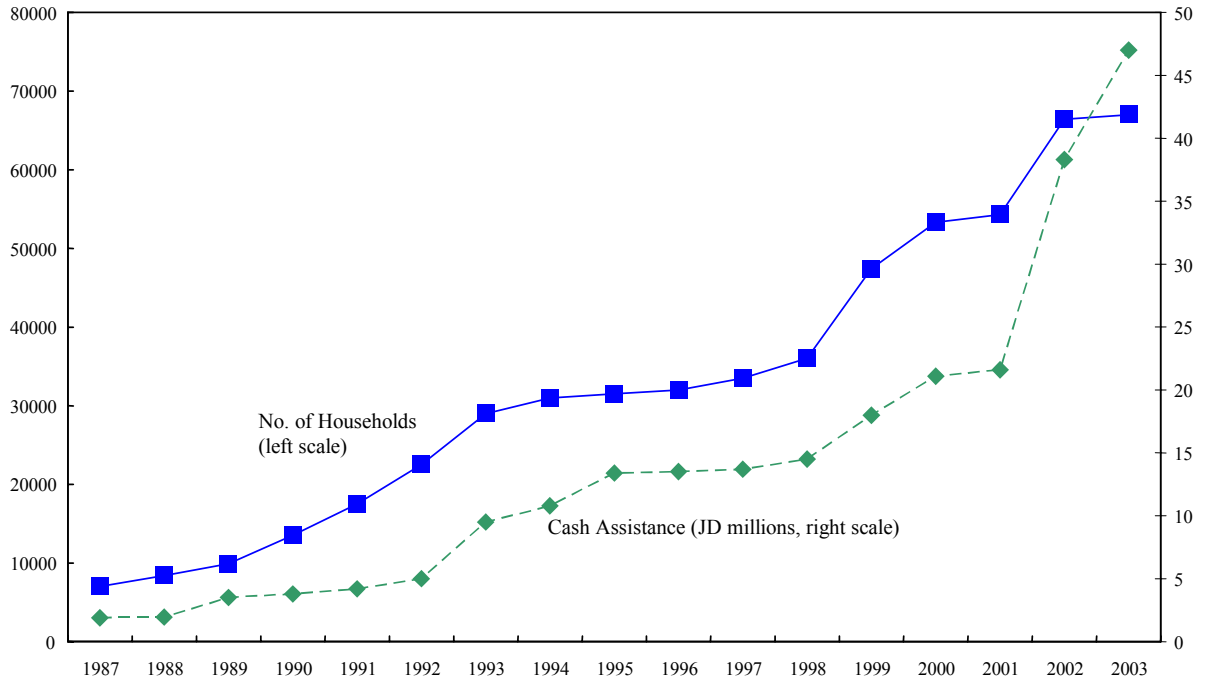
Source: Jordanian authorities and Fund staff estimates.

1/ Projected Italian ex-refinery price plus domestic and international transportation cost and distribution margin. The reference price fluctuates with the world oil price.
2/ As quoted by the Jordan Petroleum Refinery Company .
3/ Assumes that a 15 percent basic VAT rate is levied on the reference price inclusive of the 10 percent transportation mark-up and the excise tax.
4/ Includes additional trasportation mark-up, excise tax, and GST.
5/ Subsidized products only. Weighted by volume.

176. The 1996 subsidy reform underscored the importance of the NAF in mitigating the adverse impact on the poor of eliminating food subsidies. In 1997, the food coupons were replaced by monthly cash transfers, while eligibility for the transfers was limited by imposing an income threshold of JD 50 per month. The cash transfers for the pensioners and civil service employees were distributed through a system of supplementary wage and pension allowances; nongovernmental workers had to register with government offices to receive the allowances; and the transfers for the most vulnerable groups were higher and were administered by the NAF. In 1998, total compensatory transfers amounted to JD 38 million (0.7 percent of GDP), half of which were administered by the NAF. In 1999, further changes were introduced when all cash transfers were eliminated, except for NAF beneficiaries, thereby establishing the NAF as the single state-funded social safety net for the poor and most vulnerable segments of Jordanian society.

177. As the food subsidy program was being phased out, the direct cash assistance administered by the NAF became increasingly more important. Thus, the number of beneficiaries of the NAF has increased from 8,000 households in 1987 to 66,000 households in 2002. At the same time, NAF cash assistance increased from JD 2 million in 1987 to JD 38 million in 2002. Furthermore, NAF assistance is estimated to have benefited about 7.4 percent of the population in 2002, up from 2.6 percent of the population in 1997. Preliminary data indicate that in 2003, the number of NAF beneficiaries was 67,000 and the total cash assistance was JD 47 million.

Figure VI.3. Jordan: NAF Transfers, 1987–2003



178. While NAF assistance covered a substantial share of the unemployable poor, the overall coverage of the fund remained incomplete. A technical assistance mission fielded by the Fund in November 1994 identified a number of deficiencies in the coverage of the NAF. In particular, the mission pointed out that the coverage could be extended to the working poor, especially when they head large families, and the long-term potentially employable unemployed. In addition, the NAF benefit did not sufficiently exceed the abject poverty line and the authorities were urged to consider generalizing the NAF cash transfers to all households below the abject poverty line to provide a safety net of last resort with complete coverage.

179. Despite the apparent weaknesses in coverage, the NAF was more successful in reaching the poor than the system of the generalized food subsidies. The World Bank's 1992 and 1997 household expenditure surveys indicate that the food subsidies were generally regressive since richer households tend to consume more per capita than poor households. In 1992, the peak year for generalized food subsidies, the annual value of the food subsidy for the average person in the richest decile was almost twice the value of the food subsidy in the poorest decile. On the other hand, in 1997 as cash transfers replaced generalized food subsidies, the average value of cash transfers for the poorest decile was 1.7 times higher than the average value of cash transfers for the richest decile. The shift from the regressive food subsidies to the more progressive cash transfers resulted in a more pro-poor stance of government programs in 1997 compared to 1992.

180. The substitution of generalized food subsidies for a system of means-tested cash transfers has significantly reduced poverty. The poverty statistics in 1997 indicate that the Jordanian government was successful in reducing poverty, while implementing an ambitious structural adjustment program, including the virtual elimination of generalized food subsidies. The percent of the population living below the poverty line declined from 14.4 percent in 1992 to 11.7 percent in 1997. During the same period, the poverty gap was reduced from 3.6 percent to 2.5 percent, despite the low economic growth rates. The World Bank estimates that if it were not for the successfully reformed government programs, particularly the targeted cash transfers of the NAF, the proportion of population below the poverty line would have stood at 14.6 percent in 1997, thus exceeding the incidence of poverty in 1992.

D. Social Security and Pension Systems

181. Over the past decade, Jordan made substantial inroads in developing a comprehensive state-operated social security system. With the establishment of the SSC in the early 1980s, the defined-benefit civil service and military pension schemes were supplemented by a contributory pension system for private sector workers. However, as the civil service and military pension systems placed an increasing burden on the budget, the government set the goal of developing a single, uniform, and equitable social security system that would provide a comprehensive old-age pension and disability coverage for all Jordanian workers. As the

first step, in 1995 the civil service pension system was supplanted by the private sector pension scheme administered by the SSC for all newly hired civil servants, with a view to phasing out the civil service pension system completely over the next 50 years. Next, in 2003 the government closed the military pension system to all new entrants, thereby completing the integration of the public and private sector pension systems. As a result of these reforms, Jordan is well on its way to enjoying a well-designed, equitable, and broad-based social security system that is self-funded and open to all Jordanian workers, both inside and outside of the public sector. The remainder of this section describes the wide-ranging reforms undertaken in recent years on all three fronts.

Social Security Corporation

182. The Social Security Corporation (SSC) was established under the Social Security Law of 1978. It began operations in 1981 by providing social insurance in the form of old-age pension, survivor pension, disability pension, and compensation for work-related accidents, and vocational diseases for nongovernmental workers. The establishment of the SSC brought nongovernmental employees under the social security net, previously only available to government workers through the civil service and military pension systems. The scheme is mandatory for companies with five employees or more and voluntary for others. About 16,200 companies are enrolled, totaling some 462,000 contributors. The number of beneficiaries is currently about 68,000. At present, the ratio of contributors to beneficiaries is 6.8 to 1.

183. The SSC runs a contributory, defined-benefit pension plan. The benefit formula for old-age pensions is based on the average salary over the last two years of activity, multiplied by 2 percent times the number of years of contributions. Once pensions are paid out, there is no subsequent cost of living adjustment. There is a minimum pension of JD 85 per month. Contributions are equivalent to 16.5 percent of gross wages, of which 11 percent is paid by the employer and 5.5 percent by the employee.

184. Financial operations of the SSC are audited by internal and external auditors every year, in addition to the audits performed by the Audit Bureau of the Government of Jordan. The external audit for the year ending December 31, 2002 was conducted by Deloitte & Touche. The audit report stated that net assets of the SSC at end-2002 stood at JD 1.7 billion (26 percent of GDP), of which 51 percent were held in bank deposits and 27 percent in equity holdings (Table VI.5).

Table VI.5. Jordan: Social Security Corporation Balance Sheet, 2002
(In millions of Jordanian dinars)

	2001	2002
Total assets	1,610.6	1,760.6
of which Deposits with banks and financial institutions	795.7	706.1
Investment in associated companies	36.4	40.0
Investment in land and other real estate after depreciation	44.5	46.1
Liabilities	57.6	38.4
Net Assets	1,572.2	1,703.0

Source: Deloitte & Touche, Consolidated Financial Statements and Auditor's Report, 2002

185. The Social Security Law stipulates that the financial position of the SSC has to be examined by actuarial studies at least once every five years. The most recent actuarial review, completed in 1997, projected that the cash flow of the SSC would fall below zero in 2028, and that assets would be exhausted in 2042. The SSC responded to some extent by increasing the rate of contributions from 15 percent to 16.5 percent in May 2001 and changing the rules for full pension and early retirement.[64] In addition, the SSC has separated its investment operations from other administrative operations by establishing an independent investment unit staffed with experienced professionals. Nevertheless, pension and disability benefits have increased significantly more than contributions, suggesting that the financial condition of the system has deteriorated. In light of these developments, the current actuarial review, expected to be finalized by end-March 2004 should be instrumental in not only assessing the SSC's finances, but also in engendering reforms to bring the system into balance in the long run.

The civil service pension system

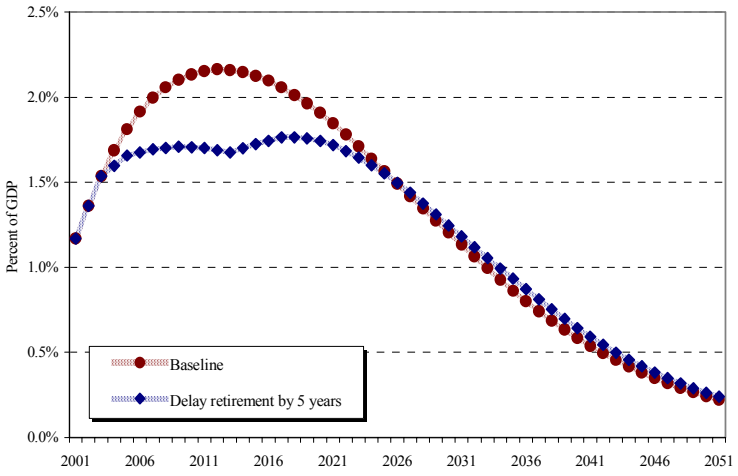
186. The civil service pension system caters to those civil servants who were hired prior to 1995 and a "special category" of civil servants who continue to enroll in the system under special provision. The special category includes primary legislators, high-level administrators, judges, and diplomats. As of 2001, roughly 69,000 civil servants, about five-sixths of those in previously eligible employment categories, were enrolled, earning JD 270 million (4.3 percent of GDP). The pension system had a total of 43,000 beneficiaries, of which 31,000 received old-age pensions, 1,000 drew disability benefits, and 12,000 received survivor benefits. Total benefit payments were JD 82 million (1.3 percent of GDP).

[64] The minimum number of years of employment necessary to qualify for full pension at the age of 60 has been raised from 10 to 15, and for early retirement at the age of 45 the minimum number of the years of service has been increased from 16 to 18.

187. The civil service pension system is a pay-as-you-go program. Contributions are collected at a rate of 8.75 percent of the basic salary for public employees. However, given that the basic salary is less than half of the total salary for civil servants, the effective rate of contributions is less than half this rate. No explicit employer contribution is levied. The pension is calculated as the sum of a basic salary and flat allowances. The basic pensions cannot exceed 125 percent of the final basic salary. The flat allowances include (i) JD 12.5 in personal allowance; (ii) JD 47.0 in cost of living allowance; (iii) JD 7.0 in allowance for married males; and (iv) JD 2.0 allowance per child (up to a maximum of JD 8.0). Eligibility for an old age pension is gained without an age limit: prior to September 2003, 20 years for men and 15 years for women was the minimum necessary employment period for classified employees.

188. Although the phasing-out of the system places a cap on the unfunded liability, in the absence of corrective measures, the system would have experienced a sharp increase in retirements over the next decade. As of 2001, essentially all participants were at least 30 years old with the average age of system participants currently over 41 years.

Figure VI.4. Delaying Retirement for Civil-Service Pensions, 2001–51



As this age distribution shifts to the right every year, the system would have experienced a bulge in retirements over the next decade, which could have exerted a substantial strain on the budget over the medium term (Figure VI.4).

189. In 2002, the authorities took measures to limit the impact on the budget of the sharp short-term increase in civil service retirees. The authorities increased the minimum years of service by five years to be phased in by half-year increments each year. It is estimated that a five-year increase in the average length of service would reduce the estimated present value of net liabilities by 5 percent of GDP. In addition, it would keep net benefits from rising above 1.8 percent of GDP and would mitigate the bulge in benefits that was expected over the next 20 years.

The military pension system

190. The military pension system has been in operation since 1959. Military personnel received total compensation (basic salary plus allowances) of JD 278 million (4.4 percent of

GDP). The pensions system had a total of 147,000 beneficiaries, of which 63,000 drew benefits based on lengths of service, 31,000 received disability benefits and 52,000 were survivors. Total benefits amounted to JD 209 million (3.3 percent of GDP). At 1 pensioner (not counting branch beneficiaries) per every 1.4 contributor (active-duty personnel) in 2001, the system already had a high ratio of beneficiaries to contributors.

191. The growing cost of military pension impeded a speedy introduction of expenditure policy reforms and fiscal consolidation. The number of beneficiaries has been growing much more rapidly than the number of contributors in recent years. As a result, a growing share of public spending had to be devoted to pensions, crowding out more productive expenditures, including not only social spending, but also outlays on active duty military personnel and other current military spending. Moreover, the large and rapidly increasing share of GDP devoted to pensions made it more difficult to reduce the budget deficit in a sustainable way.

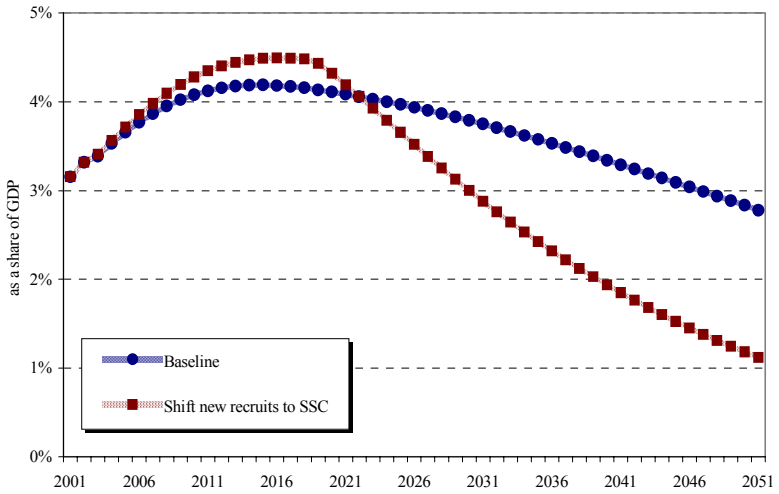
192. The military pensions system is a pay-as-you-go program with very generous defined benefits. Until recently, the system allowed participants to pay a relatively low contribution (8.75 percent of basic salary only) over a short career (as few as 16 years) and then enjoy generous benefits for the remainder of their lives and throughout the eligibility periods for their survivors. In addition, the length-of-service requirement was completely waived for service-related disabilities, a large minimum benefit applied, and beneficiaries received a supplemental benefit that made the system even more generous. The generous disability benefits combined with the recent sharp increase in the incidence of disability raised concerns about the system's efficiency and long-term solvency. Whereas in 2000 less than 30 percent of all pensioners received a disability pension, in 2001 over 90 percent of new pensioners qualified for a disability award, thus making this award a standard component of the pension package for almost all military retirees, rather than compensation for the severe cost of disability. These generous benefits were further exacerbated by the four-year-rule that allowed officers who have served more than four years at their current ranks to retire with an automatic increase in pension benefits based on the pay at the next higher rank, increasing the basic pension received by an officer by up to 41 percent.

193. As a result of the overly generous benefits, the system ran a deficit of 3.2 percent of GDP in 2001. The deficit has risen in recent years and was projected to rise steeply over the next several years because of (i) the phased effects of a substantial benefit increase awarded in 2001; (ii) the high rate of disability awards for new retirees; and (iii) an expected bulge of new retirees. Moreover, the system was inefficient as in present value terms retirement benefits were greater than active-duty compensation. The net present value of the military pension liability for the years from 2002 to 2051 is estimated to be JD 12.2 billion or 185 percent of GDP in 2002.

194. During 2002–03, the authorities implemented a number of important measures that should significantly reduce future military pension liabilities. In December 2002 the cabinet approved the enrollment of all new military personnel in the pension plan administered by the SSC, effective January 1, 2003. This measure was estimated to reduce the net present value

of the government cash flow for military pensions (benefits less contributions, plus SSC contributions) by 40 percent of GDP (Figure VI.5). The cabinet also passed the tightening of eligibility criteria for military disability pensions in June 2003, which was approved by parliament in February 2004. In addition, the four-year rule was eliminated in March 2004. These reforms are estimated to reduce the present value of liabilities by an additional 16 percent of GDP. Furthermore, the government increased the minimum service requirement by military personnel by four years to be phased in by half-year increments each year. Overall, this reform package should help reduce the net present value of the military pension liability by almost 60 percent of GDP to about 125 percent of 2002 GDP.

Figure VI.5. Projected Net Outlays for Military Pensions, 2001–51



E. Health and Education Expenditure

195. In addition to developing needs-based and means-tested social protection institutions and expanding the social security coverage, the Jordanian government allocated significant resources to public spending on health and education. International comparison suggests that Jordan spends a very respectable amount on health and education programs, compared to the size of its economy. These programs are targeted at improving the quality and standard of living for all Jordanians, with an emphasis on the residents of underdeveloped areas. By ensuring equal access to health and education services for all citizens, the programs play an important role in alleviating poverty and integrating the disadvantaged groups and the poor into the mainstream economy.

196. Improving the quality of basic government services, especially in social sectors, is one of the key goals of the government's Plan for Social and Economic Transformation (PSET). The PSET was adopted in November 2001 with a view to better addressing the pressing social needs and improving the standard of living for all Jordanians, providing them with better opportunities for finding new jobs and alleviating poverty, without compromising macroeconomic stability that Jordan had achieved with ten years of adjustments and reforms.

All PSET expenditure is funded exclusively by foreign grants and therefore is not debt-creating. The education component of PSET increased from JD 22.3 million in 2002 to JD 49.4 million in 2003 (0.7 percent of GDP).

197. Jordan's success in improving the quality of spending on health and education is reflected in the noticeable improvements in the social indicators. In recent years, Jordan managed to achieve sizable gains in the quality of education, while reducing its education expenditure, indicating an improvement in the effectiveness of public spending on education. While public health indicators appear very impressive, especially compared to other countries in the region, there may be potential savings in improving the quality of spending on health.

Education expenditure

198. At 5 percent of GDP, Jordan's spending on education exceeds industrial countries' average (4.7 percent of GDP). Although education expenditure in Jordan has declined by 2½ percent of GDP between 1990 and 2001, Jordan remains the third largest spender in the region, following Yemen and Saudi Arabia (Table VI.6). Regarding public expenditure on education by level, Jordan spends about equal amounts on primary, secondary, and tertiary education. When it comes to spending on primary education, Jordan compares favorably to industrial countries that spend about a third of their education budgets on primary education. At the same time, industrial countries spend over 45 percent of their education resources on secondary education, with only 20 percent of resources devoted to tertiary education. These data suggest that Jordan's allocative efficiency could be improved by shifting some resources from tertiary to secondary education.

199. While Jordan's spending on education has declined over the past decade, the effectiveness of this spending has increased as indicated by substantial improvements in the quality of education indicators. In particular, the adult literacy rate has gone up from 81.5 percent in 1990 to over 90 percent in 2001, while the youth literacy rate has increased from 96.7 to over 99 percent during the same period. Another important achievement in this area is a dramatic improvement in the net primary enrolment ratio that increased from 66 to 94 percent over the past decade (Table VI.6).

200. Jordan's ability to improve effectiveness of its public spending, while achieving substantial budgetary savings, can be favorably compared to other countries. For example, many countries in the region spend substantially more on education, but have lower literacy rates and enrolment ratios or show little improvement in these indicators over time. On the other hand, a number of middle income countries in East Asia that are comparable to Jordan, managed to maintain their youth literacy rates and net primary enrolment ratios in the upper 90^{th} percentiles, while spending slightly over 3 percent of GDP on education. This evidence suggests that effectiveness of public expenditure may be more important for achieving government's social objectives than the size of the spending.

Health expenditure

201. Jordan spends more on public health than any other country in the region. At 4.2 percent of GDP, Jordan's spending on health compares favorably not only to the regional average of 2.8 percent of GDP, but also to the industrial country average of 6.5 percent of GDP. Jordan's health expenditure increased from 3.6 percent of GDP in 1990 to 4.2 percent of GDP in 2001. In addition, Jordan appears to have achieved a commendable balance between public and private health expenditure, with private spending standing at slightly less than half of total expenditure on health (Table VI.7). The high level of private spending on health and the emphasis on primary health care services indicate that a sizable part of public health expenditure may be largely catering to the needs of the poor.

202. Jordan's commitment to providing quality health care as measured by various public health indicators remains strong. In 2001, close to a hundred percent of population had access to improved sanitation, 96 percent of population had sustainable access to an improved water source, and between 95 and 100 percent of population had sustainable access to affordable essential drugs. With 205 physicians per 100,000 people Jordan outstrips such well-endowed rich countries as Saudi Arabia (153) and Kuwait (160). In addition, Jordan's access to affordable drugs has reached the level of industrialized countries. These factors have positively influenced Jordan's life expectancy at birth which at 70.6 years is almost two years higher than the regional average of 68.7 years (Table VI.7). It is also noteworthy that at present, about 60 percent of the population are covered by the two publicly provided health care plans – the military (Royal Medical Services) and the civil service plans.

F. Conclusion

203. Over the past decade Jordan has made commendable progress in replacing an informal family-based social safety system with well-defined and well-targeted social protection institutions. By eliminating food subsidies and replacing them with a means-tested system of cash transfers administered by the NAF, Jordan achieved significant savings for the budget, while reaching the poor more effectively and making substantial inroads in reducing poverty levels. The reform of food subsidies was followed by the reform of fuel subsidies, with the net subsidy eliminated in 1992. The recent loss of the Iraqi oil grant underscored the importance of eliminating cross-subsidization in the oil sector in order to address the vulnerability of the budget to world oil price volatility. The Jordanian government responded by developing a strategy to phase out the remaining fuel subsidies by 2006. At the same time, Jordan had to address the rising liabilities of the pension system which placed an ever increasing burden on the budget. The recently completed pension reform is critical in this respect, although it may take several years before the pension savings begin to accrue.

204. Despite these achievements, the government continues to face important challenges in strengthening its social protection institutions. In particular, in order to protect the budget

Table VI.6. International Comparison of Public Expenditure on Education

	Adult Literacy Rate (% age 15 and above)		Youth Literacy Rate (% age 15-24)		Net Primary Enrolment Ratio (In percent)		Net Secondary Enrolment Ratio (In percent)		Children Reaching Grade 5 (In percent)	Teritary Students in Science, Math and Engineering (% tertiary students)
	1990	2001	1990	2001	1990-91	2000-01 1/	1990-91	2000-01 1/	1999-2000	1994-97 1/
Jordan	81.5	90.3	96.7	99.3	66.0	94.0	...	76.0	98.0	27.0
United Arab Emirates	71.0	76.7	84.7	91.0	94.0	87.0	59.0	67.0	98.0	27.0
Saudi Arabia	66.2	77.1	85.4	93.1	59.0	58.0	31.0	51.0	94.0	18.0
Lebanon	80.3	86.5	92.1	95.4	...	74.0	...	70.0	97.0	17.0
Turkey	77.9	85.5	92.7	96.7	89.0	...	41.0	...	...	22.0
Iran, I.R. of	63.2	77.1	86.3	94.2	...	74.0	...	...	...	36.0
Egypt	47.1	56.1	61.3	70.5	...	93.0	...	79.0	...	15.0
Pakistan	35.4	44.0	47.4	57.8	...	66.0	...	...	...	...
Yemen	32.7	47.7	50.0	66.5	...	67.0	...	37.0	...	6.0
Industrial countries 2/	97.7	98.5	99.8	99.8	95.8	97.3	87.8	93.1	...	27.2
Canada	...	...	...	...	97.0	99.0	89.0	98.0	...	...
France	...	...	...	...	101.0	100.0	...	92.0	...	25.0
Germany	...	...	...	...	84.0	87.0	...	88.0	...	31.0
Italy	97.7	98.5	99.8	99.8	...	100.0	...	91.0	...	28.0
Japan	...	...	...	...	100.0	101.0	97.0	101.0	...	23.0
United Kingdom	...	...	...	...	97.0	99.0	79.0	94.0	...	29.0
United States	...	...	...	...	96.0	95.0	86.0	88.0	...	...

Sources+A2: UNDP, Human Development Indicators.

1/ Data refer to the most recent year available during the period specified.

2/ Simple average.

Table VI.7. International Comparison of Health Expenditure and Performance, 2001

	Life expectancy at birth	One-year-olds fully immunized against measles	Births attended by skilled health personnel 1/	Physicians per 100000 people 1/	Population with sustainable access to affordable essential drugs 2/	Health expenditure 3/		
						Public	Private	Per Capita
	(years)	(in percent)	(in percent)		(in percent)	(% GDP)	(% GDP)	(PPP $US)
Jordan	70.6	99.0	97.0	205.0	95-100	4.3	3.8	341
United Arab Emirates	74.4	94.0	99.0	177.0	95-100	2.5	0.7	762
Saudi Arabia	71.9	94.0	91.0	153.0	95-100	3.5	1.0	641
Lebanon	73.3	94.0	88.0	274.0	80-94	3.7	8.5	719
Turkey	70.1	90.0	81.0	127.0	95-100	3.6	1.4	315
Iran, I.R. of	69.8	96.0	...	110.0	80-94	2.7	3.3	356
Egypt	68.3	97.0	61.0	218.0	80-94	1.8	2.3	143
Pakistan	60.4	54.0	20.0	68.0	50-79	0.9	3.2	76
Yemen	59.4	79.0	22.0	22.0	50-79	1.5	3.4	69
Industrial countries 4/	78.7	87.3	99.0	292.4	95-100	6.5	2.9	2,574
Canada	79.2	96.0	98.0	186.0	95-100	6.5	2.5	2,534
France	78.7	84.0	...	303.0	95-100	7.2	2.3	2,380
Germany	78.0	89.0	...	354.0	95-100	8.0	2.6	2,767
Italy	78.6	70.0	...	567.0	95-100	5.9	2.1	2,028
Japan	81.3	96.0	100.0	197.0	95-100	5.9	1.8	2,009
United Kingdom	77.9	85.0	99.0	164.0	95-100	5.9	1.4	1,804
United States	76.9	91.0	99.0	276.0	95-100	5.8	7.3	4,499

Sources: UNDP, Human Development Indicators.

1/ Data refer to the most recent year available during the period 1995-2001.

2/ 1999.

3/ 2000.

4/ Simple average.

from the mounting pressures of petroleum product subsidies, the government will need to remain committed to the ongoing petroleum sector reform. Furthermore, consideration should be given to improving the coverage of the NAF by extending it to the working poor. It is also important to conduct regular actuarial reviews of the SSC to ensure long-term financial viability of the social security system. Finally, there is scope for improving efficiency of public spending on health.

205. The government will need to remain committed to periodic increases of fuel prices to close the gap between domestic and international petroleum product prices. Once this gap is closed, it will be paramount to introduce an automatic price adjustment mechanism to link the local and the international fuel prices. The authorities should also consider a replacement of oil surplus with a transparent system of the GST and excises on petroleum products. The government's long-term goal should be full liberalization of the oil sector, once the exclusive concession rights of the Jordanian Petroleum Refinery Company expire in 2008.

206. The authorities should strive to further strengthen the social safety net system. The coverage of the NAF could be improved along the lines of IMF TA recommendations. Furthermore, the problem of unemployment should not be addressed by expanding the military or civil service. Instead, by curbing military and civil service employment and using the ensuing savings to provide adequate infrastructure to the disadvantaged areas and to offer professional training programs, these disadvantaged groups could be gradually integrated into the economic mainstream. At the same time, the NAF will continue covering the unemployable poor.

207. The pension reform is expected to have a beneficial impact over the medium term. The reform is an important step toward long-term fiscal sustainability. However, to safeguard the savings brought on by the reform and to ensure that the reversal of these gains does not take place, the authorities should be mindful of conducting regular actuarial reviews of the SSC and periodically revising pension benefits and contributions to ensure long-term financial viability of the social security system.

208. There is scope for improving the efficiency of public spending on health. In this regard, the focus should be on providing basic health care in an equitable manner to all Jordanians, while encouraging greater cooperation with private health care facilities. At the same time, the promotion of the private health sector in general, and medical tourism in particular, should not be at the expense of providing basic public health services to the poor, including in the remote rural areas. Sixty percent of the Jordanian population is already covered under public health insurance plans. Moving steadily toward more broad or universal coverage still remains a formidable challenge. An improvement in the costing of health care services will be key in establishing a viable and equitable health insurance system covering a broader segment of the population in Jordan.

References

Ahmad, E. and Richard Hemming, "Poverty and Social Security," *Public Expenditure Handbook*, ed. Ke-young Chu and Richard Hemming, IMF, pp. 130–136.

Enders, Klaus, Sherwyn Williams, Nada Choueiri, Yuri Sobolev, and Jan Walliser, 2002, "Yemen in the 1990s: From Unification to Economic Reform," IMF Occasional Paper 208.

Gillingham, Robert and Christopher Bender, 2002, "Jordan: Reforming the Military and Civil Service Pension Systems," IMF, Technical Assistance Report.

Gupta, Sanjeev, and others, 2000, *Equity and Efficiency in the Reform of Price Subsidies: A Guide for Policymakers* (Washington, IMF).

Heller, Peter S., Juan Amieva-Huerta, Benedict Clements, and Platon Tinios, 1996, "Jordan: Pension Reform Issues," IMF, Technical Assistance Report.

Ke-young Chu, Benedict Clements, Etienne de Callatay, and Sarosh Sattar, 1994, "Jordan: Social Safety Net Options and Budgetary Implications," IMF, Technical Assistance Report.

Mackenzie, G.A., 1991, "Price Subsidies," *Public Expenditure Handbook*, ed. Ke-young Chu and Richard Hemming, IMF, pp. 60–67.

Shaban, Radwan A., Dina Abu-Ghaida, and Abdel-Salam Al-Naimat, 2001, "Poverty Alleviation in Jordan: Lessons for the Future," *Orientation in Development Series*, World Bank, Middle East and North Africa Region.

Sunley, E., R. Rolando Ossowski, Walter Mahler, and Sanjeev Gupta, 2000, "Adjustment of Petroleum Product Prices," FAD Guidance Note.

Sunley, E., Anthony Annett, and Oystein Noreng, 2000, "Jordan: Petroleum Product Pricing," FAD TA Report.

Van Beers, Cees and Andre De Moor, 2001, *Public Subsidies and Policy Failures*.

VII. Crisis-Proofing and Sovereign Creditworthiness[65]

A. Introduction

209. Jordan's progress in macroeconomic performance and debt reduction has been mirrored in its credit ratings. As a result of sustained fiscal consolidation and prudent external debt management, the net debt burden of the central government fell from 198 percent of GDP in 1990 to 101 percent in 2002.[66] In late 1995, two years after Jordan had restructured some $750 million of sovereign crossborder bank loans, Standard & Poor's (S&P) assigned to Jordan an initial long-term foreign currency sovereign credit rating of 'B+' and Moody's Investors Service (Moody's) assigned an initial foreign currency ceiling for bonds and notes of 'Ba3', with both ratings anchored within the "speculative grade" (Table VII.1). In mid-2003, as Jordan was repurchasing its Brady bonds and prepaying selected, high-cost bilateral loans, the same agencies upgraded those ratings to 'BB' and 'Ba2', respectively, with both ratings climbing to within two notches of the "investment grade."

Table VII.1
Ratings Scales

S&P	Moody's
Investment Grade	
AAA	Aaa
AA+	Aa1
AA	Aa2
AA-	Aa3
A+	A1
A	A2
A-	A3
BBB+	Baa1
BBB	Baa2
BBB-	Baa3
Speculative Grade	
BB+	Ba1
BB	Ba2
BB-	Ba3
B+	B1
B	B2
B-	B3
CCC+	Caa1
CCC	Caa2
CCC-	Caa3
CC	--
C	--
SD	Ca
D	C

-- = Not applicable.

210. As Jordan graduates from Fund-supported programs, attention will turn to an eventual diversification of sources of financing. Although Jordan's reliance on official financing—and bilateral grants in particular—will persist well beyond the completion of the current Fund program in mid-2004, such flows may be expected to diminish over time. As the transition takes place, Jordan will need to develop an assured capacity to access international capital markets, and private bondholders in particular, regardless of whether or not it chooses to exercise that capacity. In the absence of the signaling role of Fund-supported programs, crossborder investors will require other means of assessing the appropriateness of Jordan's policy responses to new challenges. In such an "emerging market" environment, risk benchmarks such as sovereign credit ratings and yield spreads on foreign currency-denominated, traded debt will increase in importance.

211. This chapter surveys Jordan's progress and prospects from a sovereign creditworthiness perspective based on methodologies used by the rating agencies. It begins by providing an overview of the sovereign ratings methodologies of the major international rating agencies (Section B). It then proceeds to apply elements of those methodologies to

[65] Prepared by Ashok Vir Bhatia.

[66] Gross debt of the consolidated central government (i.e., the budgetary central government and the own-budget agencies) including IMF obligations, less the market value of Brady bond collateral, less deposits of the consolidated central government held with the domestic banking system.

Jordan, first by reviewing progress to date compared with other, similarly-rated countries (Section C), then by discussing issues related to private sector balance sheets (Section D), and finally by attempting to outline a roadmap to the achievement of investment grade status within a few years (Section E). The chapter concludes that Jordan's macroeconomic framework and debt management strategy are consistent with further ratings upgrades and a steady progression toward market financing (Section F).

B. Sovereign Ratings Methodology

212. The sovereign ratings methodologies of the major international credit rating agencies focus on political stability, fiscal solvency, and international liquidity.[67] One key difference between the approaches to sovereign and sub-sovereign ratings formulation is the former's focus not merely on the obligor's ability to honor debt to private creditors in full and on time, but also on its willingness to do so. In this, the agencies are guided by assessments of political conditions as well as economic factors. In their assessments of economic factors, the agencies analyze fiscal solvency, or the medium-term financial sustainability of government operations, taking into account financial fragility in the nongovernment sector and the likelihood and size of potential bank crises; and international liquidity, or the capacity of the central bank to cope with panic-induced abrupt increases in dollarization and runs on the external capital account, should they occur.

213. The ratings exercise is, at its core, a debt sustainability analysis (DSA). Projections for government revenues and primary expenditures come together to form the primary balance, to which are added projections for interest payments. The resulting overall fiscal balance represents the net financing requirement, to which is added amortization falling due, yielding the gross financing requirement. Sources of financing are then projected line-by-line, as applicable: divestment proceeds; domestic bank and nonbank borrowing; rollovers of short-term external debt; disbursements of multilateral, bilateral, and crossborder bank loans; and international bond issues. To the extent that a financing gap emerges, it is compared with official international reserves levels and debt-service commitments to the various classes of creditors, before conclusions are drawn on the likelihood, sequencing, and scope of default.

214. Rating agency DSAs emphasize stress testing under "reasonable worst-case" scenarios. In so doing, they recognize that both financing flows to the sovereign and gross financing requirements of the sovereign can encounter discontinuities in situations of acute stress. In terms of sources of financing, rollover rates on short-term debt may drop, put options in medium- or long-term debt may be exercised, and the sovereign may find itself cut off from private-creditor financing in the international primary markets. In terms of financing requirements, defaults by subsovereign issuers may trigger the calling of sovereign

[67] For a detailed discussion, see Ashok Vir Bhatia, "Sovereign Credit Ratings Methodology: An Evaluation," IMF Working Paper 02/170 (Washington: International Monetary Fund, 2002). Available via the Internet at: http://www.imf.org/external/pubs/ft/wp/2002/wp02170.pdf

guarantees, and financial system distress may necessitate government support for bank recapitalization. In addition to the collection of detailed information on debt structure, the ratings exercise places considerable weight on financial system issues.

215. In the case of at least one major rating agency, S&P, the ratings exercise is guided by a checklist of economic variables.[68] These variables are used, principally, to make cross-country comparisons, and may be divided into two broad categories: "intermediate variables" that measure the performance of the economy as a whole, and therefore its capacity to support government finances; and "operational variables" that measure the financial health of the government from flow and balance sheet perspectives, with emphasis on the estimation of contingent liabilities that could crystallize on to the sovereign balance sheet during a crisis. Estimates for contingent liabilities, in turn, include sub-estimates for the indebtedness of public enterprises to nonbank and external creditors, and for the potential upfront fiscal cost of banking sector distress in reasonable worst-case scenarios, based on an analytical process similar to that used in the Financial Sector Assessment Program (FSAP).

216. S&P's checklist includes six intermediate variables and five operational variables. The intermediate variables are: nominal GDP per capita (in dollars); the rate of growth of real GDP per capita (in local currency); the inflation rate; the gross external financing requirement (current account deficit plus amortization due plus rollover of short-term liabilities) as a proportion of official gross usable international reserves; financial system net external debt as a proportion of current account receipts; and nonfinancial private sector net external debt as a proportion of current account receipts. The operational variables are: the general government fiscal balance as a proportion of GDP; general government net debt (including guarantees) as a proportion of GDP; general government gross interest payments as a proportion of general government revenue; estimated off-budget and contingent liabilities as a proportion of GDP; and public sector net external debt as a proportion of current account receipts.[69]

C. Jordan's Ratings Scoresheet

217. A ratings-oriented assessment of Jordan could usefully take S&P's checklist as a starting point. At 'BB', S&P's long-term foreign currency sovereign credit rating on Jordan lies at the median of the coarse 'BB' ratings category (consisting of the fine ratings of 'BB-', 'BB', and 'BB+') and two notches below 'BBB-', the lowest rung of the investment grade.

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[68] For variable definitions, see David T. Beers, Marie Cavanaugh, and Takahira Ogawa, "Sovereign Credit Ratings: A Primer," *Standard & Poor's RatingsDirect* (April 3, 2002). Available via the Internet at: http://www2.standardandpoors.com/spf/pdf/fixedincome/sovereign.pdf

[69] S&P consolidates central bank net foreign assets and domestic debt securities into what it refers to as the "general government" balance sheet, and central bank interest payments into what it refers to as the "general government" budget.

Beers, Cavanaugh, and Ogawa (2002) graphically present the (simple) averages for 2002 of seven of the 11 variables in S&P's checklist, aggregated by ratings category, based on ratings as of end-March 2002 and S&P's own macroeconomic projections for the year as a whole. Although a static exercise by nature, a variable-by-variable comparison between Jordan and the group averages for countries in the 'BB' and 'BBB' categories provides a preliminary sense of the extent to which Jordan over- or underperforms its ratings peers, as well as some indication of the sectors in which it leads or lags (Figure VII.1).

218. A broadly favorable picture emerges from the data comparisons. Jordan outperforms the 'BB' category averages in five out of the seven variables studied, and in two, inflation and public sector net external debt, outperforms the 'BBB' investment grade category average as well. We develop a simple measure of the extent of Jordan's over- or under-performance for each variable, using the two-step process described below.

Step 1. We assume that the seven variables, p_n , progress linearly from their average values in the 'BB' category, $p_{n,BB}$, to their average values in the 'BBB' category, $p_{n,BBB}$. At the same time, we normalize the ratings, r, such that $r_{BB} = 0$, $r_{BBB} = 1$, and $r = 0.5$ represents the cutoff point between the speculative grade and the investment grade. Then, for each variable:

$$p_N = \left(p_{N,BBB} - p_{N,BB}\right) \cdot r_N + p_{N,BB} \qquad \textit{(Equation 1)}$$

$$\Rightarrow\ r_N = \frac{p_N - p_{N,BB}}{p_{N,BBB} - p_{N,BB}} \qquad \textit{(Equation 2)}$$

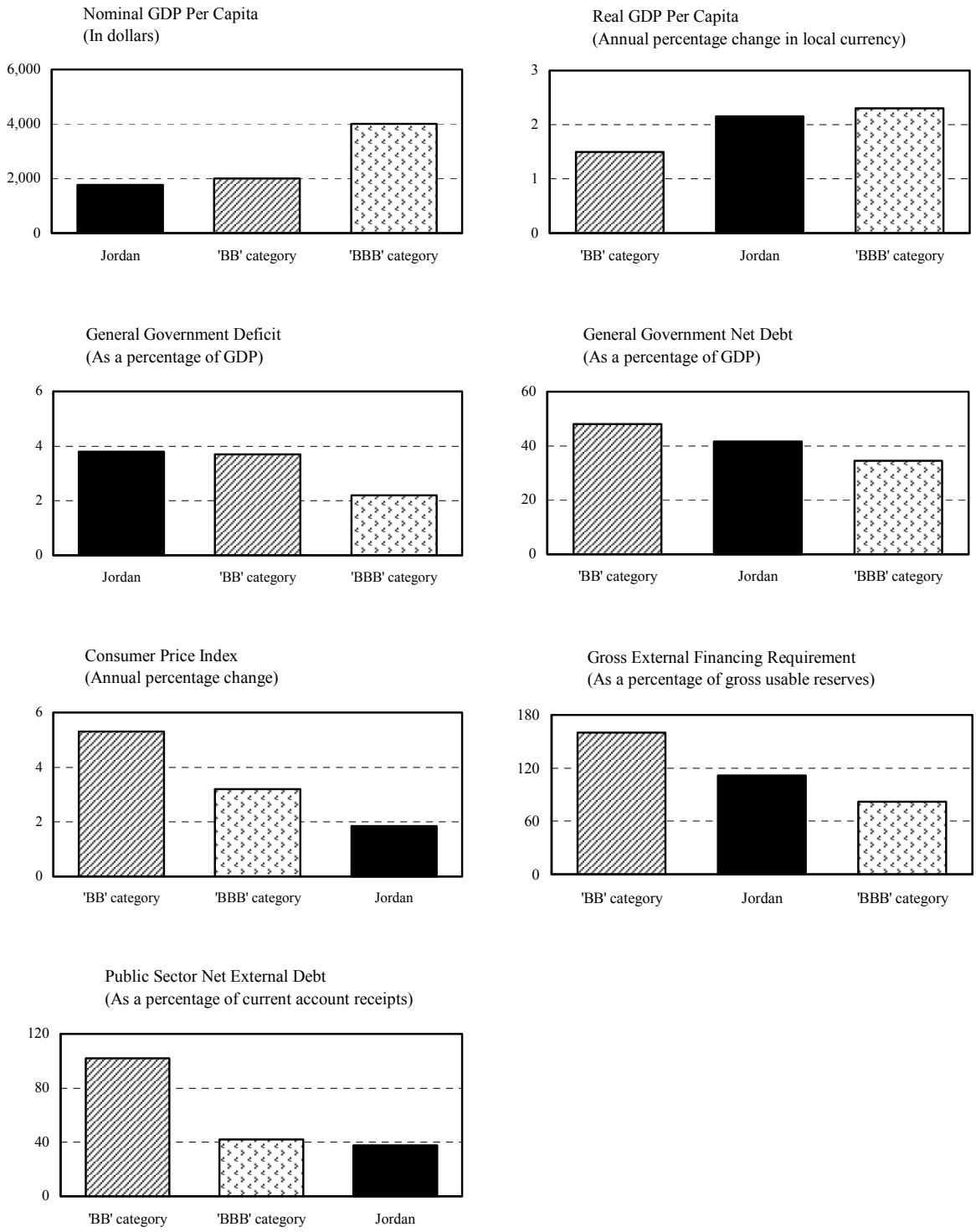
$$\Rightarrow\ r_{N,Jordan} = \frac{p_{N,Jordan} - p_{N,BB}}{p_{N,BBB} - p_{N,BB}} \qquad \textit{(Equation 3)}$$

Step 2. We assume that the overall "effective rating" for Jordan, R_{Jordan} , can be derived as a simple, unweighted average of the individual "effective ratings" for Jordan, $r_{n,Jordan}$, implied by performance relative to each of the seven variables. Then:

$$R_{Jordan} = \frac{1}{7} \cdot \sum_{n=1}^{7} r_{n,Jordan} \qquad \textit{(Equation 4)}$$

$$\Rightarrow\ R_{Jordan} = \frac{1}{7} \cdot \sum_{n=1}^{7} \left(\frac{p_{n,Jordan} - p_{n,BB}}{p_{n,BBB} - p_{n,BB}} \right) \qquad \textit{(Equation 5)}$$

Figure VII.1. Jordan: Key Ratings Variables, 2002



Sources: Beers, Cavanaugh, and Ogawa (2002); Jordanian authorities; and Fund staff estimates.

Solving *Equation 3*, we confirm that Jordan overperforms significantly, relative to the 'BB' averages, in the inflation, public sector net external debt, growth, international liquidity, and general government net debt categories, and underperforms marginally in only two categories, those for the income level and the general government deficit (Table VII.2). Solving *Equation 5*, we obtain $R_{Jordan} = 0.64$, which would suggest that, overall, S&P's long-term foreign currency sovereign rating on Jordan should be situated at around the two-thirds mark between the 'BB' and 'BBB' ratings categories. On S&P's fine ratings scale, this is consistent with an upgrade from 'BB' to 'BBB-', the lowest rung of the investment grade.

Table VII.2. Jordan: Effective Ratings by Sector, 2002

Variable number (n)	Variable (p)	Effective rating (r)
1	Nominal GDP Per Capita	-0.12
2	Real GDP Per Capita	0.81
3	General government deficit	-0.07
4	General government net debt	0.48
5	Consumer Price Index	1.65
6	Gross External Financing Requirement	0.62
7	Public Sector Net External Debt	1.07
	Overall effective rating (R)	0.64

Source: Fund staff estimates.

219. The comparative exercise, although instructive, has limitations. First, as a snapshot in time (in this case for 2002), it fails to account for the volatility of or trend changes in the variables under consideration. Second, by assuming that the seven variables enjoy equal weight as determinants of the sovereign rating, it fails to account for endogeneity amongst the variables and oversimplifies the manner in which the major rating agencies arrive at their ratings decisions. Third, by surveying only seven of the 11 variables on S&P's checklist (because of data constraints), it fails to account for private sector financial fragility and the potential ramifications for government finances. Despite these shortcomings, some conclusions can be drawn.

- **Real sector**: Jordan compares unfavorably in terms of income levels, but scores well for growth. At $1,761 in 2002, nominal GDP per capita remained marginally below the average for countries with S&P long-term foreign currency sovereign ratings in the 'BB' category, and at less than half of the average for the 'BBB' category. At 2.2 percent in 2002, real GDP growth per capita exceeded by some 0.7 percentage points the average for countries in the 'BB' category, and almost equaled the average for the 'BBB' category. The strong growth performance reflects, in large measure, robust export performance after more than a decade of sustained structural reforms.

- **Fiscal sector**: Jordan's fiscal deficit continues to be large, but the government balance sheet is sound (Box VII.1 and Table VII.3). At 3.8 percent of GDP in 2002, the general government deficit marginally exceeded the 'BB' category average, and exceeded by some 1.6 percentage points the 'BBB' category average. At 42 percent of GDP in 2002, the general government net debt burden including Central Bank of Jordan (CBJ) reserves and certificates of deposit (CDs) was some 6 percentage points below the 'BB' average, and exceeded by some 7 percentage points the 'BBB' average. Although the debt burden stands at a fraction of its level in the early 1990s,

the comparative analysis points to a continued central role for fiscal adjustment in sustaining Jordan's ascent toward the investment grade.

Box VII.1. Jordan: Public Sector Balance Sheet

The rating agencies focus on government finances at a consolidated level. S&P bases its fiscal assessments on general government data and, for external leverage, on public sector data. Its definition of general government differs from that used by the Fund in that it includes social security-related assets as well as elements of the central bank profit-and-loss statement and balance sheet. In the case of Jordan, the Social Security Corporation (SSC) is in a large net domestic asset position (and will continue to generate annual cash surpluses over the longer term), while the CBJ is in a large net foreign asset position. The consolidation of both entities into the general government balance sheet significantly reduces net domestic and external indebtedness, respectively.

Table VII.3. Jordan: Public Sector Net Debt, S&P Definition, 1996–2003
(As a percentage of GDP at market prices)

	1996	1997	1998	1999	2000	2001	2002	2003
I. Central government 1/	109.7	101.3	110.3	111.3	100.5	96.8	100.5	101.1
External (incl. IMF) 2/	103.3	96.2	95.1	95.5	84.2	78.7	80.4	76.8
Domestic	6.3	5.1	15.2	15.7	16.3	18.1	20.1	24.3
II. CBJ	-32.3	-28.6	-23.2	-30.4	-28.7	-27.0	-28.9	-32.4
External (excl. IMF)	-44.9	-49.2	-40.5	-47.3	-52.5	-46.5	-53.6	-63.4
Domestic 3/	12.6	20.5	17.3	16.8	23.7	19.5	24.7	31.0
III. Central government and CBJ (= I + II)	70.3	65.7	78.5	72.1	65.8	63.9	67.4	61.7
External	58.5	47.0	54.5	48.3	31.8	32.2	26.8	13.4
Domestic	11.8	18.7	24.0	23.9	34.0	31.7	40.6	48.2
IV. Municipalities and local governments	-0.4	-0.3	-0.2	-0.2	-0.2	-0.1	-0.2	-0.3
V. SSC	-18.0	-19.9	-20.2	-22.3	-23.6	-24.9	-25.6	-26.3
VI. General government (= III + IV + V)	51.9	45.5	58.0	49.6	42.0	38.9	41.6	35.1
External	58.5	47.0	54.5	48.3	31.8	32.2	26.8	13.4
Domestic	-6.6	-1.6	3.5	1.3	10.3	6.7	14.7	21.6
VII. Nonfinancial public sector enterprises	7.1	8.2	3.4	3.0	2.1	1.8	0.1	-1.9
External	0.7	2.1	1.9	1.8	1.8	1.7	0.5	0.5
Domestic	6.3	6.2	1.5	1.2	0.3	0.1	-0.4	-2.4
VIII. Public sector (= VI + VII)	59.0	54.0	61.9	53.0	44.5	41.0	42.0	34.1
External	59.2	49.1	56.4	50.1	33.5	33.9	27.3	13.9
Domestic	-0.2	4.9	5.5	2.9	10.9	7.0	14.7	20.2
Memorandum items:								
Central government balance (percent of GDP)	-2.8	-2.5	-6.0	-3.5	-4.7	-3.7	-5.0	-1.0
General government balance (percent of GDP)	-3.0	-0.7	-5.1	-1.1	-2.4	-1.3	-3.7	1.4
Public sector net external debt (percent of current account receipts)	75.1	64.4	82.1	71.3	45.6	48.0	37.6	17.5

Sources: Jordanian authorities; and Fund staff estimates.

1/ Consolidated central bovernment (i.e., budgetary central government plus own-budget agencies), including all explicit guarantees (most of which are on nonfinancial public sector enterprise external debt).
2/ Net of market value of Brady bond collateral.
3/ CDs only.

- **Prices, the exchange rate, and international liquidity**: Jordan's fixed-peg exchange rate regime has fostered long-term price stability, and is now backed by abundant official reserve holdings. At 1.8 percent in 2002, the consumer price inflation rate was about one-third of the 'BB' average, and about one-half of the 'BBB' average. At 112 percent of gross usable international reserves in 2002, the gross external

financing requirement was some 48 percentage points lower than the 'BB' average, and some 30 percentage points higher than the 'BBB' average. The strong liquidity position reflects not only official grant inflows, which have been large, but also robust export performance and adequate external competitiveness.

- **External sector**: The foreign currency-denominated portion of Jordan's public debt is no longer a constraint on its rating. At 38 percent of current account receipts in 2002, the consolidated public sector net external debt burden including CBJ reserves was some 64 percentage points below the 'BB' average, and marginally below the 'BBB' average. Again, the improved external debt position reflects not merely successful debt reduction efforts and reserves accumulation, but also robust export growth.

220. The Fund's most recent DSA for Jordan corroborates the generally positive view on Jordan's creditworthiness. Jordan's macroeconomic framework for 2004–08, which provides a basis for policy planning, projects a secular reduction in fiscal deficits and public debt after allowing for a substantial decline in official grant inflows. The DSA, which focuses on central government finances (excluding the CBJ), finds the declining debt trajectory to be resilient to several plausible macroeconomic shocks, with the notable exception of a permanent exchange rate shock. Given the still-large foreign currency component in the (gross) public debt, the DSA suggests that a devaluation of the Jordanian dinar (JD) by 30 percent would increase central government debt by some 24 percent of GDP (although this would be largely offset by valuation gains on CBJ reserves). The DSA does not attempt to quantify the effects of exchange rate or interest rate shocks on corporate and bank balance sheets, although such effects, if on systemic proportions, can trigger government-led bailouts and "second round" increases in public debt.

221. The DSA approach factors in key interrelationships between macroeconomic variables. Nominal growth projections are fed into revenue elasticity assumptions to yield projections for revenue collections. Interest rate and exchange rate assumptions are fed into the floating rate and foreign currency-denominated components of the debt stock, respectively, to yield projections for interest payments which, in turn, affect gross borrowing requirements. Following standard practice, the calculations are performed on an accruals basis, before taking into account special factors such as debt reschedulings and debt-equity swaps, both of which are provided for under Jordan's July 2002 Paris Club agreement, with a consolidation period to end-2007.[70] Given the prevalence of below-the-line debt operations, standard debt sustainability indicators such as the debt service ratio, the interest-to-revenue ratio, and the effective interest rate yield lower values for Jordan if computed on a cash basis.

[70] Jordan's July 2002 Paris Club agreement is exceptionally generous in that its consolidation period extends 3½ years beyond the current Fund-supported program. Details available via the Internet at: *http://www.clubdeparis.org/en/countries/countries.php?CONTINENT_ID=orient_afric_en&PAY_ISO_ID=JO*

D. Private Sector Balance Sheets

222. Neither the cross-country comparison above nor the DSA takes into account private sector finances. With the analysis thus far pointing to an investment grade rating for Jordan, the fact that the sovereign ratings from S&P and Moody's remain in the speculative grade may be attributed to other factors. One such factor may be a qualitative assessment of political stability, which is discussed later in this chapter. Other possible factors include private sector external leverage and some measure of contingent liabilities. The former is not a concern. Jordan's banking sector is in a large net external creditor position, equivalent to 22 percent of GDP at end-2002, with foreign assets entirely in the form of liquid interbank deposits. Jordan's nonfinancial private sector does not report complete external balance sheet information, but is almost certainly also in a large net foreign asset position.[71] By a process of elimination, therefore, it becomes likely that the last factor, the rating agencies' internal estimates for contingent liabilities, may be a constraint on Jordan's credit standing.

223. Jordan's nonfinancial private sector is large but moderately leveraged. Reflecting regulatory constraints on direct external borrowing by nonfinancial firms and the embryonic state of the domestic nongovernment bond market, corporate sector investment (and working capital) is funded almost entirely from bank credit and retained earnings. Domestic nongovernment bank credit stood at the equivalent of 77 percent of GDP at end-2002, the fourth highest among the 27 countries with S&P sovereign ratings in the 'BB' or 'BBB' categories as of end-2003. At the same time, however, the average ratio of bank loans, corporate bonds, and trade credit to equity (known as "Leverage 2") of all listed nonfinancial firms in Jordan stood at only 0.43, compared with 0.61 for Mexico, 0.88 for the Philippines, and 1.53 for Thailand (the ratio for Poland, at 0.39, was lower).[72] The fact that firms' leverage ratios are low despite the relatively large pool of intermediated funds points to an abundant (if concentrated) stock of private sector wealth. Market capitalization on the Amman Stock Exchange stood at almost 117 percent of GDP at end-2003.

224. Despite the risk-mitigating properties of equity finance, corporate sector balance sheets show some signs of fragility. Although the reliance on internally generated funds provides nonfinancial firms with some insulation from potential stresses in the banking sector, the opposite does not hold, in that several banks may be vulnerable to corporate sector fragility through their credit risk exposures. Banking sector data point to fairly high gross and net NPL ratios, and data for listed nonfinancial companies point to a significant number of firms with low ratios of earnings before interest, dividends, tax, and amortization (EBIDTA)

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[71] Jordanian nonbank claims on BIS reporting banks exceeded corresponding liabilities by the equivalent of 22 percent of GDP at end-2002. See Table 6B of Statistical Annex to Bank for International Settlements, *Quarterly Review: International Banking and Financial Market Developments* (September 8, 2003). Available via the Internet at: http://www.bis.org/publ/qtrpdf/r_qa0309.pdf

[72] Listed nonfinancial firms account for about a quarter of total domestic bank lending to the corporate sector.

to interest (referred to as the "interest coverage ratio").[73] Regulatory barriers to foreign currency-denominated domestic bank lending to the corporate sector, and the sector's large aggregate net foreign asset position, protect most Jordanian firms from exchange rate risk. With the bulk of bank loans to the corporate sector carrying maturities of less than two years and floating interest rates, however, short repricing cycles leave many Jordanian firms unhedged against interest rate risk.

225. Corporate sector fragility is typically transmitted to the public sector balance sheet via the banking sector. If a combination of weak lending practices and macroeconomic shocks results in the undercapitalization of one or more commercial banks that also play a key role in payment and settlement systems, for instance, then a government may be forced to intervene, including with liquidity support and recapitalization funds, in order to preserve systemic stability (Box VII.2). With assets equivalent to about 220 percent of GDP at end-2002, Jordan's banking sector is large compared with those of countries with similar sovereign ratings, and some two-thirds of system assets are held by the five largest banks. The large size and high degree of concentration imply that systemic problems, should they occur, could have significant fiscal implications, underscoring the need for supervisory vigilance and prompt corrective action when problems surface.

226. Although Jordan's banking sector is well capitalized and liquid in the aggregate, there are pockets of weakness. Recent assessments of Jordan's observance of various financial standards and codes conducted as part of the FSAP found prudential and supervisory standards to be generally in line with international best practice. With only about 15 percent of foreign currency deposits financing foreign currency lending, with only about 45 percent of JD deposits financing JD lending (most of it at floating rates), and with most banks adequately capitalized to manage their equity holdings (amounting to 35 percent of capital on average), market risk remains less of a concern than credit risk. The average ratio of regulatory capital to risk-weighted assets stood at 19 percent at end-2002, well above the CBJ-mandated minimum of 12 percent, and average pretax returns on assets and equity stood at 0.6 percent and 8.9 percent, respectively. The sector averages masked significant variation among banks, however, including pockets of insolvency.

[73] To some extent the high gross NPL ratios reflect a general aversion to write-offs (and to the forfeiture of claims) that is common in the Middle East and North Africa region.

Box VII.2. Ratings-Related Financial System Assessments

The rating agencies spend considerable time and effort investigating potential financial system weakness or instability. Although their approach relies heavily on the specialist knowledge of their financial institutions ratings practices (who, in turn, liaise with the corporate ratings groups), sovereign ratings analysts work independently to corroborate such analysis.

Step 1: Understanding system structure and credit culture

The starting point for the analysis is a survey of the structure of the domestic financial system: overall size of the deposit base and of nongovernment credit in relation to GDP; market shares for the commercial bank, nonbank finance company, money changer, development finance, insurance, pension fund, unit trust, and brokerage segments; the number of banks; the extent of government and foreign shareholding and management control; and ownership linkages between private sector banks and corporations. The extent of directed credit and interest subsidy requirements is noted, as is the presence and nature of any deposit insurance scheme or blanket guarantee. A qualitative assessment of banks' treasury and risk-management practices is made, focusing on the prevalence of collateral- vs. cash flow-based lending and reliance on relationship banking.

Step 2: Assessing regulation and supervision

Domestic prudential norms are compared with global best practice in four principal areas: minimum capital adequacy; loan classification and provisioning; caps on single- and related-party exposures; and ceilings on net open foreign exchange positions. For each area, the frequency of reporting and enforcement is noted, and actual data are compared with requirements. To the extent that they may differ from those for the commercial banks, regulations governing nonbank financial institutions are also surveyed. The staff strength of the relevant supervisory agencies is considered, as is the frequency of on- and off-site inspections and their coverage of accounts by value. Finally, foreclosure rules, bankruptcy legislation, and court processes are discussed with selected institutions, to determine the severity of impediments to collateral recovery.

Step 3: Measuring current asset quality and surveying risk exposure

Regardless of domestic norms, all nonperforming loans (NPLs) are measured on a 90-days-past-due basis, including interest in suspense. In countries with more lenient NPL-recognition standards, 90-days-past-due NPL data at the system level are estimated from NPL data gathered from a representative sample of rated or unrated financial institutions. Similarly, data on general and specific provisioning levels (excluding collateral) are collected from the relevant supervisory authorities and cross-checked against data from selected financial entities. Evidence of large single- or related-party exposures is collected, the extent of banks' real estate and stock market financing is ascertained, signs of "evergreening" activity are investigated, and the sensitivity of borrowers' repayment capacity to interest rate and exchange rate shocks is discussed. Rapid real credit growth is generally viewed as an indicator of declining credit quality.

Step 4: Taking a view on potential recapitalization costs

A peak "gross problematic assets" (GPA) ratio is derived by adding to current gross NPLs a conservative assumption on incremental problem loans in a "reasonable worst-case scenario". In such a scenario, it is assumed that the actual gross NPL ratio converges rapidly to the GPA peak while provisions fail to keep pace, resulting in a widening of net NPLs and then a drop in capital adequacy. That, in turn, necessitates capital injections, from shareholders in the first instance, but then from the government in its role as final guardian of the domestic deposit base. Determining the share of the recapitalization burden that will devolve upon the government is a difficult judgment involving, *inter alia*, assumptions on the access of foreign-owned banks to the capital bases of their parent institutions.

Source: Bhatia (2002).

227. Jordan has suffered periodic banking frauds followed by publicly funded recapitalizations, but workout procedures remain *ad hoc*. When Petra Bank was closed in 1989 because of fraud, its balance sheet was consolidated into that of the CBJ. When Jordan Gulf Bank encountered problems in 1993, the CBJ provided a 30-year, interest free loan (in an amount equivalent to about 1 percent of GDP) without requiring a transfer of ownership. When three banks together accounting for some 15 percent of system assets were hit by the "Shamayleh fraud" in early 2002, the government announced that depositors would be protected in their entirety and the CBJ imposed bilateral restructuring plans on a case-by-case basis. One of the affected banks, Jordan Gulf Bank, was brought under temporary CBJ administration in early 2003 and was granted a loan write-off, additional interest free liquidity support, and a capital injection from the old and new shareholders before being returned to its shareholders in January 2004. Separately, a second small deposit taker, Philadelphia Investment Bank, was brought under temporary CBJ administration in late 2002 following lending violations by board members. Criminal proceedings are ongoing.

228. The rating agencies take an unfavorable view of bank restructuring exercises that perpetuate moral hazard. By not requiring transfer of ownership control, the recurring quasi-fiscal bank recapitalizations in Jordan may have given rise to market perceptions of a blanket solvency guarantee on the system. In the run up to each of the recent bank failures, such perceptions may have encouraged weak collateralization and excessive risk-taking, thus helping to bring on the problems. In the wake of each of the recent failures, those perceptions may also have reduced the willingness of shareholders to provide new capital, thus increasing the restructuring bill of the government, the CBJ, and other public entities periodically involved in the recapitalizations. From a rating agency perspective, solvency guarantees can support the credit standing of individual banks but, in so doing, tend to dilute the creditworthiness of the sovereign.

229. S&P maintains global league tables of banking sector asset quality, which form a key input into its sovereign ratings decisions.[74] In a process broadly similar to that followed by the FSAP, the agency (which rates thousands of banks worldwide) stress tests selected banking sectors under sets of country-specific "reasonable worst-case" assumptions. Typically, the tests seek to gauge the direct effects on bank balance sheets of exchange rate, interest rate, and equity price shocks, to which are added standalone increases in NPLs intended to approximate growth shocks in which slumping sales reduce EBIDTA, and some (fairly arbitrary) quantum of deposit flight. Incremental NPLs under such combined shocks are added to initial NPLs to create a crude estimate of impaired assets in a severe but plausible crisis scenario. GPA "buckets" for countries with S&P sovereign ratings in the 'BB' or 'BBB' categories range from 10–20 percent of domestic nongovernment bank credit

[74] See Scott Bugie, John Chambers, Michael T. DeStefano, and Ernest D. Napier, "Global Financial System Stress," *Standard & Poor's RatingsDirect* (October 9, 2001). Available via the Internet at: http://www2.standardandpoors.com/spf/pdf/fixedincome/global.pdf

for the best performer to 35–70 percent for the worst (Box VII.3 and Table VII.4). Jordan's banking sector has not been assigned to a GPA bucket.

Box VII.3. Banking Sector Size and Asset Quality Comparisons

S&P classifies 68 major national banking sectors into five "GPA buckets", with potentially impaired assets ranging from 5–15 percent of domestic nongovernment bank credit for the healthiest banking sectors to 35–70 percent for the weakest. The GPA classifications incorporate S&P's judgment on the potential magnitude of asset quality deterioration in a reasonable worst-case scenario. S&P's (upper-bound) estimates for total recapitalization requirements in a banking crisis are derived from its GPA buckets and the size of each banking sector, among other factors. Jordan's banking sector has not been assigned a GPA bucket, but is the fourth largest (in terms of nongovernment credit as a proportion of GDP) in the 'BB' and 'BBB' categories.

Table VII.4. S&P Banking Sector Asset Quality Classification, 2001
(In percent)

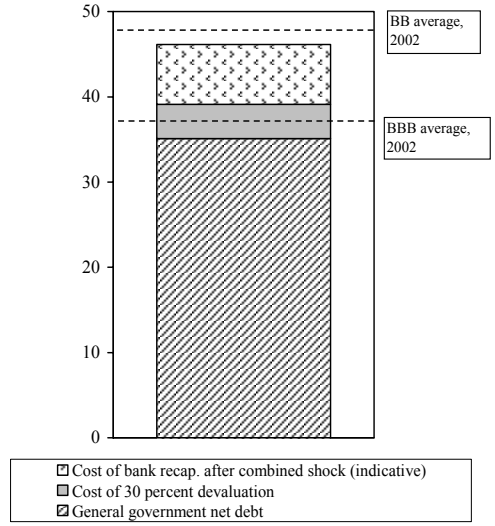
Country	Nongovt credit/GDP 1/	GPA/Nongovt credit 2/			GPA/GDP		
		Min.	Max.	Mean	Min.	Max.	Mean
'BBB' category							
China	136.3	35.0	70.0	52.5	47.7	95.4	71.5
Croatia	53.7	25.0	40.0	32.5	13.4	21.5	17.5
Latvia	31.2	35.0	70.0	52.5	10.9	21.8	16.4
Lithuania	14.6	35.0	70.0	52.5	5.1	10.2	7.7
Mexico	10.4	35.0	70.0	52.5	3.7	7.3	5.5
Oman	39.2	25.0	40.0	32.5	9.8	15.7	12.7
Poland	28.7	15.0	30.0	22.5	4.3	8.6	6.5
Slovak Republic	40.5	35.0	70.0	52.5	14.2	28.4	21.3
South Africa	74.5	10.0	20.0	15.0	7.5	14.9	11.2
Thailand	83.8	35.0	70.0	52.5	29.3	58.7	44.0
Tunisia	61.3	35.0	70.0	52.5	21.4	42.9	32.2
Average	*52.2*	*29.1*	*56.4*	*42.7*	*15.2*	*29.6*	*22.4*
'BB' category							
Bulgaria	19.3	35.0	70.0	52.5	6.7	13.5	10.1
Colombia	20.2	15.0	30.0	22.5	3.0	6.1	4.5
Egypt	65.8	35.0	70.0	52.5	23.0	46.0	34.5
India	33.5	35.0	70.0	52.5	11.7	23.4	17.6
Kazakhstan	19.0	35.0	70.0	52.5	6.6	13.3	10.0
Morocco	54.0	25.0	40.0	32.5	13.5	21.6	17.6
Panama	88.5	15.0	30.0	22.5	13.3	26.6	19.9
Peru	22.9	25.0	40.0	32.5	5.7	9.1	7.4
Philippines	34.9	15.0	30.0	22.5	5.2	10.5	7.8
Romania	9.9	35.0	70.0	52.5	3.5	7.0	5.2
Russia	18.4	35.0	70.0	52.5	6.4	12.9	9.6
Average	*35.1*	*27.7*	*53.6*	*40.7*	*9.0*	*17.3*	*13.1*
Jordan 3/	76.6	*15.0*	*30.0*	*22.5*	*11.5*	*23.0*	*17.2*
		25.0	*40.0*	*32.5*	*19.2*	*30.6*	*24.9*

Sources: S&P; and Fund staff estimates.

1/ At end-2002.
2/ As of October 2001.
3/ S&P has not disseminated a GPA bucket for Jordan; GPA ratios are therefore indicative only.

230. In the case of Jordan, a hypothetical combined shock scenario might simulate a disorderly exit from the exchange rate peg. Under such a scenario, some domestic or regional event would trigger abrupt dollarization, deposit flight from the weakest banks, and a devaluation of the JD by, say, 30 percent. The CBJ would mount an interest rate-based effort to stabilize the currency, increasing domestic interest rates by, say, 500 basis points and maintaining them at the new level for a period of, say, three months. It would also provide liquidity support to the weakest banks, sterilized through CD issuance to the strongest banks. As a second-round effect, the interest rate shock would trigger corporate defaults, further weakening the asset quality of the weakest banks and, based on recent experience, culminating in a roughly 50:50 split of recapitalization requirements between bank shareholders and the government (Figure VII.2). Although not attempted here, such a stress test might conceivably show the average gross NPL ratio rising to, say, 25–30 percent, with banks accounting for some one-third of system assets becoming undercapitalized. Conservatism of such order would not favor Jordan in a DSA framework, given the large size of its financial system.

Figure VII.2. Jordan: General Government Net Debt, S&P Definition, 2003
(As a percentage of GDP)



Sources: Jordanian authorities; and Fund staff estimates.

231. From a rating agency viewpoint, financial fragility in Jordan's private sector may constrain sovereign credit standing. The extent to which it does will depend on the agencies' own estimates of the magnitude of contingent liabilities and how they compare with those of similarly rated sovereigns. Analysis in this regard is hampered by the fact that S&P has not publicly assigned Jordan's banking sector to one of its five GPA buckets. Given the recent spate of bank frauds and ad hoc workouts, however, it may plausibly be argued that a worst-case scenario could push the impaired assets ratio into at least the 15–30 percent range, and possibly into the 25–40 percent range. In the latter case, total (prospectively) impaired assets would amount to 20–30 percent of GDP, which is higher than the average ranges for both the 'BB' and 'BBB' ratings categories. Notwithstanding the imprecision of such an analysis, it is indisputable that determined implementation of measures to reduce private sector financial fragility would hasten Jordan's ascent toward the investment grade.

E. A Roadmap to the Investment Grade

232. Jordan's geopolitical position creates special challenges. Locked between the Israeli–Palestinian conflict to the East and the Iraq conflict to the West, Jordan has had to exercise considerable skill in maintaining friendly ties with all of the major regional actors. In so doing, however, it has carved out for itself an important diplomatic role and secured a

large—and dependable—stream of financial assistance that ranges from bilateral grants (from the United States and others) and subsidized oil (formerly from Iraq and now from Saudi Arabia, Kuwait, and others) to concessional loans (from a variety of official donors) and Paris Club debt relief. Despite the many tangible benefits of the aid pipeline, however, it is possible that Jordan may have incurred a perceptional cost, with some investors associating the donor support, and the debt relief in particular, with economic and institutional weakness.[75] To compensate for the aid dependence and geopolitical risk, Jordan may well need to overperform its ratings peers in terms of key economic risk factors in order to progress to the investment grade.

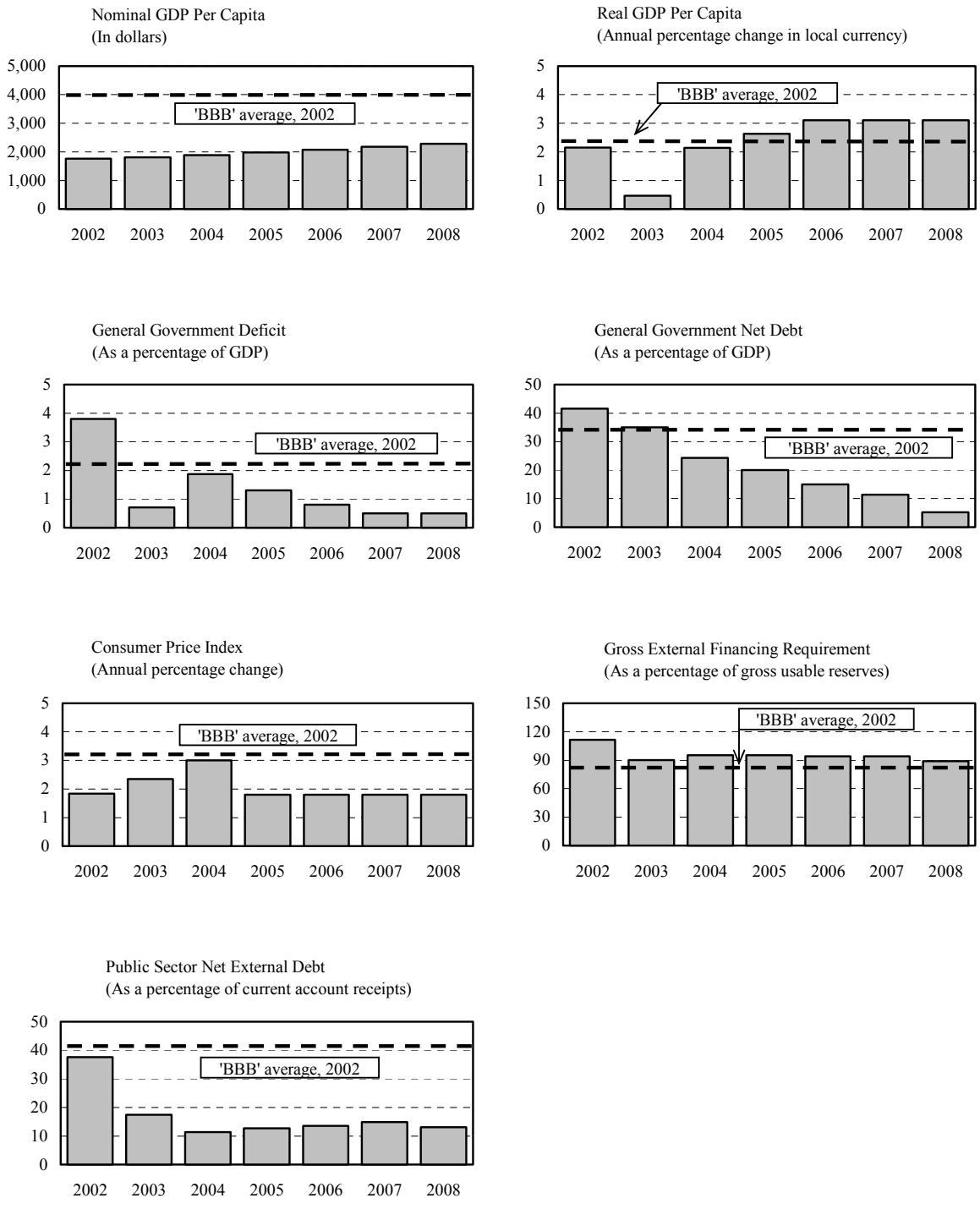
233. Given Jordan's strong track record of policy implementation, the authorities' medium-term macroeconomic framework provides a reasonably good indication of future economic performance. One key policy objective, enshrined in legislation, is continued fiscal consolidation and public debt reduction. Under the Public Debt Management Law of 2001, gross government and government-guaranteed debt may not exceed the equivalent of 80 percent of GDP by end-2006, of which no more than 60 percent of GDP may be owed to external creditors.[76] The authorities, in consultation with the Fund, maintain indicative annual targets for the central government fiscal balance that, at a minimum, are consistent with the achievement of the 2006 debt ceiling. Using an iterative process in which fiscal performance affects the real and external sectors and vice-versa, the macroeconomic framework includes projections for real GDP, inflation, and the external current and capital account balances. The most recent update of the framework covers the period 2004–09.

234. A dynamic assessment of Jordan's prospects for entry into the investment grade could, once more, begin with S&P's checklist of economic variables. With the averages of seven of the 11 variables in S&P's checklist publicly available, and with the projected values for Jordan of the same seven variables available from the macroeconomic framework, a dynamic comparison between Jordan and the 'BBB' averages provides a good sense of how Jordan's credit standing may evolve over time, as well as some indication of the sectors in which it might lead or lag by the widest margins (Figure VII.3).

[75] None of the 12 sovereigns with S&P long-term foreign currency ratings in the 'BBB' category as of end-November 2003 is undergoing a Paris Club debt treatment. Only three, Croatia (1995), Mexico (1989), and Trinidad and Tobago (1990), have ever done so, and all were unrated at the time.

[76] For the full text of the legislation, see Jordan, *Law No. (26) of 2001: Public Debt Management Law*, *Official Gazette*, No. 4496 (July 16, 2001). Available via the Internet at: http://www.cbj.gov.jo/docs/circulars.html

Figure VII.3. Jordan: Key Ratings Variables, 2002–08



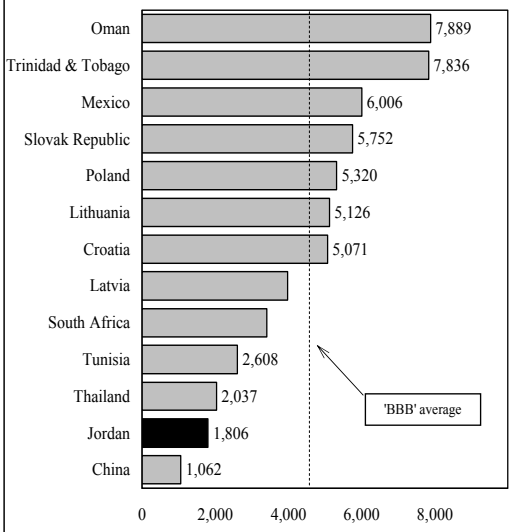
Sources: Beers, Cavanaugh, and Ogawa (2002); Jordanian authorities; and Fund staff estimates and projections.

235. As with the earlier, static comparisons, a broadly favorable picture emerges. In 2004, Jordan is projected to outperform the 'BBB' averages in four out of the seven variables studied. From 2005 onward, the number of outperforming variables increases to five, on a consistent basis. One shortcoming of the comparative exercise is that the available 'BBB' averages are a snapshot in time (for 2002), whereas in reality they would evolve over the period under consideration, reflecting both the changing country composition of the 'BBB' ratings category and economic developments for the countries within the category. Nonetheless, several sector-specific conclusions can be drawn for Jordan, many with clear implications for its future policy directions.

Income levels and growth performance

236. Although Jordan's growth rate is projected to outpace the 'BBB' average, its income level will continue to lag by a wide margin. The rating agencies, however, ascribe considerable importance to GDP per capita, which they view as a comprehensive proxy for the level of development of an economy and, thence, for its resilience to political and economic shocks. Indeed, reinforcing the intuitive reasoning that a rich debtor is normally a better credit risk than a poor debtor, various studies find GDP per capita to be among the most important explanatory variables for sovereign credit ratings.[77] With Jordan's dollar GDP per capita projected to remain at a little over half of the 'BBB' average through 2008, one pertinent question is whether its income level is a binding constraint that precludes entry into the investment grade.

Figure VII.4. 'BBB' Rated Sovereigns:
Nominal GDP Per Capita, 2003
(In dollars)



Sources: Jordanian authorities; and Fund staff estimates.

237. Jordan's low income level does not necessarily preclude its entry into the investment grade. A cursory survey of the 'BBB' category reveals only one country, China, with a lower GDP per capita than Jordan's (Figure VII.4). Nonetheless, the fact that China, with an estimated GDP per capita of only about $1,000 in 2003, enjoys an S&P long-term foreign currency sovereign rating of 'BBB' establishes that Jordan, with a GDP per capita of about $1,800, is not debarred from the investment grade on grounds of an

[77] See for instance Richard Cantor and Frank Packer, "Determinants and Impacts of Sovereign Credit Ratings," Research Paper No. 9608 (New York: Federal Reserve Bank of New York, 1996). Available via the Internet at: http://www.ny.frb.org/rmaghome/econ_pol/1096cant.html

unacceptably low income level.[78] As with the issue of geopolitical risk, the implication here is that Jordan would need to compensate with overperformance in other spheres.

Fiscal solvency and public debt structure

238. Fiscal outturns are projected to strongly outperform the 'BBB' category. Central government net debt is programmed to decline to the equivalent of about 72 percent of GDP by 2008, while net debt including CBJ reserves and CDs is projected to fall to about 32 percent of GDP (Table VII.5). The authorities' macroeconomic framework does not include projections for the municipalities and local governments or the SSC. Whereas the indebtedness of the former is de minimis, the latter plays an important role in bringing down consolidated general government deficits and net debt. For the purposes of this analysis, the SSC is assumed to run a steady surplus worth 2 percent of GDP annually, which is identical to its outturn for 2002 and its budget target for 2003. Consolidating the fiscal projections for the central government, the municipalities and local governments, the SSC, and the CBJ yields a general government net debt burden that falls below the 'BBB' average in 2004 and continues to decline secularly thereafter. The strength of the fiscal projections underscores the extent to which public debt reduction will remain the centerpiece of Jordan's adjustment effort in 2004–08.

Table VII.5. Jordan: General Government Net Debt, S&P Definition, 2003–08
(As a percentage of GDP at market prices)

	2003	2004	2005	2006	2007	2008
Central government 1/	101.1	90.5	86.5	81.6	78.1	72.2
External (incl. IMF) 2/	76.8	66.7	63.1	58.8	55.1	50.6
Domestic	24.3	23.8	23.4	22.8	23.1	21.7
Central government and CBJ	61.7	51.0	46.8	41.8	38.2	32.1
External	13.4	8.0	8.9	9.2	9.9	8.6
Domestic 3/	48.2	42.9	37.9	32.6	28.3	23.5
General government	35.1	24.3	20.1	15.0	11.3	5.2
External	13.4	8.0	8.9	9.2	9.9	8.6
Domestic	21.6	16.2	11.2	5.8	1.4	-3.4
Memorandum item:						
Public sector net external debt (percent of current account receipts)	17.5	11.3	12.7	13.5	14.9	13.1

Sources: Jordanian authorities; and Fund staff estimates and projections.

1/ Consolidated central bovernment (i.e., budgetary central government plus own-budget agencies), including all explicit guarantees.
2/ Net of market value of Brady bond collateral.
3/ CBJ contribution to domestic debt includes CDs only.

239. The structure of public debt is also projected to improve. In 2003, largely because of a very rapid increase in CBJ reserves and ongoing buoyancy in export performance, the ratio of

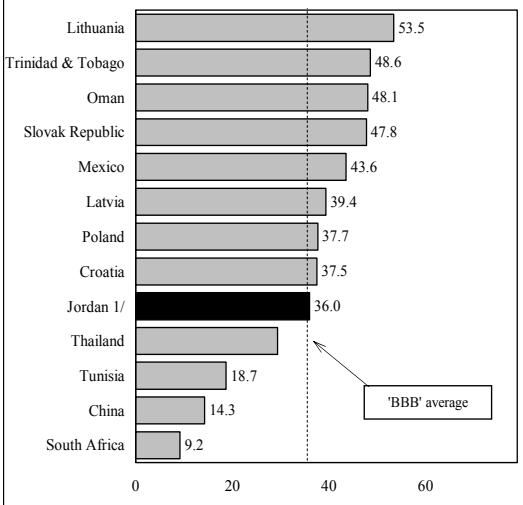
[78] Note also that Jordan's GNP generally exceeds its GDP by some 20–25 percent.

public sector net external debt including CBJ net foreign assets to current account receipts fell to less than half of the 'BBB' average. At the same time, the government launched a new debt management strategy that seeks to lengthen the maturity structure of domestic debt, replacing Treasury bills and CBJ CDs with long-term, JD-denominated bonds while also prepaying selected, high-cost external loans. By rebalancing the public debt portfolio in favor of longer-term, local currency-denominated, fixed-coupon liabilities, the authorities intend to reduce Jordan's vulnerability to exchange rate and interest rate shocks, diminish domestic rollover risk, and build the flexibility to run countercyclical fiscal policy.

International liquidity

240. The international liquidity position is more robust than S&P definitions would suggest. Jordan's gross external financing requirements as a proportion of usable official reserves appear to exceed the 'BBB' average. By including rollovers of short-term external liabilities in gross external financing requirements, however, S&P's definition is ill-suited to Jordan's circumstances. Although Jordan's commercial banking sector holds some $4.5 billion of nonresidents' deposits (and $2.9 billion of foreign currency-denominated deposits of residents), it also maintains some $6 billion in external assets. With the full amount of external assets held in the form of liquid interbank deposits with highly rated foreign counterparties, the result is a liquid net foreign asset position equivalent to about 16 percent of GDP. Excluding the nonresidents' deposits from the calculation of the gross external financing requirement reduces the liquidity ratio to negligible levels throughout 2003–08, and provides a more meaningful comparator for the adequacy of CBJ gross usable international reserves.

Figure VII.5. 'BBB' Rated Sovereigns:
Gross Usable Reserves, May 2003
(As a percentage of M2)



Sources: Jordanian authorities; and Fund staff estimates.
1/ Figure for Jordan is for end-2003.

241. Given that Jordan maintains a fixed-peg exchange rate regime, it is also appropriate to survey reserves coverage of money supply.[79] Again, Jordan compares reasonably well, with CBJ gross usable reserves covering 36 percent of M2 as of end-2003, ranking Jordan above four of the 12 countries with S&P long-term foreign currency sovereign ratings in the 'BBB' category (Figure VII.5). Excluding foreign currency deposits from M2, the coverage ratio

[79] See International Monetary Fund, "Debt- and Reserve-Related Indicators of External Vulnerability" (Policy Development and Review Department, March 23, 2000). Available via the Internet at: http://www.imf.org/external/np/pdr/debtres/debtres.pdf

increases to 47 percent, further underscoring the sustainability of Jordan's exchange rate peg. Assuming no change in monetary regime, consumer prices in Jordan (and the GDP deflator) should remain largely a function of import prices, with the annual inflation rate projected to remain below the 'BBB' average of about 3 percent throughout 2004–08.

Private sector balance sheets

242. A lack of available data by ratings category precludes dynamic comparisons of the size of Jordan's contingent liabilities burden. As discussed earlier, however, the adoption of measures aimed at strengthening the financial and nonfinancial private sectors can only hasten Jordan's ascent to the investment grade. Foremost among such measures would be the implementation of key recommendations provided by the Bank and the Fund in the context of the FSAP, which aim to strengthen the financial position of the commercial banks, insurance companies, and pension funds; improve risk-management capabilities; and ensure the efficient functioning of the payment system and capital markets. That, in turn, would facilitate domestic bank lending to the nongovernment sector, which expanded at annual rates of only about 3–5 percent in 2002–03.

243. From a ratings perspective, measures to limit moral hazard in the banking sector would be particularly important. If the CBJ were to opt for liquidation with less than full depositor protection the next time a small, systemically unimportant bank became seriously undercapitalized, a powerful signal would be sent that sovereign solvency support to banks is neither guaranteed nor unconditional. The demonstration impact of such an action could be expected to foster more careful lending decisions by banks and greater selectivity by depositors, thereby supporting the market-based allocation of resources. Efforts are already underway to improve transparency and corporate governance at banks and establish a formal financial safety net. Upcoming measures in this regard include the introduction a rules-based framework for prompt corrective action, currently in draft stage, and the enhancement of the bank resolution tools available to the Deposit Insurance Corporation, both of which would reduce the uncertainties currently surrounding the bank exit process.

244. Measures to encourage medium- and long-term debt finance for the corporate sector would also be welcome. Jordan's nonfinancial private sector would benefit not only from more bank lending, but also from more lending at fixed interest rates and longer maturities.[80] For the banks, increasing the volume of fixed-rate term lending would mean taking on more direct interest rate risk while reducing indirect interest rate risk (and therefore credit risk), thereby moving to a more efficient risk tradeoff. For the CBJ, reduced corporate sector financial fragility would enhance monetary policy flexibility, particularly in terms of its ability to mount interest rate-based defenses of the exchange rate peg if necessary.

[80] It can be shown that, for a stylized firm that borrows to invest in a long-term project with an EBIDTA that is interest rate-independent, lengthening the time-to-repricing on its debt would, *ceteris paribus*, raise the default-inducing interest rate at which one year's interest payments would exceed accrued provisions.

245. A key obstacle to fixed-rate term lending in Jordan is the absence of a meaningful yield curve for JD-denominated government securities. Reflecting the traditionally limited supply of securities as well as the surplus liquidity position of most large commercial banks (and the SSC), government bonds have traditionally been held to maturity, with minimal secondary trading activity. The resulting absence of benchmark yields has complicated the pricing of medium- and long-term bank loans and has constrained the volume of fixed-rate lending. In addition to the fiscal objective of a longer average maturity on domestic debt, the authorities' new debt management strategy also seeks to soak up excess domestic liquidity through regular and preannounced bond issuance, including to large nonbank investors such as the SSC. That, if supported by institutional measures as advocated by the FSAP, would encourage secondary market trading in government securities and the establishment of a JD yield curve.

F. Conclusion

246. This chapter has sought to review vulnerability-related issues in the context of Jordan's upcoming graduation from Fund support. To the extent possible, it has faithfully transposed the authorities' medium-term macroeconomic framework into risk factors as defined by one of the "big two" international credit rating agencies, S&P. The consolidation of central bank and public pension fund finances into what S&P refers to as "general government", for instance, implies netting out substantial CBJ and SSC net assets from various operational measures of public indebtedness. Fiscal and other risk factors are then compared with those of other countries not by region, but by ratings category, with a special focus on sovereigns rated just below or just above the important cutoff point between the speculative and investment grades.

247. A fairly robust picture emerges. Even after factoring in what the rating agencies might characterize as "reasonable worst-case" shocks, Jordan compares well with S&P's 'BBB' ratings category in all but its average income level. Although the relative weight attached by each rating agency to each risk factor is neither publicly known nor fixed in time, dynamic comparisons suggest that Jordan's underperformance in GDP per capita could be compensated for by overperformance in most other indicators. Two such indicators are general government net debt as a proportion of GDP and public sector net external debt as a proportion of current account receipts. Given that Jordan is often classified among highly indebted countries, the fact that public sector balance sheet indicators should overperform by wide margins is remarkable, underscoring the financial strength of the SSC in the wake of key pension reforms and the shock-absorption capacity of the CBJ in the wake of rapid reserves accumulation.

248. Jordan could be in contention for investment grade status within a few years. As in the past, fiscal consolidation would need to remain the centerpiece of the adjustment effort, with public debt declining in line with targets specified under the Public Debt Management Law of 2001. Other elements of the policy mix would include public debt management to lengthen the maturity structure of domestic debt and establish a benchmark yield curve, and

financial system reforms to support nongovernment credit and reduce private sector financial fragility. By crisis-proofing the economy, such measures would carry intrinsic value. As a positive externality, they would also hasten Jordan's entry into the investment grade. Given the large number of institutional investors that are bound by statutes forbidding speculative grade investments, upgrades of Jordan's long-term foreign currency sovereign ratings to 'BBB-' by S&P or to 'Baa3' by Moody's would open up access to a vast global pool of investible resources, reducing borrowing costs, facilitating subsovereign debt issuance, and supporting market confidence.

References

Bank for International Settlements, 2003, *Quarterly Review: International Banking and Financial Market Developments* (September 8). Available via the Internet at: *http://www.bis.org/publ/qtrpdf/r_qa0309.pdf*

Beers, David T., Marie Cavanaugh, and Takahira Ogawa, 2002, "Sovereign Credit Ratings: A Primer," *Standard & Poor's RatingsDirect* (April 3). Available via the Internet at: http://www2.standardandpoors.com/spf/pdf/fixedincome/sovereign.pdf

Bhatia, Ashok Vir, 2002, "Sovereign Credit Ratings Methodology: An Evaluation", IMF Working Paper 02/170 (Washington: International Monetary Fund). Available via the Internet at: http://www.imf.org/external/pubs/ft/wp/2002/wp02170.pdf

Bugie, Scott, John Chambers, Michael T. DeStefano, and Ernest D. Napier, 2001, "Global Financial System Stress," *Standard & Poor's RatingsDirect* (October 9). Available via the Internet at: http://www2.standardandpoors.com/spf/pdf/fixedincome/global.pdf

Cantor, Richard, and Frank Packer, 1996, "Determinants and Impacts of Sovereign Credit Ratings," Research Paper No. 9608 (New York: Federal Reserve Bank of New York). Available via the Internet at: http://www.ny.frb.org/rmaghome/econ_pol/1096cant.html

International Monetary Fund, 2000, "Debt- and Reserve-Related Indicators of External Vulnerability" (Policy Development and Review Department, March 23). Available via the Internet at: http://www.imf.org/external/np/pdr/debtres/debtres.pdf

International Monetary Fund, 2004, *Jordan—Staff Report for the 2004 Article IV Consultation and Second Review Under the Stand-By Arrangement*.

Jordan, 2001, *Law No. (26) of 2001: Public Debt Management Law*, *Official Gazette*, No. 4496 (July 16). Available via the Internet at: http://www.cbj.gov.jo/docs/circulars.html

VIII. Assessment of External Competitiveness and Export Prospects[81]

[81] Prepared by Alain Feler and Tushar Poddar.

249. Jordan's external competitiveness and export performance has improved significantly over the last few years, as progress achieved in structural reforms, trade liberalization, and preferential access to major foreign markets have contributed to an acceleration of export growth. A substantial part of the export growth has stemmed from a surge in garment exports as foreign investors have taken advantage of Jordan's duty and quota-free access to the U.S. market. There is concern that the competitive edge afforded to Jordan by such exemptions may be lost due to the upcoming elimination of quotas under the WTO agreement on apparel, textiles and clothing (ATC).

250. This chapter aims to assess the sustainability of the ongoing export boom by considering not only macroeconomic developments but also the micro-foundations of export growth. By identifying the sources of comparative advantage for Jordan, such as factor endowments, institutions and policy, economic geography and agglomeration economies, and focusing on the main supply and demand factors affecting each major exporting sector, this chapter attempts to capture the underlying microeconomic dynamics of Jordanian exports.

251. The analysis suggests that Jordan is likely to sustain favorable external sector prospects over the medium term. Exports of goods and nonfactor services could be reasonably expected to grow on average by about 7.5 percent in U.S. dollar terms, provided some remaining supply constraints are addressed. This outlook envisages that Jordanian exports could adjust flexibly to terms of trade shocks, further their competitive position in regional markets, and reap more fully the opportunities opened by preferential trading arrangements, particularly with the United States and the European Union.

252. This chapter is organized as follows. Section A reviews the main indicators of Jordan's external competitiveness, against the background of recent export developments. Section B analyzes the primary supply and demand sources of comparative advantage that are likely to shape the medium-term export prospects of key sectors of the Jordanian economy. Section C concludes by providing a baseline medium-term outlook for Jordan's exports and providing some estimates of the sensitivity of its external sector prospects to the impact of the elimination of quotas under the WTO/ATC.

A. External Competitiveness

253. Overall, external competitiveness of the Jordanian economy is likely to have increased significantly since the late 1990s notwithstanding the dependence of the real effective exchange rate on movements of the U.S. dollar to which the Jordanian dinar (JD) has been *de facto* pegged**.** Previous analysis undertaken by Fund staff estimated that the JD was overvalued by some 10–15 percent in real effective terms, in the spring of 1999. The REER further appreciated up to early 2002, reflecting the increasing strength of the U.S. dollar relative to other major currencies, in particular the Euro. This trend was subsequently reversed and at end-2003, the REER stood at roughly its level in early 1999 (Figure VIII.1).

254. The equilibrium real effective exchange rate has been buttressed by efficiency gains resulting from greater openness to foreign competition, privatization, as well as improvements in public infrastructure and in the delivery of government services. Together with prudent macroeconomic policies, these broad structural changes have started to yield some gains in total factor productivity growth, according to recent research by Fund staff.[82]

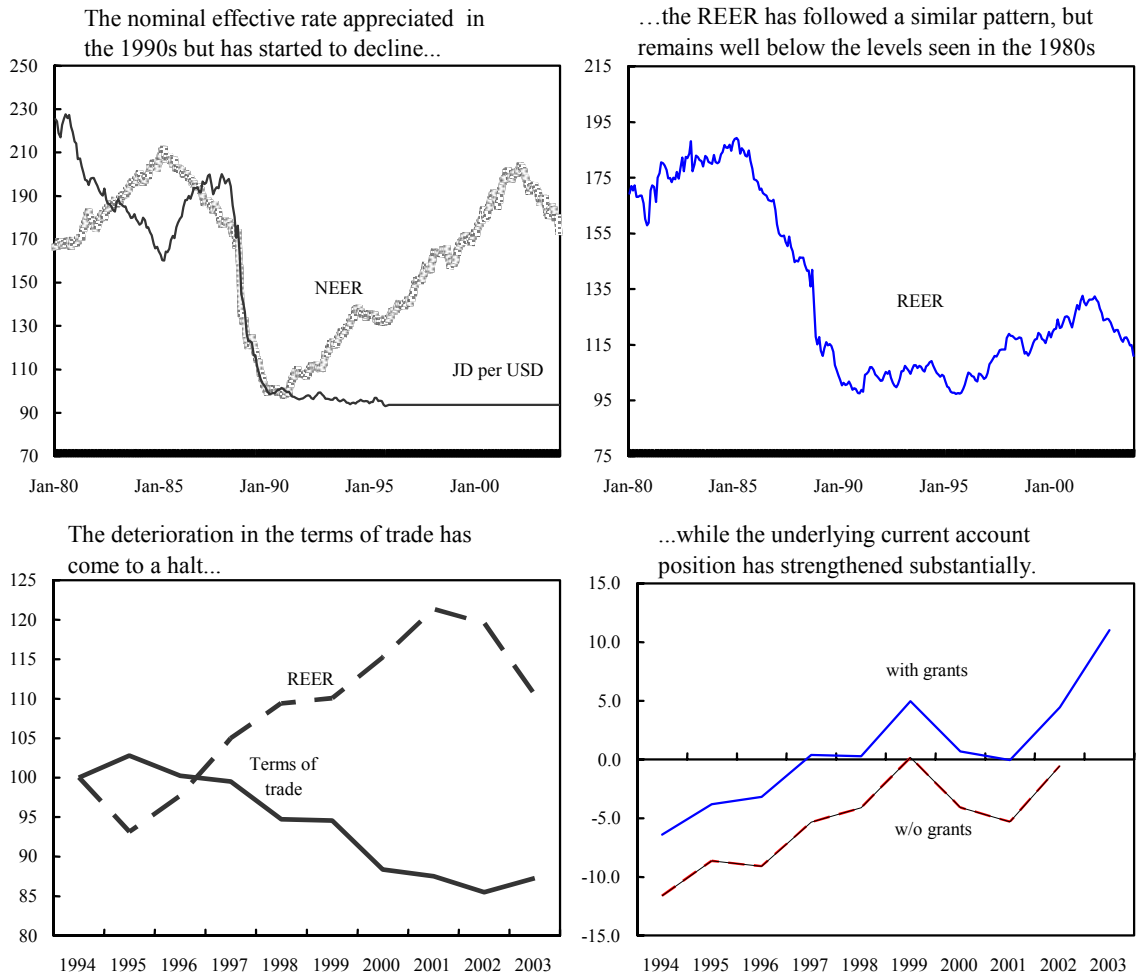
255. In successive rounds of liberalization, quantitative barriers to imports and tariffs were eliminated or reduced on a multilateral or regional basis, opening Jordan to world markets. Jordan acceded the WTO in 2000 with a commitment to gradually reduce tariff and nontariff barriers over the following 10 years. Jordan also ratified an FTA with the United States in 2001 and an association agreement with the European Union (EU) in 2002. Jordan is also a member of the Arab FTA since 1998 and has signed or concluded negotiations for FTAs with most countries of the MENA region, some European countries that are not yet members of the EU, and more recently, Singapore. In addition, the ambitious Aqaba Special Economic Zone is being developed as a low-tax, duty-free area conducive to new investments in manufacturing and tourism.

256. The above structural changes are likely to take time to fully impact the overall external performance of the Jordanian economy. They have however already started to bear fruit, as witnessed by the robust export performance that has contributed to a significant diversification of Jordan's structure and direction of trade in the last few years.

257. Following a decade of subdued growth, Jordan's export performance improved substantially during the last three years, contributing to a remarkable strengthening of the external current account. Over the period 2000–03, exports earnings increased by 8.5 percent a year in U.S. dollar terms, compared with an average annual rate of growth of only 4.5 percent during the 1990s. Remarkable gains were recorded in merchandise exports, which grew by 21.3 percent a year between 2000 and 2003, compared to 8 percent on average during the previous decade (Table VIII.1). Exports of nonfactor services, on the other hand, performed relatively poorly during the three years, partly due to a slowdown in tourism receipts related to regional and air travel security concerns.

[82] See Chapter II.

Figure VIII.1. Jordan: Indicators of Competitiveness



Sources: CBJ, IMF; and INS database.

Table VIII.1. Jordan: Average Annual Growth of US$ Export Receipts

(In percent)

	1990-99 (a)	2000-03 (b)	2000-03 (b/a)
Goods and nonfactor services	**4.5**	**8.5**	**1.9**
Goods	8.0	21.3	2.7
Domestic	6.7	18.6	2.8
Traditional	-0.3	-1.1	4.0
Phosphates	-2.5	-7.0	2.8
Fertilizers	-0.9	-1.9	2.2
Potash	3.7	4.8	1.3
Non traditional	13.8	27.3	2.0
Fruits and vegetables	7.1	13.7	1.9
Manufactures	10.4	65.9	6.4
Chemicals	14.9	4.2	0.3
Other	35.2	7.8	0.2
Re-exports	16.3	32.4	2.0
Non factor services	1.9	-5.3	-2.7
Of which: Tourism	6.1	0.8	0.1
Exports of goods excl. manuf.	7.5	10.4	1.4

Source: Jordan Department of Statistics.

258. The boom in merchandise exports of the last three years has been fueled by a surge in apparel exports to the United States. This surge has been driven by the success of the Qualified Industrial Zone (QIZ) scheme, whereby the United States offers special duty-free and quota-free market access to goods produced in designated industrial estates, under the requirement that a minimum of 35 percent of value added originating in Jordan, the West-Bank and Gaza, and Israel. This scheme proved particularly attractive to low-cost garment manufacturers, mainly from Asia, whose export potential to the United States were increasingly constrained by import quotas allowed under the WTO agreement on textile and clothing. From only two factories in 1999, the number of QIZ accredited companies reached 43 in 2003, resulting in a surge of QIZ exports from only $2.4 million in 1999 to some $586.6 million in 2003. The QIZ success was critical in lifting the growth of manufactured export receipts, from a yearly average of 10.4 percent during the 1990s to 65.9 percent over the period 2000–2003.

259. The acceleration of export growth witnessed during the last three years has not however been limited to garments assembled in QIZs. Merchandise exports excluding manufactures still grew by a respectable 10.4 percent a year during 2000–2003, up from an average of 7.5 percent during the 1990s. This solid record was achieved despite a stagnation of traditional exports of mineral products due to unfavorable price developments, as notable gains were recorded in agricultural products and pharmaceuticals exports, mainly to neighboring countries. Re-exports have also shown remarkable growth, fueled by trade with Iraq, although the latter were temporarily but severely disrupted during the first half of 2003 due to the war.

260. The above developments have contributed to a significant broadening of Jordan's export base. Mineral-based traditional exports now account for less than one-fifth of domestic exports, compared to almost one-third just a few years ago. Similarly, the

disappointing performance of tourism in recent years has contributed to a decline of the share of nonfactor services in total exports to about a third, from almost one-half at the end of the 1990s. Conversely, non-traditional merchandise exports have gained much prominence as a source of foreign exchange, with a share in total exports of goods and non factor services surging from around one-third of domestic exports at the end of the 1990s to more than 80 percent at end-2003. (Table VIII.2).

Table VIII. 2. Jordan: Structure of Exports of Goods and Nonfactor Services

(In percent)

	1985	1990	2000	2003
Goods and non factor services	100.0	100.0	100.0	100.0
Merchandise exports	39.9	42.4	53.7	67.7
Domestic	32.8	36.7	43.1	52.2
Traditional	16.4	18.4	11.5	9.8
Non traditional	16.4	18.3	31.6	42.3
Fruit and vegetables	3.1	2.7	2.9	3.5
Manufactures	7.7	7.4	12.5	24.1
Chemicals	2.6	6.6	11.5	9.8
Other	3.0	1.7	4.7	4.9
Re-exports	7.1	5.6	10.6	15.5
Non factor services	60.1	57.6	46.3	32.3
Of which: Tourism	26.2	20.4	20.4	18.4

Sources: Jordan's Department of Statistics; and Central Bank of Jordan.

261. The changing structure of its merchandise exports has contributed to a diversification of Jordan's main foreign markets. In particular, the share of exports destined to the United States has increased from only 4 percent in 2000 to more than 20 percent currently. Conversely, the importance of Asia has declined from 16 to 10 percent during the last three years, due to the relative poor performance of traditional exports of phosphate, potash, and fertilizers, mostly destined to India. Arab countries, however, continue to provide key markets for almost half of Jordan's products, including fruits and vegetables and pharmaceuticals whose exports have performed relatively well in recent years. Indeed, except for textiles and mineral based products, most of Jordan's exports are destined to other Arab countries (Tables VIII.3 and VIII.4).

Table VIII.3. Jordan: Destination of Merchandise Exports, 1999–2003

	1999	2000	2001	2002	2003
			(In percent)		
Domestic exports, f.o.b.					
Arab countries	42.1	39.9	50.1	54.5	41.9
European Union	6.2	3.3	3.7	3.2	3.4
United States	0.9	4.2	12.2	19.5	28.5
India	14.2	15.9	10.7	12.0	8.6
Other countries	33.1	36.4	31.7	26.4	14.0

Source: Central Bank of Jordan.

Table VIII.4. Jordan: Geographical Destination of Selected Merchandise Exports in 2002

Product category	Arab Countries	European Union	Eastern Europe	North America	Asia Australia	Other	World
				(In millions of U.S. dollars))			
Selected products 1/	614.9	49.9	13.3	417.2	303.2	39.8	1438.3
Vegetables and animal fats	222.4	2.0	1.4	0.1	0.0	0.2	226.1
Salt	62.4	12.1	6.3	2.3	99.3	3.4	185.8
Fertilizers	27.7	21.9	2.8	0.0	202.4	28.3	283.1
Pharmaceutical products	184.3	10.3	2.7	2.0	0.8	1.3	201.4
Apparel and clothing	85.9	3.7	0.1	412.8	0.8	0.8	504.1
Electrical equipments and parts	32.1	0.0	0.0	0.0	0.0	5.7	37.8
				(In percent of relevant export category)			
Selected products	42.8	3.5	0.9	29.0	21.1	2.8	100.0
Vegetables and animal fats	98.4	0.9	0.6	0.0	0.0	0.1	100.0
Salt	33.6	6.5	3.4	1.2	53.4	1.8	100.0
Fertilizers	9.8	7.7	1.0	0.0	71.5	10.0	100.0
Pharmaceutical products	91.5	5.1	1.3	1.0	0.4	0.6	100.0
Apparel and clothing	17.0	0.7	0.0	81.9	0.2	0.2	100.0
Electrical equipments and parts	84.9	0.0	0.0	0.0	0.0	15.1	100.0

Source: UN's Comtrade database.

1/ Accounting for 66.3 percent of domestic export receipts in 2002.

262. In the tourism sector, the mid-1990s was a high-growth phase for European and U.S. visitors due to the start of the peace process. However, the intifada, the events of September 11, and the Iraq war have caused a major drop in Western tourist arrivals. Instead, in recent years, visitors from neighboring Arab countries have increasingly contributed to Jordan's tourism industry (Table VIII.5).

Table VIII.5. Jordan - Regional Origin of Tourists

	2000	2001	2002	2003
	(In thousands)			
Total	1,036.0	1,109.4	1,164.3	1,081.6
Arab countries	555.9	713.7	828.2	749.5
Europe	233.5	163.4	108.8	104.2
America	98.8	59.7	51.6	56.9
Other	147.8	172.6	175.7	171.0
	(In percent of total)			
Total				
Arab countries	53.7	64.3	71.1	69.3
Europe	22.5	14.7	9.3	9.6
America	9.5	5.4	4.4	5.3
Other	14.3	15.6	15.1	15.8

Source: Jordan's Department of Statistics

B. Supply and Demand Sources of Comparative Advantage

263. To analyze export prospects for Jordan there is a need to understand its sources of comparative advantage. In this section we put comparative advantage in a supply-demand framework to better understand the forces which have and are likely to drive exports.

Supply issues

264. The traditional sources of comparative advantage are factor endowments, institutions and government policy, and agglomeration economies. We consider each of these sources in turn focusing on the export sectors for which they are most relevant.

Factor endowments

265. Jordan’s semi-arid climactic conditions are not favorable for large-scale farming. Annual rainfall is just 200–600 mm in the uplands and 20–70 mm in the desert, and less than 3 percent of Jordan’s surface area is arable. Indeed, agriculture comprises less than 4 percent of its GDP. However, Jordan has been a traditional exporter of fruits and vegetables to its neighbors due to farming in Jordan Valley. As a percent of exports, fruits and vegetables have been showing a declining trend, having fallen from 7.8 percent of exports in 1985 to just over 5 percent by 2003. Although Jordan is likely to continue to serve regional markets and find niche areas in European markets, given its natural constraints, agricultural produce is unlikely to be a large and fast-growing component of exports over the medium term.

266. Jordan's chief mineral resources are its deposits of potash and phosphate. Traditionally, these have contributed significantly to its exports, although to a lesser extent in recent years, largely due to unfavorable price developments as global supply has increased. Jordan will need to improve efficiencies and remove supply constraints in the sectors to fully take advantage of its deposits.[83] Recent years have seen an increasingly high level of competition in the phosphate, potash, and fertilizer markets. Current projections indicate little, if any, price increases for these commodities over the medium term. Although current WEO projections point to a moderate upturn in the prices for these traditional exports, one cannot rule out that price developments may turn out even less favorable than currently envisaged. Thus, traditional mineral exports are unlikely to reverse their relative decline as a major source of foreign exchange for Jordan.

267. Jordan possesses a comparative advantage in terms of the level of skills of its workforce compared to those of its neighbors. This is primarily due to a strong emphasis on education and a liberal social and economic environment. Jordan's literacy rate of over 90 percent is the highest in the region, and with 37 percent of its population educated to above the secondary level, Jordan has a large pool of engineering, business and medical graduates. Nascent sectors such as ICT and pharmaceuticals are well placed to exploit this comparative advantage. The IT industry has already racked up more than $40 million in exports primarily to the Middle East region in the niche areas of e-learning and e-governance. The government is taking the lead in creating an enabling environment by improving connectivity, increasing PC penetration rates, and encouraging private sector participation. To harness its IT skill comparative advantage, Jordan needs to continue to enhance its capabilities and resolve regulatory issues relating to the implementation of intellectual property rights (IPR), the streamlining of government procedures, and the development of e-commerce legislation.

268. Pharmaceuticals is a sunrise industry which stands to benefit from Jordan's relatively well-educated workforce. Jordan has four clinical research organizations to aid in research and development (R&D) and drug trials. Its smooth accession to the WTO and the IPR agreements have strengthened multinationals' confidence in Jordan's commitment to investors. Local firms in the sector have made substantial investments to comply with international standards, and especially in getting EU and the U.S. Federal Drug Administration (FDA) approvals. Strategic alliances and licensing agreements with leading international companies is likely to buttress their competitive edge over regional competitors. The companies will need to continue to innovate, invest in R&D, and strike alliances and license agreements to remain competitive.

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[83] Some gains may be possible in 2005 onwards, as a result of new phosphate production coming on line, and increases in efficiency and/or productivity as a result of the privatization (and consequent increase in investment in plant and equipment) of Arab Potash as well as the upcoming privatization of Jordan Phosphate Mining Company (JPMC).

269. Major tourist attractions such as Petra, Jerash, and several others form another source of comparative advantage. They are, however, vulnerable to perceived security risks. Jordan's tourism earnings have became less susceptible to these risks over the last few years, primarily by diversifying into regional visitors. However, there is considerable scope for improvement by addressing supply constraints in the supporting infrastructure for tourism. The primary constraints are Jordan's limited airlift capacity,[84] the lack of skilled manpower, especially in hotel management, a shortage of entertainment infrastructure,[85] and the lack of a regional tourism network to facilitate the flow of tourists to other countries within the region. Addressing these supply constraints would enable the tourist industry to attain a higher growth path.

Institutions and policy

270. An influential body of opinion in the international trade literature views institutions as a major determinant of development as well as a proximate cause for exporting success.[86] Jordan's economic and political institutions are fairly well developed compared to other countries in the region. Jordan compares very favorably on economic freedom.[87] Its level of financial development is considered to be the highest in the region.[88] On other institutional indicators such as rule of law, regulatory quality, overall trade restrictiveness, governance, and functioning of labor markets and private sector development, Jordan ranks among the highest in the region.[89] Jordan's political institutions also have relatively strong foundations and have given it political stability for the last several decades.

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[84] Currently, Royal Jordanian has a monopoly on landing rights to Jordan. Hence the major international carriers are unable to increase flights to Jordan, which is a constraint during peak tourist seasons.

[85] These relate primarily to family-oriented tourism from Arab countries. The infrastructure would include shopping malls for female tourists and theme parks for children.

[86] See Rodrik et al., 2002, "Institutions Rule: The Primacy of Institutions over Integration and Geography in Economic Development" (WP/02/189, Washington: International Monetary Fund).

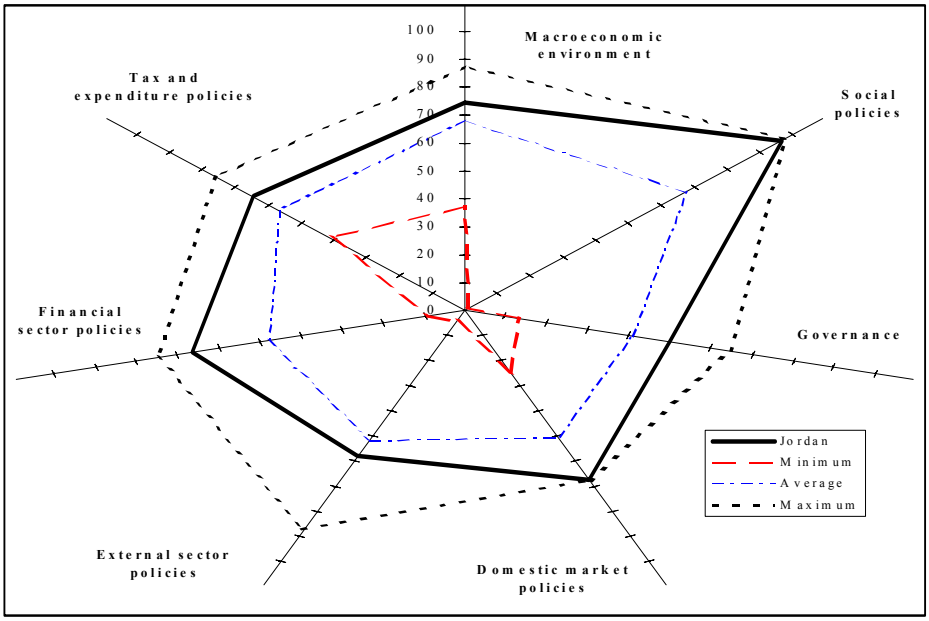
[87] On an index of economic freedom computed by the Heritage Foundation, Jordan is regarded as 'mostly free'. Each country receives its overall economic freedom score based on the average of 10 individual factor scores. Factors include trade and monetary policy, fiscal burden, government intervention, capital flows, banking and finance, wages and prices, property rights, regulation, and black market activity. Index ranges from 0 to 4 with the categories being: 0-1.95 (free), 2-2.95 (mostly free), 3-3.95 (mostly unfree), and 4 and above (repressed).

[88] Creane et al., 2003, "Financial Development in the Middle East and North Africa" (Washington: International Monetary Fund). Banking sector, nonbank financial sector, monetary sector and policy, and financial openness indices are used to compute this index. The index ranges from 0 to 100, 100 being the highest level of financial development.

[89] On rule of law and regulatory quality see chapter II above, Table II.6. On overall trade restrictiveness, see Creane et al., op. cit. On other indicators, see Le Dem et al., "Policy Indicators: Assessing Growth Conducive Policies across MENA Countries," MCD Research, (Washington: International Monetary Fund).

271. On government policy, Jordan compares very favorably with its regional neighbors. It ranks 1st among 24 countries in the region in a recent study done by the Middle East and Central Asian Department of the IMF (see Figure VIII.2).[90] The figure displays Jordan's scores on a scale of 0 to 100 (the larger the better) on several composite indicators of government policy relative to the average as well as the minimum and maximum for the MENA region. For instance, Jordan scores 75 on the index of macroeconomic environment which is above the MENA average of 65 but less than the maximum of 90. Jordan does score the highest in the region on social policies and domestic market policies, whereas it ranks very high on tax and expenditure, financial sector, and external sector policies. These indicators suggests that Jordan's highly favorable institutions and government policy should continue to have a positive impact on its export performance.

FigureVIII.2. Jordan: Performance on Institutions and Policy Relative to Region 1/



1/ Values range from 0 (worst performer) to 100 (best performer). Average, minimum, and maximum stand for simple MED average, MED minimum and MED maximum.

[90] Le Dem et al., "Policy Indicators: Assessing Growth Conducive Policies across MENA Countries," MCD Research, (Washington: International Monetary Fund) 2003.

Agglomeration

272. The forces of agglomeration and economies of scale through a clustering of activity can potentially have a large impact on exporting activity.[91] Spillovers can be both physical, where the presence of one firm reduces transportation and other input costs for the other, and intellectual, where human capital may be increased due to the flow of labor between two firms. Essentially, a clustering of economic activities generate linkages. The demand for inputs from a final goods producer generates a 'backward' linkage as more supplier firms enter the industry leading to better quality and/or cheaper inputs. The availability of better inputs in turn leads to more firms entering the final goods industry and hence its development through a 'forward linkage.' These linkages feed on each other and can generate large externalities eventually causing industrial growth.[92]

273. Jordan has a comparative advantage in the sense that it has already created a clustering of activity through the concentration of apparel exporters in the QIZs. The presence of foreign manufacturers has enabled spillovers to other producers reducing their input costs and improving their technology and human capital. The presence of garment producers in one location and the associated demand has enabled the concentration of support services such as labor markets, vocational training, health care, freight and customs, machinery supplies, housing, catering among others thereby reducing their costs and improving their quality. The availability of these inputs have encouraged other multinationals to locate in the QIZs. These linkage forces have the potential to intensify further over the medium-term.

274. In addition, multinationals act as export catalysts for domestic manufacturers through demonstration effects.[93] Given their knowledge of complying with export rules and regulations in foreign markets and dealing with potential clients, multinationals lower information costs associated with exporting for domestic manufacturers. The trade literature emphasizes the initial sunk costs of penetrating export markets through adequate marketing and distribution channels as a critical element of exporting.[94] The diffusion of this information from foreign exporters can conceivably benefit Jordanian manufacturers even

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[91] See Krugman, P. "Geography and Trade," Cambridge, Mass.: MIT Press, 1991.

[92] See Venables, A.J. "Trade Policy, Cumulative Causation, and Industrial Development," *Journal of Development Economics*, vol. 49, pp. 179–97. For examples from East Asian countries of linkages, see Hobday, M. "Innovation in East Asia: The Challenge to Japan," London: Aldershot, 1995.

[93] See Rhee and Belot "Export Catalysts in Low-Income Countries," *World Bank Discussion Paper Series*, World Bank, 1989.

[94] See Roberts, M. and Tybout, J. "The Decision to Export in Columbia: An Empirical Model of Entry with Sunk Costs," *American Economic Review*, 87(4), 1997.

after the elimination of the quotas under the WTO agreement. The spillovers through linkages and demonstration effects could potentially enable Jordanian exporters to expand their manufacturing base and export higher value-added products to new markets.

C. Demand Issues

Geographical and cultural links

275. Jordan enjoys geographical proximity to the sizeable markets of Iraq and Saudi Arabia. In the past, manufacturing exports have benefited from access to the Iraqi market, both due to historical and cultural links, as well as the latter's difficult political relations with its other neighbors. In addition, Jordan's cultural links to the region remain strong due to its diaspora and a common language. Indeed, as mentioned in Section A, most of Jordan's exports apart from textiles and apparel and mineral products, are concentrated in the Middle-East region. Hence, developments in the region will have a key impact on Jordan's export outlook.

276. Demand is likely to continue to be strong from the region barring shocks, as the region stabilizes, and growth picks up. Demand for fruits and vegetables and other agricultural produce is expected to remain significant in the region. For manufacturing exports excluding textiles, the medium-term demand outlook is less sanguine. Jordan's primary market is Iraq, and although there may be short-term demand from Iraqi importers to fill in urgent needs, it seems likely that the lucrative captive Iraqi market for Jordanian manufacturing exports will contract due to the influx of other, more efficient exporters. The diversification of Iraqi imports may cause nontextile manufacturing exports to remain stagnant or even decline. In the services sector, the demand outlook is more bullish. As the region embraces IT, demand for e-learning and e-governance is likely to continue to be strong especially from markets such as the UAE and Bahrain. For pharmaceutical products, the Middle East is one of the fastest growing markets in the world and is forecast to have annual compound growth rates in excess of 10 percent per annum over the medium term.

Preferential trading arrangements

277. Jordan has benefited immensely by exploiting its good political relations to conclude free trade arrangements and other preferential trade agreements with its Middle-Eastern neighbors and the United States and EU. In particular, the QIZ scheme with quota and duty-free access to the U.S. market has been the major factor behind the spectacular growth of apparel exports. Further, by entering the WTO and protecting the IPR regime, Jordan has gained a foothold in the pharmaceuticals sector. In the medium-term, export growth will depend heavily on Jordan's ability to take full advantage of its preferential access to the world's two largest markets. The FTA with the United States and Association Agreement with the EU ratified in June 2002 to eliminate most trade barriers over the next 10 years could translate into significant export gains for Jordan.

Sources of export demand

278. To understand sources of export demand growth we can decompose growth into four likely components—(i) deepening current penetration of existing markets with the same products; (ii) deepening current penetration of existing markets with new products; (iii) penetrating new markets with the same products; (iv) penetrating new markets with new products. We discuss prospects in each of the major exporting sectors in this light.

279. Jordan can increase its penetration of existing markets in cultural tourism. The European market for cultural tourism is very large and is a potential source for more tourism receipts. There is also underlying demand for new export sectors such as IT and pharmaceuticals as well as higher-end apparel in the existing markets of the Middle East for the former and the United States for the latter. Currently, most of Jordan's IT exports are to the region and in this market, Jordanian firms face competition from Indian and Israeli IT companies. However, there is a niche area for Jordan due to its skilled workforce, similar culture, people to people contacts and familiarity with Arabic to penetrate the Gulf market, where demand for IT continues to grow at a rapid clip. Jordan could use its knowledge of Arabic and cultural links to forge renewed growth in these segments. In pharmaceuticals, demand in the region continues to grow as discussed previously even as Jordanian companies continue to invest in R&D and innovation, and market new products. The large U.S. market for apparel is highly attractive for Jordan's competitive garment export sector. By moving up the value chain, Jordan can avoid competition from low-cost suppliers such as China and India, as well as increase its export revenue base.

280. Jordan needs to tap into demand from new markets for its existing export sectors of fruits and vegetables, textiles, and tourism. Currently, most of fruit and vegetable exports go to the region, and only a tiny fraction to European markets. There is scope to find several niche markets in Europe especially during the winter season as well as with better packaging to compete with African and Israeli exporters. In tourism, the Arab and East European markets offer tremendous opportunities to increase revenues. Jordan can focus on higher-end tourism, of which the largest segment currently goes to Lebanon, as well as increasing the length of stay of tourists by marketing Jordan as a whole. High growth areas for the regional market are adventure and eco-tourism. Other markets include a growing Eastern European market including Russia for cultural and religious tourism such as the Baptism site. In garment exports, Jordan needs not only to move up the value-added chain, but also diversify away from the United States to other lucrative markets such as the EU.

281. The outlook for penetrating new markets with new products is less optimistic, largely due to a lack of experience and knowledge. It is conceivable however, that the sunrise pharmaceutical industry could increase its penetration of the EU market, and other specialized exports such as Dead Sea minerals and olive oil could find new markets and thereby boost overall export growth.

D. Outlook and Challenges

282. The surge in apparel exports to the United States to take advantage of the duty and quota free QIZ regime has been the dominant source of export growth during the last few years. The elimination of quotas at end-2004, under the WTO/ATC, will be a significant trade shock for Jordan which will likely induce a number of companies currently operating in Jordan to relocate to countries with lower unit labor costs and/or shorter lead and delivery times.

283. The elimination of the WTO/ATC quota regime represents, however, a threat as well as an opportunity. Jordan will maintain some advantages as a result of duty-free access to the U.S. market under both the QIZ scheme and the U.S.-Jordan FTA, as well as in the EU market under the Association Agreement. Seizing upon these advantages will require a shift from mass garment production to higher value-added textile items which generally enjoy greater tariff protection in these two major markets. Prospects for such a shift seem encouraging, given the sustained interest from a number of foreign textile manufacturers in relocating production in Jordan, shortly ahead of the elimination of WTO/ATC quotas.[95]

284. In addition, the footloose apparel FDI and the clustering of production in the QIZs has benefited Jordan through the transfer of modern techniques, labor training, and the demonstration effects of exporting. Local workers have improved their skills and work ethics, managers have learnt more efficient production techniques, and owners have gathered knowledge about marketing and distribution channels to export markets. These intangible assets will remain even after the quota regime is dismantled, and can be leveraged by Jordanian exporters to seek new markets, move up the value chain, and diversify their export portfolios. The extent to which they take advantage of these assets will depend largely on entrepreneurial initiative and an ability to take risks.

285. Jordan's institutions and government policy provide a conducive environment for export growth. The government should continue to reduce its role in the economy, including through further privatization, and encourage private sector development. A further liberalization of its trade regime, including on a unilateral basis and beyond its current commitment under the WTO, together with improvements in governance should encourage further growth. Also, Jordan has been able to create comparative advantage, especially in textiles and apparel, by preferential trade agreements due to its good relations with most countries. Preferential market access will continue to be a strong determinant of export

[95] Twelve new textile companies were established in the QIZs in 2003. In addition, two major foreign investment projects are being finalized to start production in the second half of 2004 to take advantage of Jordan's duty-free access to the U.S. market. These projects should reportedly employ some 5,000 workers, which represents almost one-sixth of the current employment in Jordan's garment and textile sector.

growth for Jordan over the medium-term, in particular the duty-free access to the U.S. market and the Association Agreement with the EU. Jordan could potentially continue to translate its strong political goodwill into beneficial trade arrangements.

286. Jordan needs to address supply bottlenecks in order to reap the full benefits of its competitive advantages. The recent privatization of container handling at the port of Aqaba should contribute to removing a supply constraint facing all major merchandise exporting sectors. This should be complemented by the elimination of the existing monopoly of the truckers' union on road transport from Aqaba to Amman and the rest of Jordan. Passenger transport and freight are also affected by the monopoly landing rights of Royal Jordanian. Tourism and "just-in-time" products such as perishable fruits and vegetables bound for Europe are the ones which are most affected by the paucity of flights to and from Jordan. Vocational training for the textiles and tourism sectors needs to be enhanced as both sectors face a shortage of manpower with the necessary skills. A regulatory structure needs to be put in place to address legal and intellectual property issues in the ICT sector as well in for regulating the operations of QIZs to enhance their functioning. To harness the potential from the information sectors, Jordan will need to improve connectivity and enhance the enabling environment.

287. Provided that supply constraints are tackled, Jordan should retain favorable medium-term export prospects. Specifically, under a baseline scenario, exports of goods and nonfactor services could be reasonably expected to increase on average by about 7.5 percent in U.S. dollar terms over the period 2004–2009. Merchandise exports receipts are projected to grow by 6.8 percent a year, mainly driven by the dynamism of non-mineral sectors. Exports of nonfactor services are projected to increase faster by some 2 percentage points on average, with a catch up of sectors other than tourism, as key foreign exchange providers. (Table VIII.6).

288. Growth prospects for mineral-based exports would mainly stem from increased phosphate production as a result of the Eshidya mine and higher potash capacity envisaged from the removal of production bottlenecks at the refinery level, largely due to the additional expertise provided in this area by a leading Canadian firm that bought half of the government's stake in Arab Potash Company, in 2003. The growth of foreign exchange earnings from traditional exports is likely, however, to be constrained by subdued price prospects due to increased competition from Asian suppliers. The outlook for agricultural exports would also be mostly volume driven on the back of continued demand from neighboring countries, with possible price gains expected only gradually as producers may be able to tap higher value-added, counter-seasonal niche markets in Europe.

Table VIII.6 Jordan. Baseline Export Prospects, 2004-2009

	2004	2005	2006	2007	2008	2009
	(Amounts in billions of U.S. dollars)					
Exports	4.8	5.1	5.5	5.8	6.3	6.8
Merchandise	3.2	3.4	3.7	3.9	4.2	4.4
Domestic	2.5	2.6	2.8	3.0	3.2	3.5
Traditional 1/	0.5	0.5	0.5	0.5	0.5	0.6
Non traditional	2.0	2.1	2.3	2.5	2.7	3.0
Agriculture	0.2	0.2	0.2	0.2	0.2	0.2
Manufactures	1.2	1.2	1.3	1.4	1.5	1.6
ATC	0.8	0.8	0.8	0.9	1.0	1.1
Other	0.4	0.4	0.4	0.5	0.5	0.5
Other 2/	0.7	0.7	0.8	0.9	1.0	1.1
Reexports	0.8	0.8	0.9	0.9	0.9	0.9
Non factor services	1.5	1.7	1.8	2.0	2.1	2.4
Tourism	0.9	0.9	1.0	1.1	1.1	1.2
Other	0.7	0.7	0.8	0.9	1.0	1.1
	(Annual growth in percent)					
Exports	8.1	6.3	7.2	6.9	7.9	8.3
Merchandise	8.3	5.8	6.7	6.0	7.0	7.0
Domestic	7.2	5.0	7.8	6.9	8.2	8.2
Traditional 1/	5.4	7.0	8.4	1.4	1.5	1.2
Non traditional	7.7	4.6	7.6	8.2	9.6	9.6
Agriculture	4.8	5.0	5.5	6.2	6.5	6.5
Manufactures	10.3	2.3	6.9	7.7	8.7	8.8
ATC	13.9	0.4	7.0	8.0	9.3	9.5
Other	3.7	6.3	6.8	7.0	7.5	7.5
Other 2/	4.0	8.5	9.3	9.6	11.9	11.3
Rexports	12.0	8.1	3.3	3.0	3.0	2.7
Non factor services	7.7	7.5	8.2	8.8	9.8	10.9
Tourism	6.5	6.5	7.0	7.5	8.0	8.5
Other 3/	9.2	8.7	9.8	10.4	12.0	13.6

Source: Fund staff projections

1/ Phosphates, potash and fertilizers
2/ Including pharmaceuticals and ITC products
3/ Including ICT services

289. Export of manufactures can be projected to grow by some 7.5 percent in U.S. dollar terms on average during 2004–2009, assuming that the adverse impact of the upcoming elimination of WTO/ATC quotas is limited to a relatively short transition of Jordan's textile industry up the value-added chain. Under this baseline scenario, textile and apparel export growth would come to a halt in 2005, before gradually increasing to reach 8 percent per year by the end of the decade. Other manufactured exports could experience a smoother and somewhat faster growth path, albeit from a lower base.

290. Additional growth momentum should be mainly provided by the pharmaceutical industry, the ICT and the tourism sectors. Provided it continues to invest in R&D and other processes to comply with global standards, Jordan's pharmaceutical industry should enjoy solid export prospects, particularly in Middle-Eastern markets, but also in some specific segments of more mature markets. Likewise, Jordan's relatively young but dynamic IT sector appears poised for strong growth as it can tap a relatively large supply of skilled workers to meet the demand from niche markets in the region due to cultural and linguistic ties. Tourism prospects should also be strong, particularly if supply can be adequately diversified to better meet substantial demand from regional visitors and if new markets such as Eastern Europe can be further tapped.

291. The above outlook however is subject to some downside risk, particularly as the impact of the elimination of WTO/ATC quotas may prove more severe than envisaged under the baseline. The risk posed by this on Jordan's external prospects can be illustrated by simulating the balance of payments and external debt impacts of three adverse scenarios for ATC exports. Scenario A assumes that ATC exports drop by 25 percent in 2005, and grow by only three-fourth of the rates envisaged under the baseline during 2006–2009 (Table VIII.6). The two other scenarios B and C are even more adverse, as they assume respectively that ATC exports drop by 50 percent and 75 percent in 2005, before growing by only one-half and one-third of the rates envisaged under the baseline during 2006-2009. Financing gaps are calculated and added to the external debt stock under each scenario. It is also assumed that 65 percent of export receipts shortfall are offset by lower imports, based on the 35 percent minimum value-added requirement under the U.S.-FTA.

292. Based on these illustrative scenarios, the elimination of the WTO/ATC quotas could increase the external current account deficit by between 0.8 and 2.2 percentage points of GDP a year during 2005-2009. This would significantly slow the reduction of Jordan's external debt toward more sustainable levels, even if part of the shock to the balance of payments could be financed from a drawdown of Jordan's currently quite comfortable level of international reserves. For instance, assuming that one-fourth of the financing gap in any year is financed through lower reserves, the external debt-to-GDP ratio would still end up between 3 and 8 percentage points higher than under the baseline (Table VIII.7).

293. Another significant downside risk arises from the termination of Jordan's access to heavily subsidized supplies of crude oil by Iraq since the beginning of the war in 2003. While temporary supplies of subsidized oil from other Arab countries have mitigated the impact of the loss of the Iraqi oil grant in 2003, these arrangements may not extend into the medium-term. The end of subsidized oil could therefore add about 3 percent of GDP annually to the import bill and imply a loss of competitiveness for Jordanian exports, as domestic petroleum product prices will need to be increased to pass on the higher cost to the private sector. Based on present projections regarding oil prices in the next few years, Fund staff estimates indicate that this could result in an appreciation of the REER in the range of 1–2 percent.

Table VIII.7. Jordan. External Vulnerability to the Elimination of the Quotas under the WTO/ATC

	2004	2005	2006	2007	2008	2009
	Projections					
	(In percent)					
Growth of apparel, textile and clothing export receipts						
Baseline	13.9	0.4	7.0	8.0	9.3	9.5
Adverse Scenarios A	13.9	-25.0	5.3	6.0	6.9	7.1
Adverse Scenarios B	13.9	-50.0	3.5	4.0	4.6	4.8
Adverse Scenarios C	13.9	-75.0	2.3	2.7	3.1	3.2
Growth of total exports receipts 1/						
Baseline	8.1	6.3	7.2	6.9	7.9	8.3
Adverse Scenarios A	8.1	2.1	7.0	6.7	7.6	8.0
Adverse Scenarios B	8.1	-2.0	6.9	6.5	7.5	7.8
Adverse Scenarios C	8.1	-6.1	7.0	6.6	7.5	7.9
	(In percent of GDP)					
External current account balance 2/, 3/						
Baseline	5.3	1.6	0.2	0.0	-0.1	-0.2
Adverse Scenarios A	5.3	0.9	-0.5	-0.8	-1.0	-1.1
Adverse Scenarios B	5.3	0.3	-1.2	-1.5	-1.7	-2.0
Adverse Scenarios C	5.3	-0.4	-1.8	-2.1	-2.4	-2.6
External debt 2/, 3/, 4/						
Baseline	68.6	62.8	56.4	51.3	46.9	42.1
Adverse Scenarios A	68.6	63.2	57.7	53.1	49.2	45.0
Adverse Scenarios B	68.6	64.0	59.0	54.9	51.4	47.6
Adverse Scenarios C	68.6	64.9	60.2	56.6	53.5	50.1
	(In months of imports of goods and non factor services)					
International reserves 2/, 4/						
Baseline	8.6	8.0	7.3	6.7	6.3	5.8
Adverse Scenarios A	8.6	8.2	7.5	6.9	6.1	5.5
Adverse Scenarios B	8.6	8.3	7.6	6.8	5.9	5.2
Adverse Scenarios C	8.6	8.4	7.6	6.8	5.8	4.9
	(In millions of U.S. dollars)					
Financing gap 2/						
Baseline	--	--	--	--	--	--
Adverse Scenarios A	--	72.2	84.8	99.5	119.1	140.7
Adverse Scenarios B	--	143.4	165.0	192.0	224.8	263.7
Adverse Scenarios C	--	213.5	243.3	278.2	319.6	366.6
Financing gap 2/						
Baseline						
Adverse Scenarios A						
Adverse Scenarios B						
Adverse Scenarios C						

Source: Fund staff projections.

1/ Of goods and non-factor services
2/ Taking account of the additional net interest burden, assuming an interest rate of 5 percent per year.
3/ For the adverse scenarios, the ratios take account of the estimated GDP impact of lower growth of value-added by the textile industry.
4/ Assuming that one fourth of the financing gap in any year is financed by a loss of international reserves, rather than by the accumulation of new external debt.

294. On the other hand, a possible further correction in the U.S. dollar against other major currencies could offset part of the terms of trade shocks mentioned above. Under the current peg, a further depreciation of the U.S. dollar would result in increased competitiveness of the Jordanian dinar against other major currencies to the extent that inflation in Jordan remains close to industrial country levels.

295. In conclusion, provided that both the government and the private sector rise to the challenges posed by adverse trade shocks, in particular the elimination of the WTO/ATC quotas at the end of 2004, export growth over the medium term may prove somewhat higher than envisaged under our baseline projections. Jordan's external sector seems therefore poised to remain the key contributor to growth in this small open economy.

Table 1. Jordan: Selected Indicators, 1999–2003

Quota: SDR 170.5 million
Population: 5.3 million (2001)
Per capita income: US$1,806 (2003) (World Bank Atlas Methodology)

	1999	2000	2001	2002	2003
	(Percent change; unless otherwise indicated)				
National income and prices					
Nominal GDP (billions of U.S. dollars)	8.1	8.5	8.9	9.3	9.9
Real GDP at market prices	3.1	4.1	4.2	5.0	3.2
CPI (period average)	0.6	0.7	1.8	1.8	2.3
	(Percent of GDP)				
Saving and Investment					
Gross national savings (including grants)	30.1	22.9	22.2	27.0	33.2
Gross capital formation	25.2	22.2	22.2	22.5	22.2
Central government finances					
Revenue 1/	30.7	30.1	30.5	30.2	35.9
Expenditure and net lending	34.7	34.8	34.2	35.2	38.3
Overall fiscal balance (after grants)	-3.5	-4.7	-3.7	-5.0	-1.1
	(Changes as a percent of beginning of period money stock)				
Money and credit (end of period)					
Money and quasi-money	12.0	10.2	5.8	7.0	11.0
Net foreign assets	10.4	12.6	1.8	5.4	11.4
Net domestic assets	1.5	-2.4	4.0	1.6	-0.4
Interest rate on 3-month central bank CDs (in percent)	6.00	6.00	3.90	3.00	2.10
Income velocity of broad money	0.83	0.81	0.80	0.79	0.79
	(In billions of U.S. dollars; unless otherwise indicated)				
Balance of payments					
Exports, f.o.b.	1.8	1.9	2.3	2.8	3.0
Imports, f.o.b.	3.7	4.1	4.3	4.4	4.9
Net services	1.7	-0.1	-0.2	-0.2	-0.3
Current account (excluding official transfers)	0.0	-0.3	-0.5	-0.1	-0.2
In percent of GDP	0.0	-4.1	-5.3	-1.0	-2.2
Current account (including official transfers)	0.0	0.1	0.0	0.4	1.1
In percent of GDP	5.0	0.7	0.0	4.5	11.1
Overall balance	0.6	0.9	-0.1	0.3	1.1
International reserves					
Gross official foreign exchange reserves (end of period)	2.0	2.7	2.6	3.5	4.7
In months of imports of GNFS 2/	7.1	6.4	6.0	7.8	9.7
Debt					
External debt (public and publicly guaranteed)	7.3	7.3	7.1	7.7	7.6
In percent of GDP	89.9	86.0	80.3	81.9	77.1
Debt service ratio	22.9	20.6	20.4	18.7	19.5
Government domestic net debt (in percent of GDP)	15.2	15.8	18.3	20.1	24.4
	(In millions of SDR; unless otherwise indicated)				
Use of Fund resources					
Net Purchases	29.5	-8.6	-9.8	10.5	...
Exchange rates					
U.S. dollars per Jordan dinars (period average)	1.4	1.4	1.4	1.4	1.4

Sources: Jordanian authorities; World Bank World Development Indicators 2002; and Fund staff estimates.

1/ Including grants.
2/ Excluding imports for re-exports.

Table 2. Jordan: Sectoral Origin of Gross Domestic Product
at Constant 1994 Prices, 1999–2003

	1999	2000	2001	2002	Prel. 2003
	(In millions of Jordanian dinars)				
Agriculture	148	156	159	180	183
Mining	142	134	142	156	154
Manufacturing	694	734	777	865	884
Electricity and water	120	126	134	140	141
Construction	234	236	266	282	296
Trade and services	508	552	564	578	600
Transport and communications	778	815	861	907	981
Government services	767	817	844	992	886
Other services 1/	1,040	1,065	1,100	1,123	1,151
Real GDP at basic prices	4,430	4,635	4,846	5,096	5,278
Net indirect taxes	751	758	773	865	809
Real GDP at market prices	5,181	5,394	5,619	5,900	6,087
	(Annual percentage changes)				
Agriculture	-29.3	5.4	1.8	13.4	1.6
Mining	2.8	-5.2	5.6	10.2	-1.3
Manufacturing	4.9	5.7	5.8	11.4	2.2
Electricity and water	6.6	5.2	6.0	4.4	1.1
Construction	7.0	1.1	12.5	6.2	4.9
Trade and services	5.0	8.7	2.2	2.4	3.9
Transport and communications	6.4	4.7	5.7	5.3	8.2
Government services	3.3	6.5	3.2	17.6	-10.7
Other services 1/	2.8	2.3	3.3	2.1	2.5
Real GDP at basic prices	2.8	4.6	4.5	5.2	3.6
Net indirect taxes	4.7	1.0	2.0	11.8	-6.4
Real GDP at market prices	3.1	4.1	4.2	5.0	3.2
	(Sectoral contribution in percent)				
Agriculture	-0.8	0.2	0.0	0.4	0.2
Mining	0.1	-0.1	0.1	0.3	0.0
Manufacturing	0.7	0.8	0.8	1.7	0.2
Electricity and water	0.2	0.1	0.1	0.1	0.0
Construction	0.3	0.0	0.6	0.3	0.2
Trade and services	0.5	0.9	0.2	0.2	0.4
Transport and communications	1.0	0.7	0.9	0.8	1.3
Government services	0.5	1.0	0.5	0.4	0.4
Other services 1/	0.6	0.5	0.6	0.4	0.5
Real GDP at basic prices	2.4	4.0	3.9	4.5	3.2

Sources: Department of Statistics; and Fund staff estimates.

1/ Comprises finance, insurance, real estate and business services; community, social, and perso services; nonprofit services to households; domestic services of households; and an imputed bank

Table 3. Jordan: Sectoral Origin of Gross Domestic Product at Current Prices, 1999–2003

	1999	2000	2001	2002	Prel. 2003
	(In millions of Jordanian dinars)				
Agriculture	116	121	124	137	147
Mining	164	172	176	190	194
Manufacturing	750	798	837	914	954
Electricity and water	129	134	141	148	157
Construction	207	203	231	244	265
Trade and services	543	589	619	630	668
Transport and communications	762	820	879	949	1,050
Government services	996	1,042	1,077	1,120	1,161
Other services 1/	1,187	1,265	1,333	1,393	1,478
GDP at basic prices	4,854	5,144	5,417	5,724	6,074
Net indirect taxes	913	845	894	929	918
GDP at market prices	5,767	5,989	6,310	6,653	6,991
	(In percent of GDP at market prices)				
Agriculture	2.0	2.0	2.0	2.1	2.1
Mining	2.8	2.9	2.8	2.8	2.8
Manufacturing	13.0	13.3	13.3	13.7	13.6
Electricity and water	2.2	2.2	2.2	2.2	2.2
Construction	3.6	3.4	3.7	3.7	3.8
Trade and services	9.4	9.8	9.8	9.5	9.6
Transport and communications	13.2	13.7	13.9	14.3	15.0
Government services	17.3	17.4	17.1	16.8	16.6
Other services 1/	20.6	21.1	21.1	20.9	21.1

Sources: Department of Statistics; and Fund staff estimates.

1/ Comprises finance, insurance, real estate and business services; community, social, and pe services; non profit services to households; domestic services of households; and an imputed bank service charge.

Table 4. Jordan: National Expenditure Accounts at Current Prices, 1998–2002

	1998	1999	2000	2001	2002
	(In millions of Jordanian dinars)				
Total consumption	5,179	5,265	5,907	6,588	6,671
Government	1,077	1,025	1,092	1,458	1,517
Other	4,102	4,239	4,815	5,130	5,154
Gross fixed investment	1,190	1,354	1,263	1,260	1,252
Government	337	332	313	368	...
Other	889	915	1,015	971	...
Change in stocks	36	-107	64	79	79
Gross domestic expenditure	6,404	6,512	7,234	7,928	8,002
Net exports of goods and non-factor services	-795	-744	-1,245	7,080	...
Exports	2,516	2,505	2,507	2,764	...
Imports	-3,310	-3,249	-3,753	4,316	...
GDP at market prices	5,610	5,767	5,989	6,310	6,653
	(In percent of GDP)				
Total consumption	92.3	91.3	98.6	104.4	100.3
Government	19.2	17.8	18.2	23.1	22.8
Other	73.1	73.5	80.4	81.3	77.5
Gross fixed investment	21.2	23.5	21.1	20.0	18.8
Government	6.0	5.8	5.2	5.8	...
Other	15.8	15.9	16.9	15.4	...
Change in stocks	0.6	-1.8	1.1	1.3	1.2
Gross domestic expenditure	114.2	112.9	120.8	125.6	120.3
Net exports of goods and non-factor services	-14.2	-12.9	-20.8	112.2	...
Exports	44.8	43.4	41.9	43.8	...
Imports	-59.0	-56.3	-62.7	68.4	...
Memorandum items:					
Gross domestic savings	22.1	26.6	22.9	22.2	...
Net factor income from abroad (in millions of Jordanian dinars)	-15	-19	84	119	...
GNP at market prices (in millions of Jordanian dinars)	5,595	5,749	6,073	6,429	...

Sources: Department of Statistics; and Fund staff estimates.

Table 5. Jordan: Monthly Consumer Price Index, 1999–2003

	1999	2000	2001	2002	2003
			(1997=100)		
January	103.1	104.3	103.9	107.8	108.8
February	102.5	104.5	104.8	108.1	109.7
March	103.1	105.4	106.1	108.5	110.4
April	104.3	105.6	107.1	109.3	110.0
May	103.3	105.0	104.8	108.2	111.1
June	103.5	103.9	105.4	107.9	110.5
July	102.5	103.7	106.6	107.7	110.3
August	103.8	104.6	107.3	108.2	111.1
September	104.1	105.0	107.4	108.7	111.4
October	104.2	103.9	107.1	108.1	111.6
November	104.4	103.2	107.0	107.8	111.8
December	105.8	103.8	107.8	108.3	112.2
Annual average	103.7	104.4	106.3	108.2	110.7
Percent change	0.6	0.7	1.8	1.8	2.3
			(12-month change in percent)		
January	-0.1	1.2	-0.4	3.7	1.0
February	-0.5	1.9	0.3	3.2	1.5
March	-0.3	2.3	0.6	2.3	1.8
April	0.4	1.2	1.4	2.1	0.6
May	0.2	1.7	-0.2	3.2	2.7
June	1.7	0.4	1.4	2.4	2.4
July	0.7	1.2	2.8	1.1	2.5
August	1.2	0.8	2.6	0.8	2.8
September	0.3	0.9	2.3	1.2	2.5
October	-0.1	-0.3	3.1	1.0	3.2
November	1.1	-1.1	3.7	0.7	3.7
December	2.8	-1.9	3.8	0.5	3.6

Source: Department of Statistics.

Table 6. Jordan: Agricultural Production, 1998–2002

(In thousands of metric tons)

	1998	1999	2000	2001	Prel. 2002
Field crops					
Wheat	36.0	9.3	25.0	19.3	43.8
Barley	27.4	4.9	12.0	17.3	56.8
Tobacco	2.3	0.6	2.7	1.2	4.2
Lentils	1.6	0.2	1.1	1.9	1.7
Corn	12.3	12.5	19.0	10.4	13.8
Clover	27.4	32.4	61.9	57.3	230.6
Vegetables					
Tomatoes	299.9	293.3	354.3	310.2	359.8
Eggplant	52.9	43.7	35.7	36.7	59.4
Cucumbers	93.3	68.1	135.6	76.8	116.9
Cauliflowers and cabbages	62.6	83.1	38.3	30.0	88.1
Melons	106.8	142.1	69.0	85.7	108.2
Potatoes	88.1	96.3	97.1	101.3	105.3
Zucchini	37.3	35.7	49.5	57.5	47.7
Fruit Trees					
Olives	137.5	38.3	134.3	65.7	180.9
Grapes	17.9	18.2	23.9	58.0	34.8
Citrus fruits	161.3	85.6	124.7	136.3	124.2
Bananas	24.5	36.4	20.8	24.3	47.4
Apples	38.5	31.0	37.5	37.1	39.2
Peaches	7.0	10.6	6.9	8.1	14.0
Livestock production					
Red meat	22.1	21.0	15.1	...	...
Poultry meat	93.1	110.0	118.5	...	...
Milk	170.8	173.1	204.6	...	...
Eggs (millions of eggs)	948.1	937.0	752.0	...	...

Sources: Ministry of Agriculture; and Department of Statistics.

Table 7. Jordan: Industrial Production, 1999–2003

(1994 average index = 100)

	1999	2000	2001	2002	2003
January	97.9	102.1	117.3	138.59	135.54
February	100.0	114.6	116.4	119.7	101.07
March	114.0	107.6	118.3	145.25	110.7
April	116.4	115.8	132.0	147.1	125.13
May	120.2	127.8	136.4	143.97	139.74
June	113.1	120.6	121.8	143.89	144.32
July	117.1	131.3	138.1	160.4	154.78
August	124.1	137.3	139.7	165.29	158.59
September	114.9	130.3	147.2	158.97	138.31
October	125.4	130.4	149.0	155.6	156.09
November	123.3	121.8	133.0	139.6	130.54
December	117.3	98.4	126.6	130.36	148.48
Period average	115.3	119.8	131.3	145.8	137.0
Percentage change	0.3	3.9	9.6	11.1	-6.1

Source: Department of Statistics.

Table 8. Jordan: Selected Sectoral Industrial Production Indices, 1999–2003

(1994 average index = 100)

	Weight (Percent)	1999	2000	2001	2002	2003
Mining and quarrying	15.0	125.4	125.5	129.5	140.0	136.8
Phosphate	6.8	142.6	130.5	138.5	168.5	160.3
Potash	7.3	116.1	124.9	126.6	126.2	126.5
Manufacturing	76.7	109.9	115.6	129.3	145.4	134.6
Food items	13.6	108.8	106.8	108.0	119.8	102.6
Tobacco	10.2	165.5	220.7	283.2	350.4	343.9
Clothes and textiles	4.3	85.7	74.9	67.5	60.0	66.1
Furniture	2.8	142.7	143.6	165.6	259.3	112.6
Paper and its products	2.8	81.8	79.6	81.2	83.5	72.6
Fertilizers	3.0	138.1	108.8	115.9	122.1	112.1
Pharmaceuticals	4.6	149.5	185.1	204.2	178.5	182.0
Petroleum products	3.6	112.1	119.7	124.5	122.2	123.1
Plastic products	3.1	79.9	62.6	93.5	107.0	90.1
Cement, lime, and plaster	9.0	80.7	79.1	93.6	105.3	104.0
Electricity	8.3	147.4	148.7	152.5	161.2	159.7
General index	100.0	115.3	119.8	131.8	145.9	137.0
Percentage change		0.3	3.9	10.0	10.7	-6.1

Source: Central Bank of Jordan.

Table 9. Jordan: Construction Activity, 1997–2003

	Residential		Other		Total	
	Permits Issued	Area (1000 m^3)	Permits Issued	Area (1000 m^3)	Permits Issued	Area (1000 m^3)
1997	13,195	3,576	1,643	921	14,838	4,497
1998	14,424	3,428	1,547	670	15,971	4,097
1999	14,258	3,897	1,113	576	15,371	4,473
2000	16,381	4,133	1,544	780	17,925	4,913
2001	19,561	5,130	1,687	942	21,248	6,072
2002	19,587	5,902	1,846	1,405	21,433	7,307
2003	20,452	6,462	2,103	1,647	22,555	8,109

Source: Central Bank of Jordan.

Table 10. Jordan: New Business Registrations and Capital Investment, 1997–2003

(Capital in millions of Jordanian dinars)

	Industry		Construction		Agriculture		Trade		Other Services		Total	
	Capital	Number	Capital	Number	Capital	Number	Capital	Number	Capital	Number	Capital	Number
1997	50	306	3	61	0	0	84	2,686	69	1241	207	4,294
1998	24	387	6	75	0	0	125	2,608	37	1027	191	4,097
1999	28	400	5	82	0	0	69	2,716	37	557	139	3,755
2000	25	446	7	85	0	0	81	2,918	32	902	146	4,351
2001	24	501	4	79	1	7	71	3,070	94	1,286	194	4,943
2002	32	647	7	66	3	45	33	2,282	53	1,677	128	4,717
2003	20	701	6	85	1	38	44	2,387	32	1,802	103	5,013

Source: Central Bank of Jordan.

Table 11. Jordan: Central Government Fiscal Operations, 1999–2003

	1999	2000	2001	2002	2003
	(In millions of Jordanian dinars)				
Budgetary revenue and grants	1,788	1,802	1,926	2,010	2,511
Budgetary revenue	1,585	1,551	1,653	1,667	1,665
Tax revenue	884	962	1,020	1,000	1,083
Nontax revenue	701	589	633	667	582
Foreign grants	202	251	273	343	846
Budgetary expenditure	2,014	2,035	2,116	2,310	2,678
Current expenditure	1,649	1,739	1,791	1,852	2,057
Of which: interest	284	315	279	252	270
Capital expenditure	299	289	326	433	601
Net lending	65	7	0	25	20
Budget balance, before grants	-428	-484	-463	-643	-1,012
Privatization account spending	0	20	42	0	4
Net change in non-treasury accounts 1/	-23	29	-2	32	-98
Overall fiscal balance before grants	-405	-533	-504	-675	-919
Overall fiscal balance after grants	-203	-283	-231	-332	-73
Financing	203	283	231	332	73
Foreign financing (net)	118	-83	95	78	-323
Of which: financing gap	0	0	0	0	0
Privatization receipts (net)	0	426	-6	79	88
Domestic financing (net)	84	-60	143	176	309
	(In percent of GDP)				
Budgetary revenue	27.5	25.9	26.2	25.1	23.8
Foreign grants	3.5	4.2	4.3	5.2	12.1
Budgetary expenditure	34.9	34.0	33.5	34.7	38.3
Budget balance before grants	-7.4	-8.1	-7.3	-9.7	-14.5
Overall fiscal balance before grants	-7.0	-8.9	-8.0	-10.1	-13.1
Overall fiscal balance after grants	-3.5	-4.7	-3.7	-5.0	-1.1
Primary balance	1.4	0.5	0.8	-1.2	2.8
GDP at market prices (JD millions)	5,767	5,989	6,310	6,653	6,991

Sources: Ministry of Finance; and Fund staff calculations.

1/ The net change in non treasury accounts corresponds to the statistical discrepancy between the budget deficit measured from above-the-line and the financing data.
2/ Includes change in deferred payments.
3/ Includes the change in the float.

Table 12. Jordan: Government Revenue, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	Prel. 2003
Total budgetary revenue	1,788	1,802	1,926	2,010	2,511
Tax revenue	884	962	1,020	1,000	1,083
Taxes on income and profits	153	161	195	196	195
Corporations	94	97	130	121	128
Individuals	33	35	36	36	39
Salaried employees	13	15	17	18	19
Social service tax	4	5	5	5	5
Distributed profits	8	9	8	16	4
Taxes on domestic transactions	431	516	567	564	657
Consumption tax/GST	373	465	515	511	596
Other	58	51	52	54	61
Taxes on foreign trade	279	265	240	220	209
Customs duties	274	261	236	214	202
Fines and forfeits	5	4	5	5	7
Additional tax	22	21	19	20	21
Imports	0	0	0	0	0
Other	22	21	19	20	21
Nontax revenue	701	589	633	667	582
Licenses	25	37	33	32	32
Fees	172	200	215	225	249
Postal service	6	6	6	6	0
Interest and profits	53	42	99	49	57
Interest	27	20	22	22	22
Profits	26	23	77	27	36
Other nontax revenues	445	303	280	355	244
Public enterprise surpluses	43	28	45	58	50
JTC transfer	101	56	14	17	14
Pension contributions	19	19	18	18	19
Oil surplus 1/	162	50	98	110	23
Mining and gas royalties	33	14	16	24	21
Sale of stocks	0	0	0	0	0
Other	87	137	90	127	117

Source: Ministry of Finance.

1/ Includes payments of arrears by the refinery.

Table 13. Jordan: Government Expenditure, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	Prel. 2003
Total expenditure	2,014	2,035	2,116	2,310	2,678
Current expenditure	1,649	1,739	1,791	1,852	2,057
Wages and salaries	343	367	380	407	419
Purchases of goods and services	73	72	82	81	94
Interest payments	284	315	279	252	270
Internal	48	65	56	59	61
External	236	250	223	192	209
Subsidies	15	0	0	0	0
Other Transfers	377	408	453	505	582
Pensions	239	269	293	320	346
Social security	9	10	11	18	23
Decentralized agencies	67	67	77	92	97
Universities and municipalities	43	43	48	44	44
Other	19	20	24	30	72
Other 1/	45	47	60	57	63
Military expenditure	512	531	537	551	629
Capital expenditure	299	289	326	433	601
Net lending	65	7	0	25	20
Gross lending	97	31	35	62	64
Repayments	-32	-24	-35	-37	-44

Source: Ministry of Finance.

1/ In 1998 includes the reduction of past payments arrears of JD 71 million, or which JD 51 million classified as capital expenditure in the Jordanian Final Accounts.

Table 14. Jordan: Outstanding Gross Domestic Government Debt, 1999–2003

	1999	2000	2001	2002	Prel. 2003
Treasury bills and bonds	330	480	740	988	1208
Banking system	319	412	629	764	654
Central Bank of Jordan	4	0	0	...	...
Commercial banks	315	412	629	...	...
Nonbank	11	68	111	224	554
Development bonds	137	172	160	146	85
Banking system	74	85	69	64	36
Central Bank of Jordan	22	16	7	...	...
Commercial banks	52	69	62	...	...
Nonbank	63	87	91	82	49
Loans and advances	422	468	361	387	386
Banking system	401	391	351	378	378
Central Bank of Jordan	322	272	272	272	272
Commercial banks	79	119	79	106	106
Nonbank	21	77	10	9	8
Total central government domestic debt	889	1,120	1,261	1,521	1679
Banking system	794	888	1,049	1,206	1,068
Central Bank of Jordan	348	288	279	...	...
Commercial banks	446	600	770	...	...
Other holders	95	232	212	315	611
Own-budget agencies	135	83	108	135	144
Total central government and own-budget agencies domestic debt	1,024	1,203	1,369	1,656	1815
Treasury bills	5.7	8.0	11.8	14.9	17.2
Development bonds	2.4	2.9	2.6	2.2	1.2
Loans and advances	7.3	7.8	5.8	5.8	5.5
Total government domestic debt	15.4	18.7	20.1	22.9	23.9
Own-budget agencies	2.3	1.4	1.7	2.0	2.1
Total, including own-budget agencies	17.8	20.1	21.9	24.9	25.9

Source: Central Bank of Jordan.

Table 15. Jordan: Issuance and Amortization of Public Sector Securities, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	Prel. 2003
Treasury bills and bonds					
Issue	515	724	900	1,000	1,400
Amortization	423	574	640	752	1,180
Net issue	92	150	260	20	13
Government development bonds					
Issue	0	60	0	0	0
Amortization	18	26	12	14	61
Net issue	-18	34	-12	13	8
Public entities bonds					
Issue	20	102	73	75	95
Amortization	0	0	78	43	75
Net issue	20	102	-6	5	4
Total					
Issue	535	886	973	1,075	1,495
Amortization	441	600	730	808	1,316
Net issue	94	286	243	267	24

Source: Central Bank of Jordan.

Table 16. Jordan: Summary Operations of the Autonomous Agencies with Own Budgets, 1999–2003 1/

	1999	2000	2001	2002	Prel. 2003
Total revenue and grants	371	328	339	354	392
Total revenue	351	299	310	349	363
Current revenue	230	228	242	259	273
Capital revenues 2/	18	20	19	26	26
Central government transfers	103	51	49	61	65
Foreign grants	20	29	29	8	29
Total expenditure	354	342	367	392	404
Current expenditure	216	196	210	231	238
Of which: wages and salaries	67	66	65	70	73
Investment expenditure	137	146	157	161	166
Of which: foreign financed	49	55	55	43	37
Overall balance	17	-14	-29	-38	-11
Memorandum item:					
Overall balance excluding grants	-3	-43	-58	-43	-40
Current balance	14	32	32	28	35
Total revenue (excluding grants)	6.1	5.0	4.9	5.1	5.2
Total expenditure	6.1	5.7	5.9	5.8	5.8
Overall balance	0.3	-0.2	-0.5	-0.6	-0.2
Overall balance excluding grants	0.0	-0.7	-0.9	-0.7	-0.6
Current balance	0.2	0.5	0.5	0.4	0.5

Source: Jordanian authorities.

1/ Comprises 26 public entities with budgets approved by cabinet, and including inter alia, the Water Authority of Jordan, Jordan Investment Corporation, Aqaba railway, Port Authority, the Housing and Urban Development Corporation, the National Aid Fund, and the TV and Broadcasting Corporation.

2/ Excluding privatization receipts from the Jordan Investment Corporation.

Table 17. Jordan: Operations of the Water Authority of Jordan, 1999–2003

	1999	2000	2001	2002	2003
Total revenue and grants	144	164	139	108	164
Total revenue	125	135	111	100	144
Current revenue	60	65	71	73	84
Capital revenue	3	4	0	0	0
Transfers from government 1/	62	66	40	27	60
Foreign grants	19	29	28	8	20
Total expenditure	172	162	194	171	212
Current expenditure	82	60	67	68	70
Of which: wages and salaries	20	21	21	21	21
Investment expenditure	90	102	127	103	142
Current operational balance	-22	5	4	5	14
Overall balance	-28	2	-55	-63	-48
Total revenue and grants	2.5	2.7	2.2	1.6	2.3
Total revenue	2.2	2.3	1.8	1.5	2.1
Foreign grants	0.3	0.5	0.4	0.1	0.3
Total expenditure	3.0	2.7	3.1	2.6	3.0
Current expenditure	1.4	1.0	1.1	1.0	1.0
Investment expenditure	1.6	1.7	2.0	1.5	2.0
Current operational balance	-0.4	0.1	0.1	0.1	0.2
Overall balance	-0.5	0.0	-0.9	-0.9	-0.7
Memorandum items:					
Total assets	675	725	810	886	967
Debt outstanding	68	111	169	250	300
Foreign loans	61	74	102	153	186
Domestic loans	7	37	67	97	114

Source: Jordanian authorities.

1/ Includes government interest and amortization payments on Water Authority of Jordan domes

Table 18. Jordan: Operations of the Jordan Telecommunications Company, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	2003
Current revenue	200	199	202	193	197
Operations	193	204	212	204	193
Other	7	-5	-10	-11	4
Total expenditure	132	138	184	143	111
Current expenditure	71	82	94	105	92
Operations	68	78	90	102	89
Interest (foreign)	3	4	4	3	3
Investment expenditure	61	56	90	38	19
Current balance before tax	129	117	108	88	105
Overall balance before income tax	68	61	18	50	86
Income tax	-27	-25	-27	-18	-9
Overall balance after income tax	41	36	-9	32	77
Financing	-41	-36	9	-32	-77
Cash surplus	62	35	37	35	...
Transfer of loan to government	0	0	0	0	0
Dividend	62	35	37	35	...

Source: Jordan Telecommunications Company.

1/ Includes net change in receivables and payables, and add-back of depreciation, provisions, and resid

Table 19. Jordan: Operations of the Royal Jordanian Airline, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	2003
Current revenue	277	259	226	245	261
Scheduled revenue	220	215	188	208	234
Non-scheduled revenue	20	26	23	31	24
Non-operating revenue	37	18	15	6	3
Total expenditure	258	258	235	248	266
Current operating expenditure	228	244	225	227	257
Of which: fuel	35	44	43	44	49
Non-operating expenditure	30	14	10	21	9
Of which: interest	27	12	9	8	7
Overall balance	19	1	-9	-3	-5
Memorandum items:					
Total assets	264	231	217	226	205
Debt outstanding	89	…	…	68	28
Foreign loans	0	…	…	…	5
Domestic loans	89	…	…	20	23
Of which: owed to refinery	…	…	…	…	…
Capital leases outstanding 1/	106	90	72	55	50

Source: Jordanian authorities.

1/ Relates to aircraft and spare parts leases.

Table 20. Jordan: Monetary Survey, 1999–2003

(In millions of Jordanian dinars

	1999	2000	2001	2002	2003
Net foreign assets	3,003	3,852	3,985	4,411	5,492
Net domestic assets	3,686	3,582	3,881	4,008	3,974
Net claims on government	1,043	1,103	1,310	1,412	1,346
of which : on central government 1/A48	1,168	1,152	1,330	1,403	1,398
Claims on nonfinancial public enterprises	365	317	284	261	278
Claims on financial institutions	129	80	79	75	73
Claims on the private sector	4,011	4,212	4,696	4,848	5,016
Other items (net)	-1,862	-2,129	-2,488	-2,588	-2,739
Broad money	6,689	7,435	7,866	8,419	9,466
Currency in circulation	1,107	1,240	1,202	1,253	1,444
Jordanian dinar deposits	4,259	4,611	4,842	5,218	5,800
Foreign currency deposits	1,324	1,583	1,821	1,949	2,222
Memorandum items:					
Total resident deposits in foreign currency	1,546	1,658	1,713	1,898	1,821
Ratio of foreign currency deposits to total deposits (percent)	23.7	25.6	27.3	27.2	27.7
Velocity of end-of-period money stock	0.85	0.81	0.80	0.79	0.75
Velocity of average money stock	0.90	0.84	0.82	0.82	0.79
Velocity of Jordanian dinar money	1.06	1.02	1.04	1.03	0.97

Sources: Central Bank of Jordan; and Fund staff estimates.

1/ Including deposits of the United Nations Compensation Commission.

Table 21. Jordan: Factors Affecting the Changes in Broad Money, 1999–2003

	1999	2000	2001	2002	2003
	(In millions of Jordanian dinars)				
Net foreign assets	629	849	133	426	1,080
Net domestic assets	93	-162	298	127	-34
Net claims on government	105	-85	207	102	-66
Of which: on general budgetary government 1/	126	-36	178	73	-5
Claims on nonfinancial public enterprises	5	9	-33	-23	17
Claims on financial institutions	8	2	-1	-4	-1
Claims on the private sector	190	180	484	152	168
Other items (net)	-215	-268	-359	-100	-151
Broad money	721	687	431	553	1,047
Currency in circulation	154	133	-37	50	191
Jordanian dinar deposits	417	253	231	376	582
Foreign currency deposits	150	300	238	127	274
	(In percent of GDP)				
Net foreign assets	10.4	12.6	1.8	5.4	15.4
Net domestic assets	1.5	-2.4	4.0	1.6	-0.5
Net claims on government	1.7	-1.3	2.8	1.3	-0.9
Of which: on general budgetary government 1/	2.1	-0.5	2.4	0.9	-0.1
Claims on nonfinancial public enterprises	0.1	0.1	-0.4	-0.3	0.2
Claims on financial institutions	0.1	0.0	0.0	-0.1	0.0
Claims on the private sector	3.1	2.7	6.5	1.9	2.4
Other items (net)	-3.6	-4.0	-4.8	-1.3	-2.2
Broad money	12.0	10.2	5.8	7.0	15.0
Currency in circulation	2.6	2.0	-0.5	0.6	2.7
Jordanian dinar deposits	6.9	3.8	3.1	4.8	8.3
Foreign currency deposits	2.5	4.4	3.2	1.6	3.9

Sources: Central Bank of Jordan; and Fund staff estimates.

1/ Including deposits of the United Nations Compensation Commission.

Table 22. Jordan: Net Foreign Assets of the Banking System, 1999–2003

(In millions of U.S. dollars)

	1999	2000	2001	2002	2003
Total foreign assets (net)	4,662	5,846	6,043	4,722	4,805
Central Bank of Jordan (net)	3,235	3,887	3,683	3,242	3,352
Assets	3,465	4,064	3,865	3,370	3,477
Gold 1/	120	99	112	100	107
SDR	0	0	1	1	1
IMF reserve position	0	0	0	0	0
Foreign exchange 2/	2,019	2,787	2,604	2,494	2,611
Bilateral accounts 3/	1,327	1,178	1,148	775	758
Liabilities	231	178	181	128	125
Commercial banks (net)	1,428	1,960	2,360	1,480	1,453
Assets 4/	4,713	5,779	6,573	4,825	4,784
Liabilities	3,285	3,819	4,214	3,345	3,330

Source: Central Bank of Jordan.

1/ National valuation.
2/ Excludes counterpart to commercial banks' deposits at the CBJ.
3/ Includes claims on the Central Bank of Iraq.
4/ Includes foreign currency deposits at the CBJ.

Table 23. Jordan: Sectoral Allocation of Credit, 1999–2003

	1999	2000	2001	2002	2003
	(In millions of Jordanian dinars)				
Agriculture	121	128	106	103	99
Mining	93	101	78	95	78
Industry	659	683	729	790	801
Commerce and trade	1,138	1,113	1,206	1,251	1,327
Construction	764	745	729	765	805
Transportation	201	134	132	164	167
Tourism, hotels, restaurants	139	155	171	174	173
Financial services	177	153	151	140	133
Public services and infrastructure	231	240	326	350	349
Other	944	1,095	1,322	1,300	1,331
Total	4,466	4,547	4,949	5,130	5,262
Of which: to private residents	3,857	4,001	4,457	4,585	4,667
	(Percent change)				
Agriculture	5.0	5.7	-17.6	-2.5	-4.0
Mining	8.0	8.5	-22.8	22.7	-18.2
Industry	7.0	3.7	6.6	8.4	1.5
Commerce and trade	3.0	-2.2	8.4	3.7	6.1
Construction	-3.5	-2.4	-2.1	4.9	5.2
Transportation	-10.2	-33.1	-1.6	23.8	1.8
Tourism, hotels, restaurants	28.2	11.3	10.2	1.5	-0.4
Public services and infrastructure	3.4	4.1	-1.2	-7.4	-4.7
Financial services	10.0	-13.9	36.0	7.1	-0.2
Other	10.3	16.0	20.7	-1.7	2.4
Total	4.2	1.8	8.9	3.7	2.6
Of which: to private residents	4.7	5.0	11.4	2.9	1.8

Sources: Central Bank of Jordan; and Fund staff estimates.

Table 24. Jordan: Balance Sheet of the Central Bank, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	2003
Net foreign assets	1,992	2,463	2,321	2,940	3,909
Foreign assets	2,890	3,267	3,064	3,694	4,571
Of which: bilateral accounts	941	835	814	775	767
Foreign liabilities	-465	-419	-420	-430	356
Liabilities other than to the Fund	-164	-126	-129	-128	125
Net Fund position 1/	-301	-293	-291	-303	232
Banks' foreign currency deposits with CBJ	-432	-385	-324	-324	-306
Net domestic assets	-179	-587	-513	-1,046	-1,622
Claims on government (net) 2/	802	655	664	580	729
Claims on nonfinancial public enterprises (net)	-20	-19	-19	-25	-63
Claims on Social Security Corporation	0	0	0	-30	-66
Claims on financial institutions (net)	32	27	14	24	24
Claims on the private sector	12	13	14	15	15
Claims on commercial banks	52	255	114	121	87
Rediscount facilities	56	52	69	55	89
Bail-out operations	270	266	264	263	263
Remunerated deposits	-274	-63	-219	-197	-265
Certificates of deposit	-970	-1,422	-1,234	-1,644	-2,176
Other items, net (asset: +)	-87	-96	-66	-86	-172
Jordanian dinar reserve money	1,813	1,876	1,808	1,894	2,287
Currency	1,183	1,323	1,279	1,333	1,535
Commercial banks' reserves	630	553	529	561	751
Legal reserves	538	391	283	322	428
Excess reserves	92	162	246	239	323
Memorandum items:					
Total reserve money (foreign currency and Jordanian dinars)	2,245	2,262	2,132	2,218	2,593
Money multiplier (for Jordanian dinar liquidity)	3.01	3.12	3.34	3.42	3.17
Official foreign exchange reserves (in millions of U.S. dollars) 3/	1,991	2,763	2,579	3,495	4,740
Ratio of official foreign exchange reserves to Jordanian dinar broad money (percent)	25.8	33.5	30.3	38.3	46.4

Sources: Central Bank of Jordan; and Fund staff estimates.

1/ Adjusted by replacing the Fund position with cumulative net purchases since 1992, valued at transaction exchange rates.

2/ Including deposits of the United Nations Compensation Commission.

3/ SDR and foreign exchange, minus U.S. dollar deposits of banks and nonresidents.

Table 25. Jordan: Operations of the Central Bank of Jordan, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	Prel. 2003
Revenue	107.3	153.7	163.9	92.8	132.6
Revenue of foreign investments	89.3	140.3	140.5	79.4	122.5
Revenue from investments in Jordan	11.8	7.6	7.1	4.3	3.7
Other revenue	6.2	5.8	16.3	91.0	6.4
Expenditure	138.0	125.8	145.7	104.2	86.9
Interest on banks' accounts and CDs	110.0	77.0	108.8	71.9	56.8
Other interest and commissions	9.6	24.7	2.4	3.9	5.4
Interest on accounts of government and public institutions	1.4	5.3	19.1	10.0	7.9
Other expenditure	17.0	18.8	15.4	18.4	16.8
Transfer to government 1/	0.0	15.0	12.0	0.0	0.0
Retained earnings/loss	-30.7	12.9	6.2	-11.4	45.7
Memorandum item:					
Retained earnings/loss (in percent of GDP)	-0.6	0.2	0.1	-0.2	0.7

Source: Central Bank of Jordan.

1/ Profits of JD 15 million in 2000 were actually transferred to the budget in January 2001.

Table 26. Jordan: Balance Sheet of Deposit Money Banks, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	2003
Net foreign assets	579	1,004	1,341	1,148	1,277
Foreign assets	2,908	3,712	4,328	4,493	4,382
Foreign liabilities	-2,329	2,708	2,987	3,345	3,105
Reserves	986	711	818	851	1,105
Deposits at CBJ	909	628	741	771	1,013
Currency	76	83	77	80	92
Deposits in foreign currency with the CBJ	433	385	332	332	306
Net credit to the CBJ	910	1162	1116	1522	2086
Credit from the CBJ	-334	-324	-336	-318	-356
CD holdings	970	1,422	1,234	1,644	2,176
Remunerated deposits	274	63	219	197	265
Domestic credit (excluding to CBJ)	4,758	5,013	5,670	5,976	5,942
Net claims on government (total)	355	415	645	833	618
Credit to government (net, general budget)	341	458	835	984	788
Of which: Brady bonds	75	61	47	65	2.2
Credit to government (net, autonomous agencies with own budget)	14	-43	96	104	99
Claims on municipalities and local government	0	0	0	0	0
Claims on the Social Security Corporation	0	1	0	0	0
Claims on financial institutions	45	49	58	49	46
Claims on nonfinancial public enterprises	308	317	284	261	278
Credit to the private sector	4,050	4,231	4,682	4,833	5,000
Of which: in foreign currency	266	315	388	441	536
Other items, net (asset: +)	-2,048	-2,103	-2,639	-2,719	-2,825
Of which: capital account	1,317	1,378	1,436	1,545	1,623
Total deposits	5,619	6,172	6,638	7,109	7,891
Demand deposits	823	952	1,154	1,365	1,881
Of which: in foreign currency	154	168	242	333	471
Time and savings deposits	4,796	5,221	5,484	5,744	6,010
Of which: in foreign currency	1,108	1,396	1,559	1,590	1,687
Memorandum items:					
Foreign currency lending/total lending to the private sector (in percent)	6.6	7.4	8.3	9.1	10.7

Sources: Central Bank of Jordan; and Fund staff estimates.

Table 27. Jordan: Indicators of Bank Soundness, 1999–2003

	1999	2000	2001	2002	June 2003
	(In millions of Jordanian dinars)				
Total assets	10,990	12,387	13,630	14,602	14,725
Total loans	4,267	4,367	4,771	4,955	5,045
Total capital	570	601	617	641	659
Capital and reserves 1/	864	883	902	956	933
Classified loans 2/	613	800	921	980	1,075
Provisions against classified loans 3/	274	278	335	333	396
Total assets in foreign currency	3,786	4,580	5,211	5,640	5,408
Of which: loans to residents in foreign currency	384	402	478	569	622
Total liabilities in foreign currencies	3,639	4,428	5,015	5,485	5,218
Of which: nonresident deposits	1,546	1,658	1,713	1,898	1,713
Net profits 4/	31	40	98	86	55
	(In percent)				
Total capital/total assets	5.2	4.9	4.5	4.4	4.5
Capital and reserves/total assets	7.9	7.1	6.6	6.5	6.3
Risk-weighted capital ratio	21.2	19.4	17.4	17.5	17.1
Share of banks with ratio below required minimum	--	--	...	...	
Classified loans/total loans	14.4	18.3	19.3	19.8	21.3
Provisions/classified loans	44.7	34.8	36.4	34.0	36.8
Net profits/total assets	0.3	0.3	0.7	0.6	0.4
Net profits/total loans	0.7	0.9	2.1	1.7	1.1

Source: Central Bank of Jordan.

1/ Capital and reserves are defined according to the capital adequacy definition of 1997.

2/ Loans at least 180 days overdue until 1999, then 150 days due for 2000, and 120 days due for 2001

3/ Provisions against classified loans in the year 2000 declined by JD 40 million due to a revised treatment of the provisions of one of the banks.

4/ With the agreement of the Central Bank of Jordan, no provisions were taken for the troubled banks pending acourt resolution.

Table 28. Jordan: Balance Sheet of the Specialized Credit Institutions, 1997–2001

(In millions of Jordanian dinars)

	1997	1998	1999	2000	2001
Foreign liabilities	89	88	86	82	74
Reserves	2	1	1	1	2
Net credit to the CBJ	-25	-24	-18	-8	0
Domestic credit (excluding to the CBJ)	303	310	307	311	329
Claims on government (net)	-10	-11	-11	-48	-51
Credit to government	5	2	2	2	0
Borrowing from government	-14	-14	-13	-50	-51
Claims on municipalities and public enterprises	56	63	68	68	64
Claims on other financial institutions (net)	-8	-14	-29	16	30
Claims on other financial institutions	51	41	22	70	74
Borrowing from other financial institutions	-59	-55	-51	-54	-44
Borrowing from others	-14	-14	-16	0	4
Credit to the private sector	279	286	295	275	283
Other items, net (asset: +)	-171	-184	-191	-207	-232
Fixed assets	11	15	22	24	28
Other assets	90	97	49	73	61
Capital	-82	-84	-85	-85	-85
Reserves	-72	-80	-92	-101	-118
Other liabilities	-119	-131	-85	-117	-119
Total deposits	20	15	14	17	18

Source: Central Bank of Jordan.

Table 29. Jordan: Selected Interest Rates, 1999–2003

(In percent per year)

	1999	2000	2001	2002	2003
Deposit rates (average)					
Demand	1.46	1.20	1.06	0.91	0.50
Saving	4.19	3.76	2.91	1.84	0.88
Time	7.89	6.55	5.19	3.97	2.75
Lending rates (average)					
Overdrafts	12.66	11.60	10.42	9.35	9.43
Loans and advances	12.67	11.38	10.45	9.85	8.92
Discount bills and bonds	13.37	12.81	11.88	10.95	10.24
Overnight interbank loans	1.03	5.75	3.88	2.88	2.13
CDs					
3-months	6.00	6.00	3.90	3.00	2.10
6-months	8.25	6.05	4.00	3.45	2.15
CBJ rediscount rate	8.00	6.50	5.00	4.50	2.50
CBJ overnight deposit rate 1/	0.50	5.63	3.75	2.75	2.00
CBJ 7-day repurchase agreements	9.25	7.50	6.00	5.50	3.50

Source: Central Bank of Jordan.

Table 30. Jordan: Operations of the Social Security Corporation, 1998–2002

	1998	1999	2000	2001	2002
Revenue	204	233	238	275	258
Subscriptions	127	143	153	178	215
Net investment and other income	77	90	85	97	43
Current expenditure	94	81	111	116	146
Social security payments	57	67	80	104	132
Other	37	14	31	12	14
Net income	110	152	127	159	112
Financing	-110	-152	-127	-159	-112
Change in bank deposits (- = increase)	-130	-158	5	-39	90
Change in holdings of equity (- = increase)	-16	-44	-78	-147	-59
Change in claims on government (- = increase)	30	13	-80	-16	-123
Lending (- = increase)	18	38	32	75	-14
Other 1/	-12	-1	-6	44	27
Memorandum items: 2/					
Net assets	1,134	1,286	1,412	1,572	1,684
Assets	1,159	1,321	1,440	1,611	1,744
Bank deposits	606	763	757	796	706
Equity holdings	148	192	271	418	477
Claims on government	57	45	124	140	263
Loans	204	166	135	60	74
Other	144	155	153	197	224
Liabilities	25	35	28	32	45
Revenue	3.6	4.0	4.0	4.4	3.9
Current expenditure	1.7	1.4	1.9	1.9	2.2
Net income	1.9	2.6	2.1	2.5	1.7
Net assets	20.1	22.3	23.6	25.1	25.6
Assets	20.5	22.9	24.0	25.7	26.5
Liabilities	0.4	0.6	0.5	0.5	0.7

Source: Jordanian authorities.

1/ Includes adjustment to cash basis.

2/ End-of-year balances.

Table 31. Jordan: Amman Financial Market Indicators, 1999–2003

	1999	2000	2001	2002	2003
Value of trading					
Manufacturing and mining	202.9	101.0	263.1	471.4	850.3
Banking and finance	128.1	128.5	300.3	349.8	524.8
Services	50.8	54.1	92.9	114.1	440.9
Insurance	7.6	4.1	6.2	11.4	39.1
Total	389.4	287.7	662.5	946.7	1855.2
Traded shares price index 1/	167.4	133.1	172.7	170.0	261.5
Manufacturing and mining	96.2	75.2	91.7	101.6	148.2
Banking and finance	251.9	198.7	275.2	255.7	443.4
Services	110.6	99.8	109.4	106.0	126.7
Insurance	123.7	119.7	133.2	149.9	228.8

Source: Amman Stock Exchange.

1/ Weighted by market value of capital; end of period.

Table 32. Summary Balance of Payments, 1999–2003
(In millions of U.S. dollars)

	1999	2000	2001	Prel. 2002	Prel. Est. 2003
Current account	405	59	-4	418	1,090
Trade balance	-1,460	-2,175	-2,007	-1,679	-1,931
Exports f.o.b.	1,832	1,899	2,294	2,772	3,000
Imports f.o.b.	3,292	4,074	4,301	4,450	4,931
Services (net)	4	-86	-243	-277	-258
of which: travel (net)	440	336	280	368	437
Income (net)	-11	135	187	111	122
of which: investment income (net)	-154	-27	9	-79	-76
of which: compensation of employees (net)	143	161	178	190	199
Current transfers (net)	1,873	2,184	2,059	2,259	3,156
Public (net)	390	405	461	510	1,266
Private (net)	1,483	1,780	1,598	1,755	1,840
of which: U.N. compensation 1/	248	529	68	76	111
of which: remittances	1,317	1,487	1,640	1,750	1,837
Capital account	217	576	-108	-89	-29
Public sector (net)	-44	-310	-88	-152	-723
Disbursements	373	171	342	334	178
Amortization 2/	417	531	457	481	900
Private sector (net)	261	883	-20	64	694
Direct foreign investment 3/	154	782	91	31	330
Portfolio and other capital flows	-3	104	-111	18	347
Errors and omissions	21	315	-82	0	17
Overall balance	622	950	-30	330	1,061

Table 32. Summary BOP continued, 1999–2003
(In millions of U.S. dollars)

	1999	2000	2001	Prel. 2002	Prel. Est. 2003
Financing	-622	-950	30	-330	-1,061
Increase in NFA (-) 4/	-926	-1,186	-185	-617	-1,254
Central bank 3/	-637	-586	290	-889	-1,267
Commercial banks	-289	-600	-475	272	13
Fund credit (net)	39	-12	-13	15	-100
Arab Monetary Fund (net)	-14	-17	1	-14	-9
Relief from debt operations 5/	3	65	22	69	28
Debt rescheduling	276	200	204	218	273
Financing gap	0	0	0	0	0
Memorandum items:					
Gross international reserves	1,970	2,742	2,565	3,474	4,745
In months of prospective imports GNFS 6/	4.8	6.4	6.0	7.8	9.7
In months of current merchandise imports	8.0	8.9	7.9	10.8	13.4
Annual merchandise export growth, percent	1.6	3.7	20.8	20.8	8.2
Domestic exports	0.5	2.8	25.1	15.1	5.3
Export of GNFS growth, percent	-0.4	0.1	6.8	13.4	3.4
Import growth, percent	-3.3	23.7	5.6	3.5	10.8
Excluding oil	-6.4	18.8	7.1	1.4	8.5
Import of GNFS growth, percent	-2.0	16.2	4.0	3.5	5.0
Current account balance in percent of GDP	5.0	0.7	0.0	4.5	11.1
GDP (in millions of U.S.dollars)	8,134	8,447	8,901	9,383	9,860

Sources: Jordanian authorities; and Fund staff estimates.
1/ U.N. compensation to Jordanian residents for personal and business losses related to the Gulf war.
2/ Includes the face value of debt reduction from debt restructuring operations, as well as a buyback of all of Jordan's Par Brady bonds in December 2003.
In 2004, allows for the early repayment of US$250 million of higher interest external debt.
3/ Includes the proceeds for US$170 million from the privatization of 26 percent of the Arab Potash Company for October 2003.
4/ The change in Fund credit outstanding is deducted from the change in NFA from monetary survey.
5/ The difference between the face value of debt reduction the cost of debt operations.
6/ In months of prospective import of goods and non-factor services for the following 12 months, excluding imports for re-exports.
7/ In terms of expected full year GDP.

Table 33. Jordan: Merchandise Imports, 1999–2003

	1999	2000	2001	2002	Prel. 2003
	(In millions of U.S. dollars)				
Food and live animals	683	747	739	691	790
Beverages and tobacco	38	47	47	61	83
Raw materials	119	146	150	149	138
Petroleum and petroleum products	450	718	699	770	993
Oil products	156	143	155	187	321
Crude oil	311	526	544	571	673
Volume (1000 barrels)	25,621	27,571	28,389	28,216	29,754
Unit price (in U.S. dollars per barrel) 1/	12	19	19	21	24
Oils and fats	63	56	55	83	102
Chemicals	471	493	535	567	628
Manufactured goods	552	696	940	973	1,103
Machinery and transport	1,022	1,313	1,324	1,255	1,297
Other manufactures	255	255	289	349	351
Other imports	64	125	93	127	186
Total imports (customs), c.i.f.	3,716	4,596	4,870	5,018	5,577
Of which: non-oil imports	3,249	3,860	4,171	4,249	4,584
Total imports (BOP), c.i.f. 2/	3,698	4,576	4,833	4,999	5,542
	(Annual percentage changes)				
Food and live animals	-9.0	9.5	-1.1	-6.6	14.4
Beverages and tobacco	17.0	22.4	-1.1	32.2	35.7
Raw materials	-4.8	23.0	2.2	-0.2	-8.2
Petroleum and petroleum products	26.7	59.5	-2.6	-9.1	18.1
Oil products	38.7	-8.3	8.0	21.1	71.4
Crude oil	22.2	69.2	3.4	4.9	17.9
Volume (1000 barrels)	-0.9	7.6	3.0	-0.6	5.5
Unit price (in U.S. dollars per barrel) 1/	23.3	58.3	0.9	7.7	16.0
Oils and fat	-22.5	-10.6	-2.0	49.7	23.5
Chemicals	-3.5	4.6	8.5	6.1	10.6
Manufactured goods	-10.2	26.2	35.0	3.6	13.4
Machinery and transport	-6.7	28.5	0.8	-5.1	3.3
Other manufactures	3.2	0.0	13.4	20.6	0.7
Other imports	65.3	96.5	-25.3	36.0	47.0
Total imports (customs), c.i.f.	-2.9	23.7	6.0	3.0	11.1
Of which: non-oil imports	-6.4	18.8	8.1	1.9	7.9
Total imports (BOP), c.i.f. 2/	-3.3	23.7	5.6	3.4	10.8

Source: Data provided by Jordanian authorities.

1/ Unit price of oil imports by Jordan, all of which is supplied by Iraq.

2/ Adjusted for imports by the non residents (mostly by embassies and multilateral agencies).

Table 34. Jordan: Composition of Imports, 1999–2003

(In millions of Jordanian dinars)

	1999	2000	2001	2002	2003
Total imports, c. i. f.	2,634	3,259	3,454	3,559	3,956
Food and live animals	484	530	524	490	560
Live animals	24	35	34	34	39
Meat	49	54	53	54	55
Dairy products and eggs	41	48	49	52	77
Wheat and wheat flour	42	69	70	40	25
Rice	34	29	27	28	36
Sugar	31	32	44	35	35
Fruits, vegetables, and nuts	58	65	65	68	73
Coffee, tea, cocoa, and spices	26	33	27	30	30
Others	179	165	155	149	191
Beverages and tobacco	27	33	33	44	59
Raw materials (excluding fuels)	84	104	106	106	98
Petroleum, fuels, and lubricants	319	509	495	540	638
Of which: crude oil	220	373	386	405	477
Oils and fats	45	40	39	59	72
Chemicals	334	350	379	402	445
Of which:					
Medical and pharmaceutical products	104	103	112	124	148
Essential oils and cleaning preparations	22	24	26	31	35
Manufactured goods	391	494	667	690	783
Rubber products	27	27	23	28	29
Paper and cardboard	53	67	83	78	82
Textile yarn and fabrics	80	128	216	270	333
Iron and steel	98	102	152	125	130
Others	133	170	193	189	209
Machinery and transport equipment	725	931	939	891	920
Machinery	360	464	573	497	545
Transport equipment and parts	365	467	366	394	375
Other manufactured goods	181	181	205	247	249
Clothing and footwear	53	52	55	77	84
Scientific instruments	43	33	46	42	42
Others	85	96	104	128	123
Other	45	89	66	90	132

Source: Central Bank of Jordan.

Table 35. Jordan: Direction of Trade, 1999–2003

	1999	2000	2001	2002	2003
	(In millions of Jordanian dinars)				
Domestic exports, f.o.b.	1,051	1,081	1,352	1,537	1,639
Arab countries	427	431	681	740	688
Saudi Arabia	100	92	96	105	108
Iraq	80	100	299	311	222
United Arab Emirates	62	48	59	56	66
Other	185	191	228	268	292
European Union	61	35	50	45	55
United States	9	45	165	304	468
India	181	172	145	159	141
Japan	11	9	9	8	10
Other European countries	8	5	12	11	22
People's Republic of China	25	33	30	32	26
Other countries	329	351	260	238	229
Imports, c.i.f.	2,635	3,259	3,454	3,559	3,956
Arab countries	569	774	823	907	706
Saudi Arabia	107	106	111	103	210
Iraq	296	484	486	532	144
United Arab Emirates	26	35	42	56	69
Other	140	149	184	216	283
European Union	835	1,074	1,089	1,031	1,049
France	102	124	132	148	128
Germany	256	375	317	330	310
Italy	108	119	114	126	153
United Kingdom	124	124	124	133	141
Others	245	332	402	294	317
Japan	166	128	124	112	142
United States	260	322	281	258	254
Other European countries	173	174	192	184	204
People's Republic of China	84	126	169	237	322
Other countries	548	661	777	830	1,279

Table 35. Jordan: Direction of Trade, 1999–2003 (concluded)

	1999	2000	2001	2002	2003
Domestic exports, f.o.b.	100.0	100.0	100.0	100.0	100.0
Arab countries	40.6	39.9	50.3	47.6	41.9
Saudi Arabia	9.5	8.5	7.1	6.8	6.6
Iraq	7.6	9.3	22.1	20.0	13.5
United Arab Emirates	5.9	4.4	4.4	3.6	4.0
Other	17.6	17.7	16.8	17.2	17.8
European Union	5.8	3.3	3.7	2.9	3.4
India	17.2	15.9	10.7	10.3	8.6
Japan	1.0	0.9	0.7	0.5	0.6
Other European countries	0.7	0.5	0.9	0.8	1.4
People's Republic of China	2.4	3.1	2.2	2.1	1.6
Other countries	32.3	36.4	31.5	35.8	42.5
Imports, c.i.f.	100.0	100.0	100.0	100.0	100.0
Arab countries	21.6	23.7	23.8	25.5	17.8
Saudi Arabia	4.1	3.3	3.2	2.9	5.3
Iraq	11.2	14.8	14.1	15.0	3.7
United Arab Emirates	1.0	1.1	1.2	1.6	1.7
Other	5.3	4.6	5.3	6.1	7.1
European Union	31.7	33.0	31.5	29.0	26.5
France	3.9	3.8	3.8	4.2	3.2
Germany	9.6	11.5	9.2	9.3	7.8
Italy	4.1	3.6	3.3	3.5	3.9
United Kingdom	4.7	4.5	3.6	3.7	3.6
Others	9.2	9.5	11.6	8.3	8.0
Japan	6.3	3.9	3.6	3.2	3.6
United States	9.9	9.9	8.1	7.3	6.4
Other European countries	6.6	5.3	5.6	5.2	5.2
People's Republic of China	3.2	3.9	4.9	6.7	8.1
Other countries	21.7	20.3	22.5	23.1	32.4

Source: Central Bank of Jordan.

Table 36. Jordan: Merchandise Exports, 1999–2003

	1999	2000	2001	2002	Prel. 2003
	(In millions of U.S. dollars)				
Domestic Exports	1,482	1,524	1,907	2,195	2,312
Phosphates	162	128	128	136	128
Volume (1000 metric tons)	3,633	3,196	3,606	4,006	3,826
Unit price (U.S. dollar /metric ton)	45	40	36	34	32
Fertilizers	110	84	86	90	104
Volume (1000 metric tons)	524	460	503	518	538
Unit price (U.S. dollar/metric ton)	210	184	171	174	177
Potash	178	195	195	193	204
Volume (1000 metric tons)	1,665	1,881	1,896	1,918	1,937
Unit price (U.S. dollar/metric ton)	107	104	103	100	101
Other	1,032	1,117	1,495	1,750	1,877
Fruit and vegetables	110	101	133	151	156
Miscellaneous manufactures	359	443	783	915	1,067
Chemicals	387	405	400	459	436
Miscellaneous	177	167	179	212	218
Re-exports	349	375	387	574	687
Total exports	1,831	1,899	2,294	2,769	2,999
	(Annual percentage changes)				
Domestic exports	0.5	2.8	25.1	15.1	5.3
Phosphates	-17.6	-21.1	-0.4	6.6	-5.8
Volume	-20.4	-12.0	12.8	11.1	-4.5
Unit price	3.5	-11.1	-10.0	-5.5	-4.9
Fertilizers	-24.4	-23.8	2.4	4.9	15.2
Volume	-20.5	-12.2	9.3	2.9	4.0
Unit price	-4.8	-12.5	-7.1	1.9	1.6
Potash	29.7	9.6	-0.2	-1.1	5.9
Volume	12.0	13.0	0.8	1.1	1.0
Unit Price	0.7	-2.6	-1.0	-2.4	0.0
Other	5.8	8.2	33.8	17.1	7.2
Fruits and vegetables	-27.0	-8.1	31.4	13.4	3.3
Miscellaneous manufactures	13.6	23.4	76.7	16.8	16.7
Chemicals	24.8	4.7	-1.2	14.7	-5.1
Miscellaneous	-11.0	-5.6	7.2	18.5	2.8
Re-exports	6.8	7.4	3.2	48.3	19.7
Total exports	1.6	3.7	20.8	20.7	8.3

Source: Data provided by the Jordanian authorities.

Table 37. Jordan: Terms of Trade and Trade Volumes, 1999–2003

(1994 = 100)

	1999	2000	2001	2002	2003
Export unit price	110.7	105.8	107.2	107.6	115.5
Import unit price	116.9	119.7	122.5	125.8	132.3
Terms of trade	94.7	88.4	87.5	85.5	87.3
Memorandum items					
Export volume	119.5	128.9	158.7	182.5	178.9
Import volume	95.3	115.1	118.8	119.8	126.6

Source: Central Bank of Jordan.

Table 38. Jordan: Official Transfers, 1999–2003

(In millions of U.S. dollars)

	1999	2000	2001	2002	Prel. 2003
Bilateral grants	350	356	417	470	1227
Arab Countries	165	240	268	306	469
Iraq 1/	165	240	268	268	69
Other	0	0	0	38	400
Other Countries	185	116	148	164	758
United States	129	50	68	140	651
Japan	55	65	81	19	107
Austria	0	0	0	0	0
Canada	0	0.3	0	0	0
Other	1	1	0	5	0
Other grants 2/	46	55	49	41	92
Total grants	396	411	465	511	1319
Memorandum item:					
Total grants (in percent of GDP)	4.9	4.9	5.2	5.4	13.4

Source: Data provided by the Jordanian authorities.

1/ The grants are in the form of petroleum imports from Iraq at prices below world market prices.
2/ Includes the United Nations Relief and Work Agency (for Palestinian refugees), the European Union, and emergency projects.

Table 39. Jordan: Debt Service Payments, 1999–2003

(In millions of U.S. dollars)

	1999	2000	2001	2002	2003
Principal due	454	353	437	506	544
Paris Club creditors (industrial and other governments)	192	162	206	233	248
London Club creditors	10	10	10	10	11
Suppliers' credits	0	0	1	2	2
Arab governments	15	1	4	11	9
Multilateral	166	158	191	239	250
Of which: IMF amortization	36	31	51	79	99
Other (bonds and leases)	70	22	25	24	22
Interest due	356	370	332	293	318
Paris Club creditors (industrial and other governments)	151	188	173	165	144
London Club creditors	41	41	31	25	24
Suppliers' credits	0	0	0	0	0
Arab governments	12	0	1	3	2
Multilateral	106	117	112	103	116
Of which: IMF charges	19	24	20	14	12
Other (bonds and leases)	55	23	17	29	51
Total debt service	810	723	769	799	862
Memorandum items:					
Total debt service/exports of goods and nonfactor services (in percent)	22.9	20.4	20.4	18.8	...

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

Table 40. Jordan: Outstanding Public External Debt, 1999–2003 1/

(In millions of U.S. dollars)

	1999	2000	2001	2002	2003
Total external debt	7,861	7,182	7,059	7,227	7,602
Medium- and long-term debt	7,468	6,802	6,713	7,203	7,173
Arab countries	307	306	375	375	291
Bilateral loans	0	0	0	0	0
Funds	307	306	375	375	291
Industrial countries	4,144	3,938	3,766	4,126	3,229
Bilateral loans	2,330	2,055	1,846	1,979	1,593
Export credit guarantees	1,814	1,882	1,919	2,147	1,635
Other countries	33	39	39	44	44
International banks 2/	910	522	462	...	...
Multilateral institutions	2,322	2,253	2,317	2,519	1,742
IMF	498	463	433	480	299
World Bank	914	893	995	1,098	756
Other multilateral	910	896	889	940	687
Leases	146	124	101	78	47
Short-term debt 3/	0	0	0	0	0
Memorandum item:					
Total external debt/GDP (in percent)	96.6	85.0	80.0	77.0	77.1

Source: Ministry of Finance.

1/ Public and publicly guaranteed external debt, end-of-period.

2/ Includes par and discount Brady bonds, the principal payments of which are fully collateralized. Excludes the holdings of resident commercial banks.

3/ Nonresident holdings of treasury bills.

Jordan: Summary of the Tax System, as of December 31, 2003

(All amounts in Jordanian dinars or fils) 1/

Tax	Nature of Tax	Exemptions and Deductions	Rates
1. Taxes on net income and profits			
1.1 Taxes on companies, corporations, or enterprises			
1.11 **Income tax** (Law No. 57 of 1985 as amended by Law No. 4 of 1989 and by Law No. 4 of 1992 and Law No. 14 of 1995) and Law No. 25 of 2001 and Law No. 39 of 2003	Profits realized from activities carried out in Jordan are taxed under the Income Tax Law of 1985 at different rates. Branches abroad tax 20 percent of the net income, after deducting from the foreign income tax of the Jordanian companies branches operating outside the Kingdom declared in their final accounts which are certified by an external auditor shall be taxable.	Exemptions cover a wide range of activities, including those that are traditionally exempt from corporate profits taxes such as local authorities, labor unions, pension funds, associations that do not seek profit but promote social, religious, cultural, health etc. purposes. In addition, the Law exempts agricultural activities, including gardening, breeding, etc, fishing, interest on bonds issued by industrial corporations, profits from concessions granted by the government which stipulate tax exemptions and capital gains with the exceptions of real estate which is taxed under specific conditions, and the profits accruing from the sale or transfer of ownership of assets governed by the rules of depreciation prescribed in the law.	(1) 15 percent for private industrial companies and of that income generated from a project in one of the following section: a) Metallurgy b) Industry c) Hotels d) Hospitals e) Transportation f) Constructional contracts (2) 35 percent for banks, and financial companies. (3) 25 percent for other companies.
	- Advance payments of income tax on importers against some of their imports.	In addition, enterprises may be exempt partially ranging from 25 to 75 percent of their net profit depending on their location.	2%

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.2 **Taxes on individuals**			
1.21 **Income Tax** (Law No. 57 of 1985 as amended by Law No. 4 of 1989 and Law No. 14 of 1995) and Law No. 25 of 2001 and Law No. 39 of 2003.	A general income tax on all incomes and profits realized within Jordan by residents and income generated by investments abroad of capital originating from Jordan.	Income earned by Jordanians working abroad. Interest on obligations issued by the government and financial institutions. Personal exemptions are allowed as deductions from adjustable gross income, irrespective of the level of income and the number of dependents. Minimum personal exemption for a single taxpayer is JD 1000, and for a married taxpayer with no dependents is JD 2000. In addition, exemptions for each dependent child is JD 500, and for each other dependent is JD 200. Personal deductions include up to JD 2000 for each dependent attending college education. 50 percent of wages and salaries paid by the government, public institutions, and local authorities. 50 percent of the first JD 12,000 and 25 percent of the amount above that for salaries, wages, allowances, bonuses, and appropriations paid to the employees by institutions other than those described in the preceding paragraph.	Progressive rates according to the bracket method. There are 4 brackets ranging from 5 percent of the first JD 2,000 to 25 percent of taxable income in excess of JD 14,000.
	- Interest earned on bank's deposits.		5%
	- Advance payments of income tax on importers against some of their imports.		2%

Jordan: Summary of the Tax System, as of December 31, 2003 (continued)

Tax	Nature of Tax	Exemptions and Deductions	Rates
1.3 **Other**			
1.31 **Social service tax** (Law No. 89 of 1953 and amended by Law No. 15 of 1954)	Surcharge on merchandise imports and income tax. The portion of the levy on income applies only to the amount of tax liability assessed under the income tax above and it is collected simultaneously.	Same as under income tax above.	10 percent of income tax.
2. **Social security contributions** (Law No. 30 of 1978 and amendment of 1980 effective January 1, 1981)	Law applies to employees in Jordan over 16 years of age. Contributions are made to an independent body, the Social Security Corporation, whose Board of Director consists of members representing government, labor, and business.		Employers and employees contribute 11 percent and 5.5 percent of the employee's monthly salary, respectively.
3. **Payroll taxes** None			
4. **Taxes on property**			
4.1 **Real estate taxes**			
4.11 **Land and building tax** (Law No. 11 of 1954 amended by Law No. 65 of 1985)	Annual levy on land and buildings located within municipal areas. Land is assessed on 2 percent of its market value. Industrial and commercial buildings are assessed on their net annual rental value. Residential buildings are assessed on a specified dinar value per square meter depending on the classification of the municipalities, the location, conditions of the building, and the materials used for construction.	Net annual rental value of industrial, commercial, and residential (or owner occupied) buildings is determined by deducting 20 percent from gross annual rent as an estimate of depreciation. A 10 percent depreciation rate is allowed for residential buildings built before end-1974.	Land: 2 percent Buildings: 15 percent. Of these rates, 2 percent is for the Ministry of Education, 3 percent for sewerage services, and 10 percent for municipalities.

Tax	Nature of Tax	Exemptions and Deductions	Rates
4.2 **Property transfer taxes**			
4.21 **Land and buildings sales tax** (Law No. 21 of 1974 and amendment of 1976)	Applies to land (including wells, trees, and buildings thereon).	Sales and donations between branches of a family or between husband and wife pay 1.6% (housing corporation projects and housing companies which do not deal with interest on borrowed money (up to 150 sg.m).	4 percent on seller. 6 percent on buyer.
4.22 Land registration tax (Law No. 26/1958). 4.23 Extra tax (Law 28/1969). 4.24 Extra taxes for Jordan Universities (Law 4/1985).	Applies to land including wells, tress and buildings thereon.	The following are exempt: The King, the government and municipalities (council of minister has the right to exempt the representative of foreign countries on condition of reciprocity of treatment.	6% paid by the buyer.
5. **Taxes on goods and services**			
5.1 **General sales taxes** (Law No. 6 of 1994, and amendments No. 15 of 1995 and No. 25 of 1999) and Law No. 36 of 2000 and Law No. 25 of 2002 and Law No. 23 of 2003.	Applied on imported and domestically produced goods (with exemptions) and specified services (hotels and restaurants; movie theaters; food and beverage; real estate; car rental; computer services; travel and tourism; mail; accounting; engineering; architecture; some commercial services; parking; entertainment; beauty salons; weddings and receptions; legal services and exhibition services.)	Exempted are firms with a threshold below JD 60,000 for goods and JD 30,000 for services; or JD 30,000 when producing goods and services; or JD 10,000 when subject to the specific taxes. Traders and importers are subject to GST. No exemption threshold is imposed on importers, while the threshold for traders is JD 250,000. Goods and services exported from Free Zones or projects established in Free Zones and re-exports.	13 percent 4 percent on some basic commodities. Some goods are subject to a specific tax (cement, alcoholic beverages, tobacco, etc.)
5.2 **Supplementary sales tax** (Schedule 5 Excises) (Law No. 6 of 1994, and	The supplementary sales tax was cancelled and replaced by the following schedules which were		

Tax	Nature of Tax	Exemptions and Deductions	Rates
amendments No. 15 of 1995 and No. 25 of 1999)	introduced in the Law No. 36 of 2000: 1. Schedule (1) of the Special Tax 2. Schedule (2) of the Zero-rated goods tax. 3. Schedule (3) of the Tax-exempt goods and services. 4. Schedule (4) of the Nondeductible items Tax.		
5.21 **Tobacco encouragement tax**	Specific surcharges on cigarettes. Proceeds are distributed to tobacco manufacturers to subsidize growers.	None	27.5 fils per pack
5.3 **Selective taxes on services**			
5.31 **Additional tax** (Law No. 28 of 1969 and various amendments)	Levied on: • Electricity • Airline tickets for international travel • Marriage contracts • Divorce contracts • Ongoing cases in court • Professional and industrial licenses, construction permits, driver's licenses, and vehicle registrations • Transport vehicles	Exemptions apply only to the parts of the additional tax relating to imports and departures (see below).	Examples: • Electricity: 1 fils per kwt. hour • Marriages: JD 5 per marriage • Divorce: JD 10 per divorce • Airline tickets: JD 10 per ticket

Tax	Nature of Tax	Exemptions and Deductions	Rates
	• Passenger vehicles exiting Jordan • Travelers leaving the country by air or land		
5.4 **Motor vehicle taxes** (Bylaw No. 20 of 1989) Bylaw No. 35 of 1995 Amendment No. 60 of 1998 Amendment No. 47 of 1999 Amendment No. 62 of 2000	Annual license fees levied according to the engine capacity of private automobiles, the seating capacity of taxis and buses, and the tonnage of trucks and trailers. Other fees include: (1) One-time fees on the registration of cars; (2) Annual fees on the use of license plates by passenger cars and buses; and (3) One-time fees on the registration of the license plates of trucks.	None	Examples: • Private automobile with an engine capacity exceeding 3 liters: JD 400 per annum. • Taxi carrying 7–8 passengers (diesel-powered): JD 160 per annum. • Diesel-powered truck carrying 2–3 tons: JD 120 per annum.
6. **Taxes on international trade and transactions**			
6.1 **Taxes on imports**			
6.11 **Customs duties** (Law No. 20 of 1998, and amendments No. 10 of 1999, No. 16 of 2000, No. 27 of 2000)	Tariff schedule is based on Harmonized System (HS) since 1994, and amended on March 3, 1997 in line with the system issued by the World Customs Organization. Duties are mostly ad-valorem with the	A number of items such as some essential food products, most pharmaceuticals, raw materials, and printed materials are exempt from customs duties. In addition, the Customs Law exempts certain imports of governmental	Rates range from 0 to 35 percent. Tobacco and tobacco products are subject to duties of 80 percent, and alcoholic beverages to 180 percent.

Tax	Nature of Tax	Exemptions and Deductions	Rates
	exception of three agricultural commodities: apples, bananas, and grapes which are subject to compound duties at the rate of 30 percent + JD 250 per ton, and gas-operated lighters at the rate of 35 percent + fils 30 per lighter.	departments, imports by the Royal palaces and diplomatic community, import under the Encouragement of Investment Law, and import bound by international agreements with some Arab countries from the payment of customs duties.	
6.12 **Other import taxes** (Consolidated Fees Law No. 7 of 1997)	Consolidated customs fees levied on the c.i.f. value of merchandise reports consisting of: (1) Uniform tax	Imports, which are exempt from customs duties.	On c.i.f. value of imports: (1) Uniform tax: 0–35 percent.
6.13 **Animal head tax** (Law No. 41 of 1963)	Originally, a specific tax was levied on livestock within the Kingdom. However, owing to administrative difficulties, it is now levied only on livestock when imported.	None	JD 2 per head of sheep or goats plus 5 percent tax. JD 10 per head of calves plus 5 percent tax.
6.2 **Export taxes** None			
6.3 **Other additional taxes** (Law No. 28 of 1969, amended in 1988)	Tax on border crossings and airport departures.	Members of Royal family, diplomatic community, official guests, airline crews, transit passengers, government cars, and cars in transit.	Examples: • Airport departure: JD 25 for Jordanian citizens, JD 15 for Jordanians working abroad, and JD 5 for non-Jordanians. • Border crossings by trucks or cars: JD 1–2 per crossing for trucks; JD 5 for Jordanian private cars; and JD 1 for non-

Jordan: Summary of the Tax System, as of December 31, 2003 (continued)

Tax	Nature of Tax	Exemptions and Deductions	Rates
			Jordanian private cars.
7. **Other taxes**			
7.1 **Stamp taxes**	Duties levied on a large number of official documents, invoices, contracts, bills of sale, and other documents.	Various	Various

Source: Ministry of Finance.

1/ One Jordanian dinar equals 1,000 fils.