

## **Republic of Yemen: Selected Issues**

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INTERNATIONAL MONETARY FUND

REPUBLIC OF YEMEN

**Selected Issues**

**From Unification to Economic Reform: Yemen in the 1990s**

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Approved by Middle Eastern Department

February 15, 2001

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## I. OVERVIEW

1. The 1990s surely must have been one of the most dramatic periods in Yemen's rich history. Unification, rapid development of an oil sector, and a radically changed external environment fundamentally transformed the opportunities and challenges the Yemeni people face. This paper attempts to summarize economic developments in Yemen during the 1990s; to take stock of the many structural changes that took place in the economy during this decade; and to point out important reforms that are needed if Yemen were to move to a path of high and sustainable growth, to reduce rampant poverty, and to responsibly manage a highly volatile oil rent. It is hoped that this paper may provide useful input to the ongoing debate in Yemen on the appropriate development strategy for the coming years.

2. Section II summarizes the main political and exogenous events that shaped the decade. At the beginning stood the unification of the Yemen Arab Republic (YAR)—which itself had undergone dramatic change since it emerged in the 1960s as republican successor to the medieval regime of the *Imam*—with the People's Democratic Republic of Yemen (PDRY), which had emerged from the struggle for independence in the British colony and protectorates around Aden in 1967. A few months after unification, with the onset of the second Gulf Crisis, Yemen experienced a major shock with the return of about three quarters of a million workers from the Gulf states, challenging a fragile socioeconomic fabric already weakened by a severe two-year drought. At the same time, the development of oil fields provided a growing source of foreign exchange earnings, and may have been the element that kept Yemen away from the brink, even if it also added a new vulnerability due to fluctuations in world oil prices.

3. However, the strains from these developments eventually led to a brief civil war in 1994, following attempted secession by elements of the former PDRY leadership. It was only after the secession was militarily defeated—and as the new constitutional system providing for a multi-party democracy, a free press, and an essentially market-based economic system took hold—that the political consensus could be forged for the urgent economic reforms that had been delayed since unification. In 1995, Yemen thus initiated an economic reform program, supported by the Fund as well as by the World Bank and other institutions and countries, aiming in its core at enhancing the foundations of a market-based and private sector-driven economy, integrated into world markets and in a context of broad financial stability. This approach underpins government policy until today.

4. The first priority of reform was obviously to restore macroeconomic stability, which was threatened by large fiscal imbalances, price distortions (including exchange and interest rate controls) resulting from the attempt to suppress excess demand through controls, and a huge debt-overhang largely, but not only, arising out of the former PDRY's debt to the Soviet Union. The emerging macroeconomic policy mix is described in Section III. Fiscal policy

was obviously key, and in light of the importance of oil for government revenue, it is assessed also from an inter-temporal perspective, given the fact that based on current information Yemen has only limited proven reserves.

5. While stabilization policy was highly successful, structural reforms faced greater difficulties and resistance and were also more severely constrained by Yemen's limited administrative capacity. Section IV describes the progress to date, pointing to impressive success in liberalizing the exchange and trade regime and lifting price controls, but also to a huge unfinished agenda in tax and budget management reform, privatization, and civil service reform. Deep-rooted obstacles to growth, notably weaknesses in the judicial system and governance, have been barely touched so far; and reform in these areas, perhaps more than in others, will have to emerge from and be shaped by civil society itself.

6. Section V looks at some of the "formal" social safety measures that were put in place to protect the most vulnerable segments of society against adverse effects of certain reform measures (notably the reduction in generalized subsidies), but—probably more important—the often brutal exogenous shocks Yemen society had to absorb, such as the return of workers in 1990–91, the dislocations from the civil war in 1994, and the collapse of oil prices in 1998. No data exist to gauge the scope of traditional, often tribal- or religious-based, social support systems; such systems likely remain far more important than formal systems and must have been at the core of Yemen's ability to somehow absorb the workers returning from the Gulf region.

7. Finally, Section VI looks at performance in terms of growth, inflation, social indicators, and savings and investment balances, also in comparison with other countries.<sup>1</sup> Clearly, during the second half of the 1990s, performance improved on all three accounts, very much so for macro stability but considerably less for social indicators. This reflects the return to political stability and peace, on the whole favorable oil price sector developments, and the first fruits of reforms. But building on these achievements, an even greater focus on growth and poverty reduction will be needed. The Yemeni authorities have therefore embarked on preparing a comprehensive poverty reduction strategy in the context of the next Five-Year Plan (2001–2006) and in broad consultation with civil society to be launched in

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<sup>1</sup> An important caveat on data availability and quality is in order. The statistical systems of the YAR and the PDRY were both weak and inconsistent; meaningful aggregate data for all of Yemen therefore started 1990 at the earliest. Even now, while monetary data are considered reliable and fiscal data available in reasonable quality, national accounts and price statistics (especially outside the energy sector) remain weak, and balance of payments data are mostly estimates involving considerable judgment and reliance on anecdotal evidence. Along with the reform program, a comprehensive effort was mounted to improve the quality and coverage of statistical data and should bear fruit in the near future. The introduction of a computerized customs system (ASYCUDA) should lead to better trade statistics; ongoing Fund technical assistance should help improve national accounts and price statistics methodology while additional and better designed surveys should provide better raw material to such statistics; and recent reforms in budget nomenclature and the establishment of a macroeconomic unit at the Ministry of Finance should result in better reporting on public finances.



early 2001. It is hoped that this paper can contribute to the formulation of such a strategy by providing some of the needed background and by drawing some first lessons from Yemen's adjustment experience to date.

## II. THE EXTERNAL ENVIRONMENT: POLITICS, OIL, AND DEBT

### A. Political Developments: Unity, Gulf Crisis, Civil War, and Democracy

8. Unification of North and South Yemen in early 1990 opened a decade of dramatic sociopolitical and economic change. Similar to German unification, the YAR of North Yemen, a larger and broadly market-based economy, absorbed a smaller, centrally planned economy: the PDRY in the south.<sup>2</sup>

9. As in the German case, unification was a long-standing aspiration of the Yemeni people in both states and became possible mainly through the effects of *Perestroika* in the Soviet Union on the socialist PDRY. On the economic side, a reduction in financial and technical assistance from the Soviet bloc, combined with declining workers remittances—a main stay of the PDRY accounting for about half of government revenue in the late 1980s—created pressures for a rethinking of the PDRY's development strategy in the mid-1980s. While the PDRY had achieved respectable improvements in education and other social indicators (more so than the YAR),<sup>3</sup> the economy was in a dismal state as a result of failed socialist reforms in agriculture, fisheries, and port activity. Large Soviet-financed investments in the Shabwah oil field (discovered in 1986) added half a billion U.S. dollars to South Yemen's staggering debt (largely to the Soviet Union and her allies), but the oil facilities were yet unfinished and production was limited to 10,000 barrels per day (bd) which were trucked to the decrepit refinery in Aden.<sup>4</sup> On the political side, the last years of the PDRY saw some liberalization of political activity and the press, but at the same time it saw political instability within the leadership of the country with violent internal struggles in 1986.

10. The YAR, in contrast, had witnessed a measure of political stability with some consolidation of central control—even over traditional tribal areas—as well as a measure of economic development despite limited progress in education and health. Oil exploration was

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<sup>2</sup> The YAR's population was then estimated at 10.4 million people, the PDRY's at 2.4 million people (Dunbar, 1992); respective GDP was US\$5.4 billion for the YAR and US\$1.3 billion for the PDRY (based on national accounts of YAR and PDRY, using official exchange rates which were well below parallel market rates in both countries).

<sup>3</sup> Illiteracy in the PDRY was reduced from 97 percent in 1967 (when the PDRY was created out of the British Aden colony and the two adjacent British protectorates) to 59 percent in 1985; at that point the YAR's illiteracy rate was still 80 percent (Dunbar, 1992).

<sup>4</sup> Shabwah was closed down in 1994 after disappointing results, mainly due to the inappropriate recovery methods introduced in the late 1980s.

in private hands and, in 1984, oil strikes quickly led to development of a major oil field (Marib) starting production in 1987 with most output exported through a pipeline, reaching about 195,000 bd in the early 1990s. While the YAR was also dependent on workers' remittances, foreign debt averaged to a more manageable 60 percent of GDP, well below PDRY's 180 percent of GDP during 1987–89.

11. Development of oil was another important catalyst for unification. The simultaneous oil discoveries in the YAR (Marib) and the PDRY (Shabwah) were in adjacent areas, and development and exploration required settling of outstanding border issues. At first it triggered a bilateral agreement, demilitarizing the border zone in 1988, along with easing the bilateral travel restrictions and activation of common institutions, notably the Supreme Yemeni Council, formally in place since 1982. The dynamics set in motion were such that by late-1989 "historic agreement" was reached, calling for a draft constitution for a unified Yemen to be presented to both parliaments within six months and a referendum six months thereafter. A unity government was formed in early 1990 and a year later, an impressive majority in both parts of the country approved a new constitution by popular referendum. The new constitution provided for basic political freedom (inclusive of women), including the right to organize and vote, the right of private ownership, and *sharia* as principal (but not sole) source of law.

12. Early on, however, severe strains developed to challenge the newfound unity. Most importantly, during the Gulf crisis in late 1990, Saudi Arabia—home to the bulk of Yemeni migrant workers, made up an estimated 17 percent of the Saudi workforce—decided to end the visa and sponsorship exemptions traditionally enjoyed by Yemeni people living and working in Saudi Arabia. As a result, an estimated three-quarters of a million workers returned to Yemen.<sup>5</sup> About 50,000 workers returned from other Gulf states. Some 60,000 returning migrants had to be put in refugee camps, most others returned to their hometowns and villages. Returnees initially ran through their savings, but the loss in remittances and official assistance from Gulf states (about US\$200 million per year in the late—1980s) and the need to accommodate a million returnees contributed to a rapid deterioration in economic balances, contracting economic activity and fuelling inflation. These adverse factors were compounded by a severe drought during 1990–91.

13. Other economic (and political) strains resulted from the way the two very different economic systems were merged. The two civil services were simply added together, with 50/50 sharing of all posts between the former YAR and the former PDRY services, reflecting a similar sharing of the top leadership posts. Harmonization of wage scales at the higher level of the YAR added to pressures on the public finances. Tensions quickly arose, for example, as to what education policy to pursue. Hasty attempts to roll back the PDRY's farmland distribution and only slow reconstitution of real estate nationalized under the PDRY to businesses who had fled the South, led to dissatisfaction among farmers and the business

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<sup>5</sup> Dunbar, 1992.

community. The bloated bureaucracy fueled a rise in governance problems; many Southerners were concerned about aspects of traditional YAR society such as tribal influence and greater circumscription of the role of women (and many Northerners about what was perceived as non-Islamic behavior in the South). As a result, the leadership remained largely divided among former North-South lines, with Southern representatives often abstaining from joint cabinet meetings. Each side largely preserved control over its former armed forces.

14. At the same time, the introduction of democracy led to a flourish of political parties (more than 40 political parties emerged) and newspapers across a broad political spectrum. In the first “unified” election in 1993, the electorate largely voted along the traditional North-South line.<sup>6</sup> The General Peoples’ Congress (GPC), including much of the former YAR’s leadership, emerged as the dominant political force, winning nearly half of the available seats; the newly formed Islamic Yemeni Reform Group (YRG), or *Islah*, came in a distant second; closely followed by the Yemeni Socialist Party (YSP), comprised largely of the former PDRY leadership, and which won most seats in the South. There were also a large number of independents and small parties. Although a coalition government including the GPC, YRG, and YSP was formed, the election results led to growing estrangement between the Southern and Northern leadership, with each focused on the rebuilding of regional power bases. This was also fuelled by development of a Southern oilfield (Masila), which came on stream in 1993 (with 40,000 b/d trucked to Aden); output rose to 150,000 b/d as a central processing unit and a pipeline to the Indian Ocean were completed in 1994. Despite many attempts—notably by other Arab states—to mediate between the two sides, the declaration of an independent Southern state by parts of the YSP leadership in 1994 triggered a civil war that ended with the defeat of the Southern forces a few months later and at the cost of considerable destruction of lives and property.

15. In September 1994, a new constitution was adopted, providing for direct popular election of the president and making *sharia* the principal source of legislation. A new government comprising only GPC and *Islah* representatives was formed and, in 1995–96, was able to reach a broad consensus to start needed economic and administrative reforms. New elections in April 1997 were boycotted by the YSP and gave the GPC an absolute majority, with *Islah* again the second largest party, followed by a number of smaller parties and independents. This time the GPC alone formed the government, although the cabinet included a few independents (including the Prime Minister). However, the President also instituted the Consultative Council, including members of YRG, YSP, and GPC, along with eminent tribal leaders and other representatives of civil society. The council has no legislative or executive mandate, except for debating the major issues and submitting recommendations to the president; it plays, however, an important role in mediating, for example, differences between parliament and the executive.

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<sup>6</sup> Kostiner, 1996.

16. In September 1999, President Saleh won another five-year mandate in Yemen's first contested presidential election, running against another GPC member. The Yemeni Reform Group refrained from putting up a candidate, and other opposition parties were unable to muster the 10 percent votes in parliament, which was needed to field a presidential candidate.

### **B. Yemen's Emergence as Oil Producer**

17. From a regional perspective, with estimated proven oil reserves and production levels in 1998–99 at 0.6 percent and 1.8 percent of the corresponding Middle Eastern totals, Yemen is a minor player in the oil market. The oil sector in Yemen is characterized by little government intervention and dominated by the presence of large international oil companies that manage exploration and production operations. Oil production began in 1987 in the Marib concession held by a consortium of companies (including Hunt, Exxon, and Yukong). In 1993 the second major block, Masila, operated by Canadian Occidental Petroleum (CanOxy), came on stream, giving a major boost to oil GDP growth (Table 1). As oil production continued to increase at an annual average of about 3 percent throughout the rest of the decade (Chart 1), Yemen's economy became highly oil-dependent. The share of oil in real GDP nearly doubled, from 10.7 percent in 1992 to 20.2 percent in 1999, and government crude oil export revenues as share of GDP increased eight-fold over the same period.

#### **Inception and evolution of exploration agreements**

18. While exploration activity took place in Yemen as early as in the late 1930s, it accelerated in the 1970s when 8 agreements were signed with oil companies to conduct exploration, mostly in the Hadramout and Tihama areas. Between 1982 and 1991, Yemen signed about 10 additional exploration and production agreements,<sup>7</sup> including agreements for the 5 currently producing blocks—Marib, Masila, Jannah, Shabwah, and Ayad. The contracts in each case were fairly similar. Exploration commitments were specified,<sup>8</sup> in addition to cost oil percentages<sup>9</sup> and profit sharing ratios, and signing bonuses were granted in most cases. The share of cost oil was usually around 30 percent, while profit sharing was on average about 20 percent for the company.<sup>10</sup>

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<sup>7</sup> See *Arab Oil and Gas Directory* (various issues); some information can also be found on the web site of the Ministry of Oil and Mineral Resources (<http://www.monr.gov.ye>).

<sup>8</sup> For example, contracts specified activities to undertake in the exploration phase, such as the numbers of wells to drill and the kind and amount of seismic data to produce and analyze. Funds committed in the exploration phase, generally in the order of tens of millions of U.S. dollars, were also stated.

<sup>9</sup> Cost oil is the amount recoverable by the operator per year to cover expenses during the appraisal and exploration period as well as operation costs.

<sup>10</sup> As an illustration, assume production is at 100,000 b/d, the share of cost oil is 50 percent, and the profit sharing is 20:80 in favor of the government. The company then receives 50,000 b/d (cost-oil) plus 20 percent of the remaining 50,000 b/d (profit), while the government obtains 80 percent of these remaining 50,000 b/d (profit).

Table 1. Republic of Yemen: Selected Economic Indicators, 1990-99

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prel. 1999
(Change in percent)										
<b>Production and prices</b>										
Nominal GDP at market prices	41.2	18.6	27.0	23.8	28.4	67.1	43.7	21.5	0.4	24.3
Real GDP at market prices	...	-2.1	4.8	0.4	-3.6	7.9	2.9	8.1	5.3	3.8
Real non-oil GDP	...	-1.5	8.0	-0.1	-9.6	5.5	0.5	8.2	5.9	3.2
Real oil GDP	...	-5.7	-15.9	4.3	43.7	20.0	13.5	7.5	2.7	6.2
Consumer price index (annual average)	33.5	44.9	50.6	62.4	71.3	62.5	40.0	4.6	11.5	8.0
Crude export oil price (weighted average, US\$ per barrel)	22.1	19.8	19.7	15.9	15.4	16.9	20.3	18.5	11.6	18.7
(In percent of GDP)										
<b>Government finance</b>										
Total revenue and grants	19.8	23.1	16.1	14.9	12.8	19.5	35.9	32.8	26.4	31.8
Oil revenue	7.5	9.4	4.7	4.2	3.7	9.3	25.1	22.1	13.8	19.8
Non-oil revenue	11.2	12.6	11.1	10.5	8.9	9.8	10.5	10.1	12.2	11.1
Grants	1.1	1.0	0.3	0.1	0.3	0.3	0.3	0.6	0.4	0.9
Total expenditure	32.3	30.1	28.9	29.5	29.0	25.6	39.8	34.7	32.7	32.1
Current	23.6	26.1	25.5	26.0	26.4	22.5	33.2	27.9	26.6	26.5
Development	8.7	4.0	3.4	3.5	2.6	3.1	6.6	6.8	6.1	5.6
Overall balance including grants (cash basis)	-11.7	-5.6	-11.7	-13.9	-15.7	-5.2	0.6	-1.8	-7.9	-0.4
Overall balance excluding grants (commitment basis)	-13.6	-8.0	-13.1	-14.8	-16.4	-6.4	-4.2	-2.5	-6.7	-1.2
(12-month change in percent of initial broad money)										
<b>Monetary data</b>										
Broad money	35.1	18.8	27.6	35.4	34.7	20.4	8.6	10.7	11.7	13.8
Credit to nongovernment sector	36.4	21.5	7.2	15.8	69.0	28.0	-29.4	46.6	54.2	15.0
Benchmark deposit interest rate (percent)	6.5	6.5	6.5	6.5	6.5	20.0	25.0	11.0	15.0	18.0
Velocity (non-oil GDP/M2)	1.5	1.5	1.5	1.4	1.2	1.7	1.9	2.0	2.2	2.1
(In millions of U.S. dollars)										
<b>External sector</b>										
Exports, f.o.b.	1,384	1,197	1,095	1,167	1,824	1,937	2,263	2,274	1,501	2,466
<i>Of which</i>										
Crude oil	1,203	1,011	819	834	1,615	1,735	1,976	1,945	1,229	2,131
Imports, f.o.b.	-1,726	-1,897	-1,891	-2,087	-1,522	-1,948	-2,294	-2,407	-2,228	-2,440
Services (net)	-739	-661	-852	-917	-475	-411	-370	-470	-398	-489
Private remittances and transfers (net)	1,241	1,078	1,071	1,067	1,117	1,104	1,188	1,256	1,254	1,314

Table 1. Republic of Yemen: Selected Economic Indicators, 1990–99

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prel. 1999
Capital account (net)	356	88	-36	74	-641	-876	-397	34	-154	11
Overall balance	-65	-803	-1,283	-1,008	-779	-38	-625	116	-463	320
(In millions of U.S. dollars)										
Central bank own gross foreign reserves 2/	424	680	323	147	357	525	937	1,152	853	1,351
In months of imports 2/	2.8	4.2	2.2	0.9	2.9	3.1	4.6	5.3	4.2	6.0
As percent of base money	8.6	12.5	4.9	1.7	3.0	19.0	73.2	103.5	79.3	112.3
As percent of M2	6.8	9.2	3.4	1.2	2.1	12.5	48.8	53.7	41.7	62.7
Current account, including grants (in percent of GDP)	-3.1	-10.7	-13.2	-16.1	5.6	2.8	1.7	0.3	-3.7	2.9
Current account, excluding grants (in percent of GDP)	-4.4	-12.2	-13.8	-16.5	4.5	2.2	0.7	-1.0	-4.6	1.5
Debt service ratio, obligation basis 3/	46.7	91.3	89.1	80.8	46.8	42.1	31.9	12.6	17.0	10.5
Official external debt, before rescheduling 3/	9,915	10,323	10,541	10,735	10,876	11,017	11,135	5,359	5,373	5,490
(In percent of GDP)	105.7	129.5	127.9	138.5	167.1	170.1	173.2	81.2	85.3	80.4
Terms of trade (1996=100)	122.3	113.0	107.4	91.8	85.5	85.3	100.0	100.7	69.5	114.1
Exchange rate (free market, cop) (YRIs/US\$)	17.5	29.7	42.7	67.8	101.0	127.1	126.9	130.5	141.7	159.7
Real effective exchange rate (1996=100) 4/	...	...	...	...	...	76.2	100.0	109.7	119.5	107.1

Sources: Yemeni authorities; staff estimates and projections.

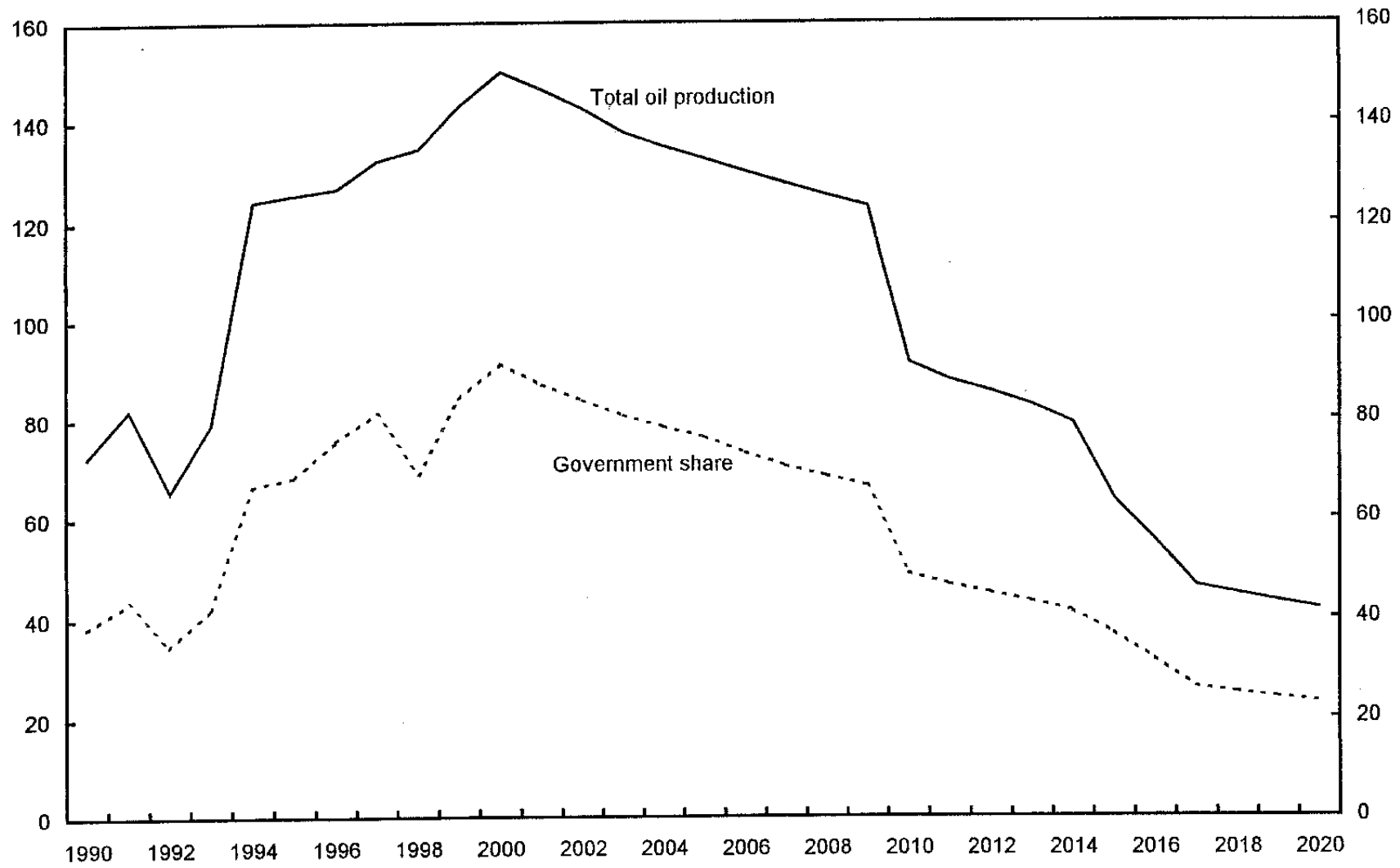
1/ EBS/99/98 (6/15/99).

2/ Gross reserves minus commercial bank foreign exchange deposits held with the central bank. Imports are for the current year, and exclude oil and gas sector imports. Short-term debt by remaining maturity; excludes private debt for which data is not available.

3/ Public- and publicly-guaranteed debt including central bank foreign liabilities. Debt service ratios in percent of exports of goods and services and reflecting reschedulings in 1996 and 1997 under the auspices of the Paris Club.

4/ Based on the free market rate.

Chart 1. Republic of Yemen: Crude Oil Production and Government Share 1/  
 (In millions of barrels per year)



Source: Ministry of Oil and Mineral Resources; Ministry of Finance; and staff calculations.

1/ Based on proven recoverable reserves as of end-1999; excluding natural gas reserves.

19. Three agreements signed in the 1980s eventually led to oil discoveries, which was quite substantial in two cases.<sup>11</sup> The remaining agreements for the currently producing blocks were signed in the early 1990s. In the early to mid-1990s, foreign interest in the Yemeni oil sector diminished, mainly due to the civil war and a relatively low exploration success rate (primarily because of geological difficulties). As the government realized that without additional foreign investment, oil production would decline in the near future; it began to offer better financial terms for interested oil companies and eased the terms of existing contracts on a case-by-case basis. A major change implemented in the contracts was allowing the share of cost oil to be periodically revised in light of movement in world oil prices.

20. To provide better incentives to oil companies investing in small fields, the Yemeni government renegotiated deals with NPC and CanOxy in 1995–96. The new financial terms allowed oil companies to recover their initial exploration expenses in a shorter period of time.<sup>12</sup> For the new agreements signed in 1996 and onwards, the starting point for the sliding scale of the profit-sharing formula was increased from 20 percent to 30 percent, and the share of cost oil was increased from about 30 percent to 50 percent–75 percent. That share was to be decreased, however, once the oil company had recovered its initial costs and entered into the operational phase. As a result of these better terms, the number of new companies in the oil sector increased significantly. During 1996–99, 20 exploration blocks were awarded (Statistical Appendix Table 11). As of February 2000, more than 26 oil companies were conducting exploration operations in Yemen on a total of 30 blocks. Most finished their

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<sup>11</sup> The first was signed in September 1981 with the U.S. Company Hunt Oil over a 16,890-km<sup>2</sup> area located in the then North Yemen in the onshore Tihama area (the Marib block). In addition to shares of cost oil and profit distribution, the terms of the agreement specified a 10 percent royalty on the fraction of production in excess of 100,000 b/d. In September 1986, a consortium consisting of CanOxy and Athens-based Consolidated Contractors International Company (CCC) was awarded two onshore tracts totaling 35,548 km<sup>2</sup> and located in the Masila region, which turned in the second most important oil findings in Yemen after Marib. In April 1987, the South Yemeni government awarded Total of France the 15,827 km<sup>2</sup> East Shabwa acreage located northeast of Aden. A consortium consisting of Total, Hunt Oil/Exxon, the Kuwait Foreign Petroleum Exploration Company (Kufpec), Mashinoimport, and Zarubezhgeologia signed an agreement in 1990 with the Yemeni Company for Investment in Oil and Mineral Resources (YCIOMR) for the exploration of Jannah, a tract of land of size 2,372 km<sup>2</sup>, with a signature bonus of US\$6 million. In the following year, Nimir Petroleum Company (NPC) signed an exploration agreement for the Ayad block, obtaining a much larger signature bonus of US\$27 million and a production bonus of US\$5 million at a rate of output exceeding 50,000 b/d. Oil had been found in the Ayad block earlier in the 1980s, but the company that held the concession at the time had later relinquished it.

<sup>12</sup> In the revised agreement with CanOxy, for example, costs would be recovered out of 50 percent of crude oil produced instead of the previous 28 percent. The original 10 percent royalty rate was replaced by a sliding scale, rising from 3 percent on production up to 25,000 b/d to 10 percent on production exceeding 100,000 b/d. Under its revised agreement, NPC would collect 70 percent of revenue generated on production up to 25,000 b/d as cost oil (instead of the previous 24 percent). Once that allocation is made, the company would pay the government 3 percent as royalties, and the remaining profit would be split evenly between NPC and the government. Similarly, in early 2000 the government finalized amendments raising companies' profit share to the production sharing agreement with the DNO-operated Block 32, in which production is expected to start in October 2000.



seismic surveys and were in the process of drilling exploration wells. More recently, the authorities moved away from their traditional approach of negotiating concessions on a bilateral basis and embarked in late 1999 on road shows in London and Houston, inviting a new round of bids for the development of seven blocks. About 15 companies seemed interested but none was ready to make a formal commitment, possibly awaiting important discoveries in the current exploration operations.

### *Production prospects*

21. According to the Petroleum Exploration and Production Board, Yemen's remaining recoverable reserves stood at 2.8 billion barrels at end-April 2000, allowing for a production horizon of about 18 years at the current level of output.<sup>13</sup> Yemen's oil production is expected to increase from an average of 389,000 b/d in 1999 to about 450,000 average in the year 2000. The main increase is expected to come from the Jannah and Shabwah blocks where large investments in infrastructure are taking place. Unless relatively large new fields come on stream, however, oil production is expected to start declining from 2001 onwards at an approximate average rate of 3 percent as fields in both Marib and Masila start drying up.<sup>14</sup>

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<sup>13</sup> Of these reserves, 413 million barrels are located in the Marib block, 1,410 million in the Masila block, 181 million in the Shabwah block, 281 million in the Jannah block, 107 million in the Ayad block, and 25 million in the Howarim block.

<sup>14</sup> **Masila** is currently the country's most productive block. Production started in July 1993 at an initial rate of 40,000 b/d and by 1999 reached 207,000 b/d on average. CanOxy reported that operating costs of the Masila fields were under US\$1 per barrel in 1999; it also invested about US\$60 million in continued field development for that year. However, if no new discoveries are made, Masila's production could begin to decline in 2001 by an average of 9,000 b/d. **Marib**, the country's second largest and oldest production field peaked in 1994 at 185,000 b/d; average production declined since, at a rate of about 14,000 b/d. This trend is expected to continue over the medium term, albeit at a smaller pace. Without further investment for secondary or tertiary extraction, Marib's output could decline to levels below 40,000 b/d by 2005. **Jannah** is the most promising block that emerged in the late 1990s. Production started in 1996, at about 4,000 b/d, and rapidly rose to reach 48,000 b/d in 1999. Output is expected to rise further to about 60,000 b/d in 2000 and to keep on increasing annually by 5,000–6,000 b/d for the near term. **Shabwa** came on stream in December 1997 and its output is expected to reach 27,000 b/d in 2000, from a current level of 17,000–18,000 b/d. This increase is owed to the development of two recently discovered fields on its tract, and this new level should be sustained in the near term. Some production took place in the **Ayad block** from 1988 to early 1990 when Technoexport operated the block. NPC took over in 1991 and resumed production in 1992 at a low level of 5,000 b/d. The civil war in Yemen caused the suspension of NPC's operations, and production was only taken up again (at a low rate of 1,000 b/d) in 1997 after the amendment of the terms of agreement with the government. Given the difficult geological conditions characterizing the Ayad tract, production is expected to decline steadily over the near term. **Howarim**, Block 32, is the sixth and latest block to produce oil in Yemen. It is operated by the Norwegian company DNO, is expected to come on stream in October 2000 with initial production from two wells in the Tasour field of about 5,000–7,000 b/d. Other exploration blocks (S1, S2, 9 and 15) yielded oil that added about 380 million barrels to recoverable reserves; production could start within a couple of years.

## *Refining*

22. Yemen has two state-owned refineries in Aden and in Marib. The refinery in Aden was constructed in 1954 by British Petroleum and nationalized by the PDRY. It is currently entirely state-owned and operated by the Aden Refinery Company (ARC). Initial capacity was about 150,000–170,000 b/d, but obsolescence of its equipment and other inefficiencies had reduced the refinery's capacity to about 110,000 b/d by 1990, and it sustained further significant damage during the civil war in 1994. It only refines about 70,000 b/d currently, producing an array of petroleum products (including gasoline, fuel oil, kerosene, and diesel) mainly for the domestic market. The Marib refinery was constructed much later in 1986, in the Marib block, specifically to refine oil extracted there. It is operated by Yemen Hunt Oil Company. Its capacity is much lower 10,000 b/d; and it mostly supplies the local market.

23. Under pricing arrangements introduced in early 1999, refineries pay the international price for crude oil delivered out of the government's share in production (through the Yemen Oil and Gas Corporation) and charge the Yemen Petroleum Corporation (YPC) international prices for refined products.<sup>15</sup> The Ministry of Finance transfers the difference to the YPC between its payments to the refineries and its sales (at administratively fixed prices for most products).

24. Progress on the renovation of the Aden refinery has been plagued with problems including disagreements over how much capacity to restore. In May 1998 the Council of Ministers approved, in principle, the privatization of the Aden refinery, and in January 2000 preparations for the privatization of the plant began.

## **The role of crude oil in the Yemeni economy**

25. The bulk of Yemeni crude oil production has always been exported which accounted for 80–90 percent of total exports over the period 1994–99 (Chart 2). Companies export their entire share, which has averaged about 43 percent of production in the second half of the 1990s; the government sells about two-thirds of its share abroad. The second half of 1999 was an exceptionally favorable period for the Yemeni government, as both the government's oil share and oil prices increased; the former was mainly due to high oil prices allowing the government to negotiate substantially lower than usual cost oil shares for the companies.

26. Over the course of the decade, dependence on oil to generate exports and budget revenues has increased quite sharply in Yemen, also when compared to other non-major oil producing countries (Chart 2). By the second half of the 1990s, Yemen's dependence on oil

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<sup>15</sup> The formulas are different across the two refineries. YPC pays the Marib refinery average monthly prices quoted on the Mediterranean market; however, it pays the ARC daily prices quoted by Platts Marketscan News from the Rotterdam market, plus a premium of US\$17 per ton. The latter supposedly reflects remuneration for shipping services, but may partly include an explicit subsidy to compensate for the refinery's inefficiency.

exceeded, for example, that of Syria, and it has always been higher than Egypt's.<sup>16</sup> A simple simulation exercise highlights the extent to which Yemen has become more vulnerable to oil price movements. Table 2 shows the effect of a unit decrease in the export price of crude oil on government and export revenues for the sample countries, assuming unchanged production levels and profit-sharing arrangements for each year. For example, an oil price lower by one U.S. dollar in 1999 would have resulted in a drop in budget revenues of 0.68 percent of GDP in Yemen, higher than those all other sample countries except Saudi Arabia; it would have also reduced exports by 1.67 percent of GDP, an impact considerably larger than the one for all other sample countries.

27. More generally, Table 3 summarizes key volatility measures of oil-related macroeconomic aggregates for Yemen and a sample of countries from the region. Terms of trade volatility in the 1990s were much higher for oil exporters than for non-oil exporting countries in the sample, clearly due to the volatility in oil prices. Yemen's terms of trade volatility was similar to that of other oil-exporters in the region, but is associated with higher than-average income volatility. Indeed, in Yemen as in Iran, GDP volatility is not much below terms of trade volatility; while for Saudi Arabia and Egypt, GDP is far less volatile than the terms of trade.<sup>17</sup> Yemen's terms of trade variability is also associated with relatively larger volatility of government revenues, compared to countries such as Syria and Egypt, and high oil price variability could, therefore, have a bigger negative impact on Yemen. In part, this reflects the fact that under the cost-sharing agreements with oil companies' oil revenues accruing to the government do not change linearly with oil prices. The lower the oil price, the more oil volume is necessary to pay for oil production costs and thus the lower the oil volume available to the government. Hence, falling oil prices also cause a fall in government oil volume. The opposite holds true for rising oil prices.

28. Fluctuations in real gross domestic income (RGDI) are another way to capture the impact of oil price volatility on the Yemeni economy, adjusting fluctuations in real gross domestic product (RGDP) for terms of trade effects:<sup>18</sup>

$$\text{RGDI} = \text{RGDP} + \text{ToT effect.}$$

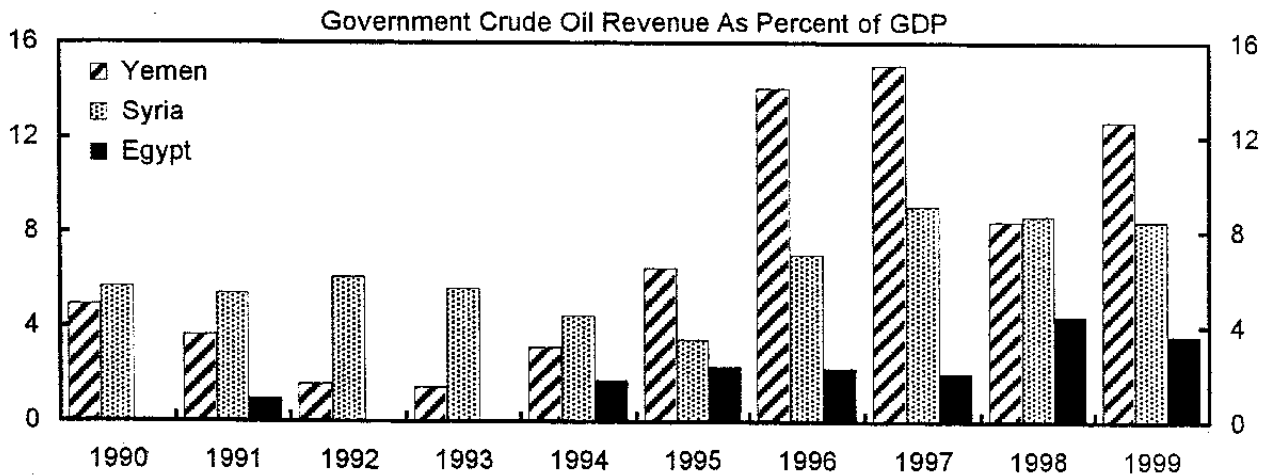
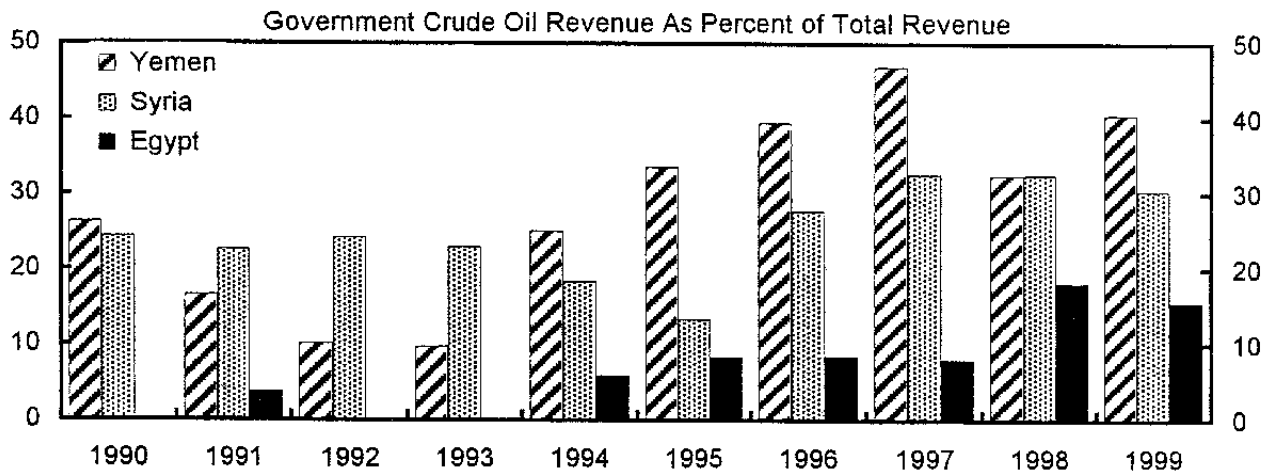
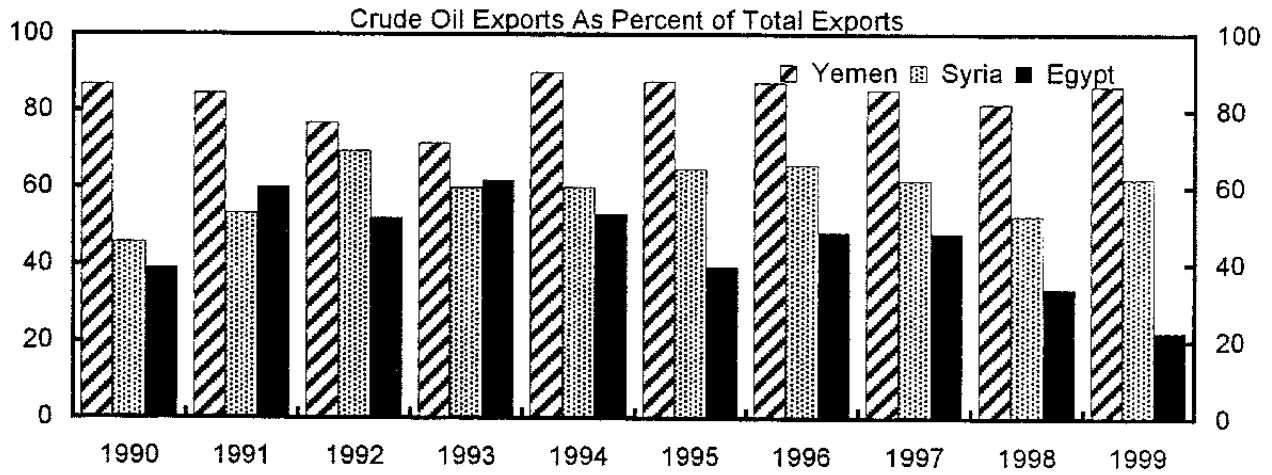
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<sup>16</sup> Data on government crude oil revenues for Egypt (measured by crude oil receipts of the state petroleum company Egyptian General Petroleum Company) were not available for the fiscal years 1989/90, 1991/92, and 1992/93. The data reported on all charts corresponds to fiscal year data. For both Syria and Yemen, the fiscal year is the same as the calendar year; for Egypt, 1990 refers to data for fiscal year 1989/90, and so on.

<sup>17</sup> Unstable correlation patterns between trade price indices and output have often been observed in both developed and developing country data. For example, see Backus and Crucini, 2000.

<sup>18</sup> See Qatar—Recent Economic Developments and Selected Issues, January 2000 (SM/00/1).

Chart 2. Republic of Yemen: Crude Oil Comparisons, 1990-99  
(Comparing Yemen to other non-major oil exporters)



Source: Ministry of Oil and Mineral Resources.

Table 2. Republic of Yemen: Sensitivity to Oil Price Changes, 1990-99

(In percent of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
(1) Effect of US\$1-decrease in the oil export price on budget revenues 1/										
Egypt	n.a.	-0.05	n.a.	n.a.	-0.12	-0.16	-0.14	-0.11	-0.31	-0.36
Iran	-0.45	-0.44	-0.46	-1.51	-1.09	-0.98	-0.81	-0.81	-0.65	-0.67
Saudi Arabia	-1.46	-1.74	-1.7	-1.71	-1.54	-1.43	-1.32	-1.57	-1.4	-1.12
Syria	-0.26	-0.3	-0.34	-0.37	-0.28	-0.21	-0.37	-0.5	-0.76	-0.53
Yemen	-0.23	-0.18	-0.08	-0.09	-0.2	-0.38	-0.69	-0.81	-0.71	-0.68
(2) Effect of US\$1-decrease in the oil export price on exports 1/										
Egypt	-0.18	-0.31	-0.26	-0.28	-0.23	-0.22	-0.21	-0.18	-0.15	-0.11
Iran	-0.98	-0.78	-0.75	-1.12	-1.23	-0.96	-0.85	-0.84	-0.84	-0.74
Saudi Arabia	-1.58	-1.88	-1.96	-2.33	-2.3	-2.02	-1.58	-1.54	-1.82	-1.48
Syria	-0.72	-0.78	-0.92	-0.93	-0.81	-0.91	-0.83	-0.86	-0.88	-0.83
Yemen	-0.66	-0.89	-0.75	-1.12	-2.9	-2.55	-1.78	-1.59	-1.62	-1.67

Source: Staff estimates.

1/ Assumes unchanged production and sharing patterns between the government and oil companies. Because of different classifications for each country, the results should only be interpreted as broadly indicative of trends.

Table 3. Republic of Yemen: Oil-Related Volatility in the Economy,  
Comparing with Other Oil Exporters in the Region

(In millions of Yemeni Rials)

	Crude Export Price 1/	Terms of Trade 1/	Oil Exports, Share of GDP 2/	Budget Revenues from Crude Oil, Share of GDP 2/	Real GDP 1/
(Major Oil Exporters)					
Saudi Arabia	0.17	0.16	3.7	4.7	0.05
Iran	0.18	0.2	3.7	5.5	0.12
(Other Oil Exporters)					
Egypt	0.2	0.31	1.4	1.2	0.1
Syria	0.17	0.1	1.9	1.9	0.16
Yemen	0.18	0.17	11.6	5.2	0.1
(Non-Oil Exporters)					
Jordan	...	0.07	...	...	0.15

Source: Staff estimates.

1/ The volatility for crude export price, terms of trade, and real GDP was calculated as the standard deviation of the natural logarithms of the corresponding annual values over the period 1990–99.

2/ The volatility for the GDP-shares of oil exports and budget oil revenues was calculated as the standard deviation of the corresponding annual values.

The terms of trade effect adjusts the volume of production, measured by RGDP, for changes in the purchasing power of income generated by such production.<sup>19</sup> Simple calculations show that in 1990–99 the volatility of RGDI reached 0.23, more than the double of RGDP volatility. In 1998, following the large drop in oil prices, the 30 percent decline in the terms of trade for Yemen was associated with a 15 percent decline in RGDI; the 61 percent improvement in terms of trade in the following year led to a 59 percent increase in RGDI (changes in RGDP for these two years were 5.3 percent and 3.8 percent, respectively).

29. Growing budgetary vulnerability can be illustrated by recent episodes. The collapse in oil prices in 1998, for example, was accompanied by a dramatic decline in government export revenue from 15 percent of GDP in 1997 to 8.5 percent in 1998. In that instance, because of oil shares cost rising, the price decline was aggravated by a 17 percent reduction in the government share of the total volume of oil production. By the same token, with the rapid rise in oil prices and an increasing government share in oil production, in 1999 oil export revenues reached 12.7 percent of GDP. The 1998–99 swing in prices also pointed to costs in adjusting expenditures. With limited access to foreign financing, avoiding inflationary deficit financing requires sharp adjustments to expenditures in times of low oil prices. Much expenditure is already predetermined by long-term decisions and cannot be cut at short notice. In 1998, the government coped with the unexpected revenue shortfalls by stopping development projects on an ad hoc basis, not always reflecting spending priorities. Moreover, wage increases were delayed and granted only after the recovery of oil prices in 1999. While difficult to quantify, the economy likely suffered costs, such as the unavailability of unfinished schools and infrastructure as well as more indirect effects on investment and saving.

### Gas production prospects

30. Yemen's proven natural gas reserves are about 15 trillion cubic feet,<sup>20</sup> about one percent of the Middle East total. So far, only few facilities for recovering and utilizing associated gas have been installed. About 30,000 b/d equivalent of liquefied petroleum gas (LPG) are currently produced in the Marib block, fully covering domestic consumption.

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<sup>19</sup> In other words *ToT effect* =  $NX/P - (X/P_x - M/P_m)$  where  $NX$  refers to the nominal trade balance,  $P$  to a price deflator for the trade balance (the CPI is used here as a proxy measure for  $P$ ),  $X$  and  $M$  to nominal exports and imports respectively, and  $P_x$  and  $P_m$  to their respective price deflators.

<sup>20</sup> About 13.5 trillion cubic feet in the form of associated and non-associated gas is concentrated in the Marib block while the rest is found in the Jannah block. Recent discoveries in Block S1 could add some 2 trillion cubic feet to this stock.

31. After the civil war, the government signed a joint contract establishing the Yemen liquefied natural gas (LNG) Company—a partnership of Hunt, Exxon, Yukong, and Total of France—with the public General Gas Corporation of Yemen, which retained 26 percent of the venture. The LNG project stipulates the construction of: (a) a two-train liquefaction plant with a capacity of 5.3 million tons per year; and (b) facilities for supplying gas to local power stations and industrial factories. The initial expenditure is estimated at about US\$2.6 billion, but could reach US\$5 billion if the cost of shipping the LNG to foreign markets is factored in. In addition, a 100–250 million cubic feet per day capacity gas line is to be constructed to supply Sana'a with gas for local consumption, and the maximum possible volume of LPG is to be extracted as well for both domestic consumption and for export. The agreement between the government and the foreign companies with holdings in Yemen LNG would expire 25 years from the start of exports.

32. The launching of the LNG project has been delayed so far because of the lack of secured markets in which to sell the gas. The Asian crisis in 1997–98 temporarily dimmed the prospects of finding markets for LNG in the region, and—even with the upturn of the economic situation in Asia—Yemen faces strong competition from Oman and Qatar, which already have LNG infrastructure in place with room to expand existing plants, if necessary. However, despite the fact that no definite gas sales contracts have yet been signed, Yemen LNG recently decided to invite bids for the execution of the project (including the plant, pipeline, and long-lead items) starting in March 2001. Three years would be needed to complete the construction of the plant.

### C. External Debt

33. Of the many burdens unified Yemen inherited, the crushing external debt was among the heaviest. By the end of 1990, unified Yemen's medium- and long-term external public and publicly guaranteed debt amounted to an estimated US\$9.9 billion (equivalent to 106 percent of GDP) of which US\$6.4 billion (valued at the official exchange rate) was debt to the members of the former Council of Mutual Economic Assistance (CMEA) with Russia accounting for 97 percent of it.<sup>21</sup> Yemen's debt service obligations for 1990 were estimated at US\$696 million (47 percent of exports of goods and nonfactor services) on a commitment basis. However, the actual debt service payments were in the order of US\$426 million as debt service to the former CMEA and certain Middle Eastern countries and financial institutions had been in abeyance since mid-1990 (Table 4).

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<sup>21</sup> The debt of the former PDRY to the former Soviet Union was inherited by the unified Yemen and Russia, respectively.



Table 4. Republic of Yemen: Balance of Payments, 1990-99

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	(In millions of U.S. dollars)									
Current account	-292	-849	-1,091	-1,248	366	183	106	23	-230	195
Current account excluding oil company transactions	-370	-669	-516	-520	375	-135	-143	-153	-541	-193
Goods and services	-1,080	-1,361	-1,648	-1,837	-173	-422	-401	-602	-1,124	-464
Trade balance	-341	-700	-796	-920	302	-11	-31	-133	-727	25
Exports, f.o.b.	1,384	1,197	1,095	1,167	1,824	1,937	2,263	2,274	1,501	2,464
<i>Of which</i>										
Crude oil	1,203	1,011	819	834	1,615	1,735	1,976	1,945	1,229	2,131
Imports, c.i.f.	-1,726	-1,897	-1,891	-2,087	-1,522	-1,948	-2,294	-2,407	-2,228	-2,440
<i>Of which</i>										
Food	-554	-550	-489	-499	-427	-687	-915	-916	-787	-807
<i>Of which</i>										
Wheat and flour imports	...	...	...	...	-274	-433	-617	-484	-374	-378
Services, net	-739	-661	-852	-917	-475	-411	-370	-470	-398	-489
Income	-454	-566	-514	-478	-579	-499	-682	-631	-359	-655
<i>Of which</i>										
Oil company profits	-284	-290	-265	-244	-393	-324	-541	-554	-301	-599
Interest income, net	22	25	17	6	4	16	29	47	40	43
Current transfers	1,241	1,078	1,071	1,067	1,117	1,104	1,188	1,256	1,254	1,314
<i>Of which</i>										
Workers' remittances, net	1,071	841	989	1,013	1,043	1,064	1,123	1,157	1,191	1,223
Capital and financial account	356	88	-36	74	-641	-876	-397	34	-207	-74
Financial account excluding oil company transactions	84	-390	-754	-829	-657	-626	-123	109	-11	364
Oil sector direct investment, net	-131	282	718	903	16	-218	-60	-138	-267	-319
Trade credits, net	...	-12	12	-51	29	36	104	-16	-117	-119
Medium- and long-term loans, net	84	-678	-762	-771	-685	-694	-521	-66	-64	27
Private capital, net	...	...	...	...	...	...	80	255	240	337
Errors and omissions 1/	-129	-42	-156	165	-504	655	-334	60	-27	199
Financing	65	803	1,283	1,008	779	38	625	-116	463	-320

Table 4. Republic of Yemen: Balance of Payments, 1990-99

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Net reserves, official and banks (increase -)	-205	-158	380	99	-79	-713	-37	-297	317	-459
Official net reserves	44	-272	332	144	-149	-260	-294	-27	330	-467
Commercial banks net reserves	-249	114	48	-45	69	-453	257	-270	-13	8
Memorandum items:										
Current account including grants (percent of GDP)	-3.1	-10.7	-13.2	-16.1	5.6	2.8	1.7	0.3	-3.7	2.9
<i>Of which</i>										
Official grants (percent of GDP)	1.2	1.6	0.5	0.4	1.1	0.6	0.9	1.4	0.9	1.3
Central bank own gross foreign reserves 3/	424	680	323	147	357	525	937	1,152	853	1,351
(Months of imports) 4/	2.8	4.2	2.2	0.9	2.9	3.1	4.6	5.3	4.2	6.0
Official external debt 5/	9,915	10,323	10,541	10,735	10,876	11,017	11,135	5,359	5,373	5,490
Official external debt (percent of GDP) 5/	105.7	129.5	127.9	138.5	167.1	170.1	173.2	81.2	85.3	80.4
Debt service (percent of exports of goods and services) 5/										
Obligation basis	46.7	91.3	89.1	80.8	46.8	42.1	31.9	12.6	17.0	10.5
Actual	28.6	17.9	17.2	13.2	3.3	6.6	8.7	10.3	14.0	8.3
Change in outstanding Fund credit (US\$ millions), increase (+)	...	...	...	...	...	...	120.6	129.8	84.5	73.5

Sources: Central Bank of Yemen; and Fund staff estimates and projections.

1/ For the period until 1996, includes private capital.

2/ Represents full settlement of overdue obligations to non-Paris Club official bilateral creditors under discussion to ensure comparable treatment and commercial debt subject to IDA debt buyback.

3/ Includes central bank SDR holdings, foreign exchange held abroad, foreign securities, gold, silver, and foreign currencies, excludes commercial bank required foreign exchange reserves with the central bank against their foreign currency deposits.

4/ Imports are c.i.f. for current year and exclude oil sector imports.

5/ Public- and publicly-guaranteed debt including central bank foreign liabilities. Debt and debt service reflect the 1996 and 1997 Paris Club reschedulings, including the 80 percent upfront discount provided by the Russian Federation.

34. In 1991, the government began to explore the possibilities to normalize the arrears situation and to seek debt relief. Following the temporary interruptions in 1990, debt service payments to all regional multilateral institutions were resumed. The government's debt-servicing policy was to fully service its contractual obligations to international multilateral creditors and to give debt-servicing priority to those bilateral and regional multilateral creditors who continued to provide resources for development.<sup>22</sup> For the former CMEA creditors, the policy was to seek a write-off of all obligations relating to the military debt of the former PDRY and a rescheduling of principal and a write-off of interest obligations on civilian debt.<sup>23</sup>

35. In 1993, Germany forgave Yemen's debt to the former German Democratic Republic (US\$46 million), but there were no negotiations with Middle Eastern or other former CMEA countries, except Russia, to seek ways to address Yemen's external indebtedness. While an agreement was reached with the Russian authorities in early 1993 on the magnitude of the ruble stock of debt, differences persisted over the currency and exchange rate for valuing and servicing the debt. In the end of 1994, Russia offered to cancel Yemen's debt for a cash payment equivalent to 10 percent of the stock of debt outstanding plus the accumulated interest arrears valued at the loan contracting rate. While the Yemeni government wished to resolve the Russian debt issue, the financial resources available at the time or in prospect were not sufficient to meet those terms.

36. In 1994, all debt service to multilateral creditors became current despite shortfalls continued in debt service payments to bilateral creditors.<sup>24</sup> By the end of 1995, Yemen's public and publicly guaranteed external debt (including capitalized interest) had risen to about US\$11.0 billion, or 170 percent of GDP, of which US\$6.8 billion was debt to Russia. Over the same period, the stock of official external arrears reached an estimated US\$6.4 billion of which US\$4.8 billion were arrears to Russia.

37. In February 1996, the government requested debt relief from the Paris Club creditors and intensified its efforts to reach an agreement on debt relief with Russia and other bilateral official and commercial creditors. On September 24, 1996, Paris Club creditors reached an agreement with Yemen on a flow rescheduling on Naples Terms.<sup>25</sup> The debt relief applied to

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<sup>22</sup> Given the difficult external debt position, the government's external borrowing policy was to avoid new borrowing on commercial terms, to carefully consider any new concessional borrowing, and to provide government guarantees only on supplier credits for food imports.

<sup>23</sup> Debt obligations to the former CMEA creditors were viewed largely as "political" rather than "economic" debt.

<sup>24</sup> The external debt service obligations during the 1994-95 periods were estimated at US\$1.8 billion on a commitment basis while the actual debt payments were only US\$205 million.

<sup>25</sup> The participating creditor countries were Denmark, France, Germany, Italy, Japan, the Netherlands, the United Kingdom, and the United States.

medium- and long-term public and publicly guaranteed external debt contracted before the January 1, 1993 cut-off date and entailed a 67 percent reduction in the net present value (NPV) of consolidated debt, encompassing outstanding debt service arrears as of end-August 1996 and obligations falling due during the September 1, 1996–June 30, 1997 period.<sup>26</sup> This provided a debt service relief in the amount of US\$93 million for the remaining months of 1996. The participating creditor countries also agreed in principle to consider the matter of Yemen's debt service payments falling due after June 30, 1997 and relating to loans contracted before January 1, 1993.

38. Following the September 1996 Paris Club meeting, the authorities communicated to all other bilateral creditors requests to negotiate debt relief on terms that would be at least as favorable as those granted by the Paris Club creditors. In particular, intense direct contacts with Russia were initiated in late 1996.<sup>27</sup>

39. On September 17, 1997, Russia reached an agreement with the Paris Club creditors on Russia's participation in the Paris Club and, in line with the provisions of the agreement, agreed to provide debt relief to Yemen on Paris Club terms. The agreement applied to the totality of Russian claims on Yemen, including capitalized interest, and, for the purpose of their treatment within the Paris Club, entailed an 80 percent up front discount to be applied at the date of the signature of an Agreed Minute.<sup>28</sup> The Agreed Minute negotiated in November 1997 between Yemen and its Paris Club creditors (including Russia) provided a 67 percent NPV reduction of consolidated public and publicly guaranteed external debt contracted before January 1, 1993, and encompassing outstanding debt service arrears as of end-October 1997 (including late interest); principal due from November 1, 1997 up to October 31, 2000; and interest obligations (excluding late interest) falling due during the July 1, 1999–October 31, 2000 period.<sup>29</sup> This provided an immediate debt relief in the amount of US\$6.0 billion of which US\$5.9 billion was for arrears reduction.

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<sup>26</sup> The 1996 agreement did not include late interest that, by end-1996, amounted to US\$542 million of which 90 percent was due to Russia.

<sup>27</sup> By end-1996, the stock of external debt stood at US\$11.1 billion or 173 percent of GDP, and the stock of external arrears reached US\$7.0 billion. Debt to the Russian Federation, evaluated at the loan-contracting rate of Rub 0.6 per U.S. dollar, accounted for 62 percent of total debt and 77 percent of amortization and interest arrears.

<sup>28</sup> The rate of discount was determined based on the fact that Yemen was an International Development Agency (IDA) only country for which Russia was the largest military creditor among the Paris Club creditors. Russia's agreement to the discount was based on using the official USSR Gosbank ruble exchange rate of Rub 0.6 per U.S. dollar and a conversion rate of the transferable ruble (in which the original claims were denominated) of 1 Rub per U.S. dollar.

<sup>29</sup> As of end-1999, the bilateral agreements implementing the Agreed Minute had been signed with all Paris Club creditors except France.

40. In addition, the authorities requested assistance under the IDA Debt Reduction Facility in executing buybacks of the remaining commercial debt, which had been in default since 1991. Yemen's total commercial debt eligible for the Facility amounted to US\$695 million of which US\$415 million consisted of principal and the rest of interest arrears. Of the principal, about US\$342 million was owed to Russian creditors and the rest to creditors from 51 countries. Under the proposed buyback operation, all interest arrears were to be forgiven; the principal arrears were to be bought back at a fixed price after an initial reduction of 80 percent was applied to the stock of Russian commercial debt in line with the provisions of the September 17, 1997 agreement between Russia and the Paris Club on Russia's participation in the Paris Club.<sup>30</sup> A grant in the amount of US\$15.10 million was approved in November 1999 and a buyback offer for a payment of 10 cents per U.S. dollar of outstanding principal was launched.<sup>31</sup>

41. As a result of the multiyear debt relief provided under the 1997 Paris Club, rescheduling, Yemen's external debt burden was substantially reduced. The total official external debt declined from US\$11.1 billion (173 percent of GDP) by the end of 1996, to US\$5.5 billion (80 percent of GDP) by the end of 1999 while the stock of amortization and interest arrears was reduced from US\$7.0 billion to US\$1.2 billion.<sup>32</sup> Over the same period, external debt service obligations declined from 32 percent of exports of goods and nonfactor services to 11 percent.

42. In early 2000, the government undertook a debt sustainability analysis (DSA) in collaboration with the Fund and Bank staffs. The analysis was based on the stock of public and publicly guaranteed external debt outstanding as of end-1999 and assumed a full use of traditional debt relief mechanisms, in particular, a stock-of-debt operation on Naples Terms in the near future. The results of the analysis indicate that Yemen's external debt position would remain sustainable over the medium term with the stock of debt and the ratio of debt service payments to exports of goods and nonfactor services projected to decline further (after taking into account expected new borrowing), to US\$5.4 billion (64 percent of GDP) and 7.8 percent, respectively, by 2005; and that Yemen would not be eligible for special assistance under the enhanced Highly Indebted Poor Country (HIPC) Initiative.

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<sup>30</sup> This ensured a comparable treatment with the official debts owed by the government of Yemen to the Russian government included in the Paris Club agreement. As a consequence, the effective buyback price for the "Russian debt" component of this operation was 2 cents per U.S. dollar of the principal amount of eligible debt.

<sup>31</sup> Of this amount, US\$1 million was intended for the incidental costs related to closing the operation, auditing the records, and protecting against exchange rate fluctuations.

<sup>32</sup> Implementation of the commercial debt buyback operation would further reduce the stock of external debt service arrears to US\$760 million, which represents arrears to non-Paris Club bilateral creditors from whom the Yemeni authorities have requested debt relief on terms comparable with those obtained from the Paris Club.

### III. MACROECONOMIC POLICY DURING 1990-99

#### A. Changing Policy Mix

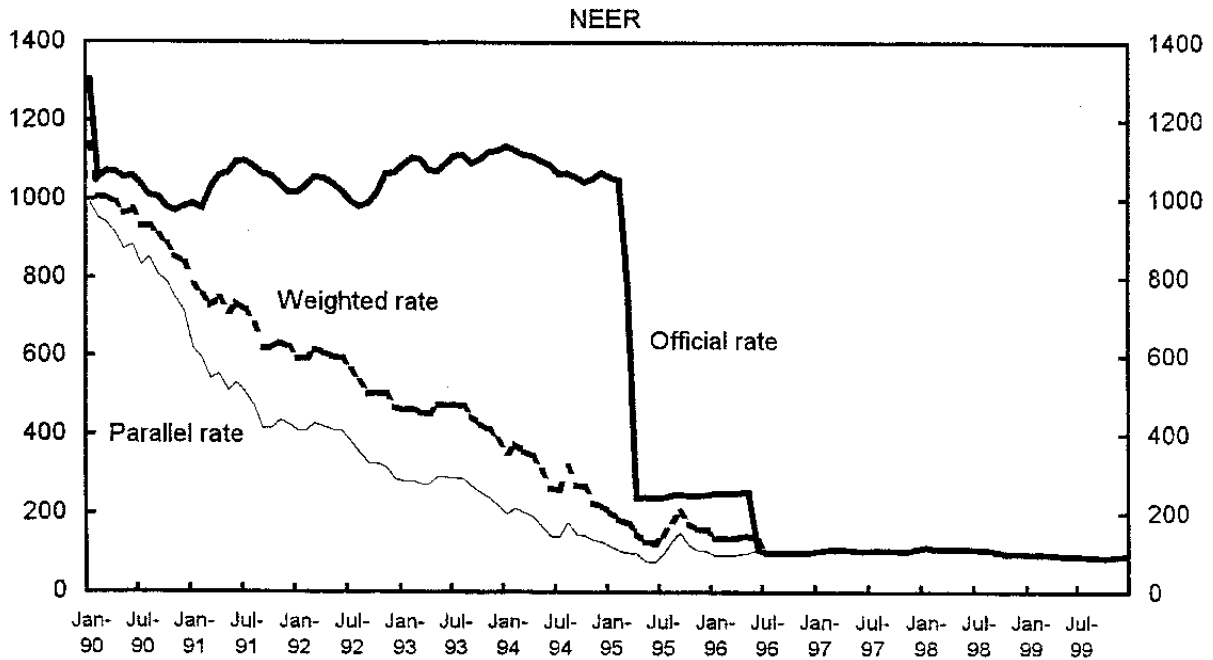
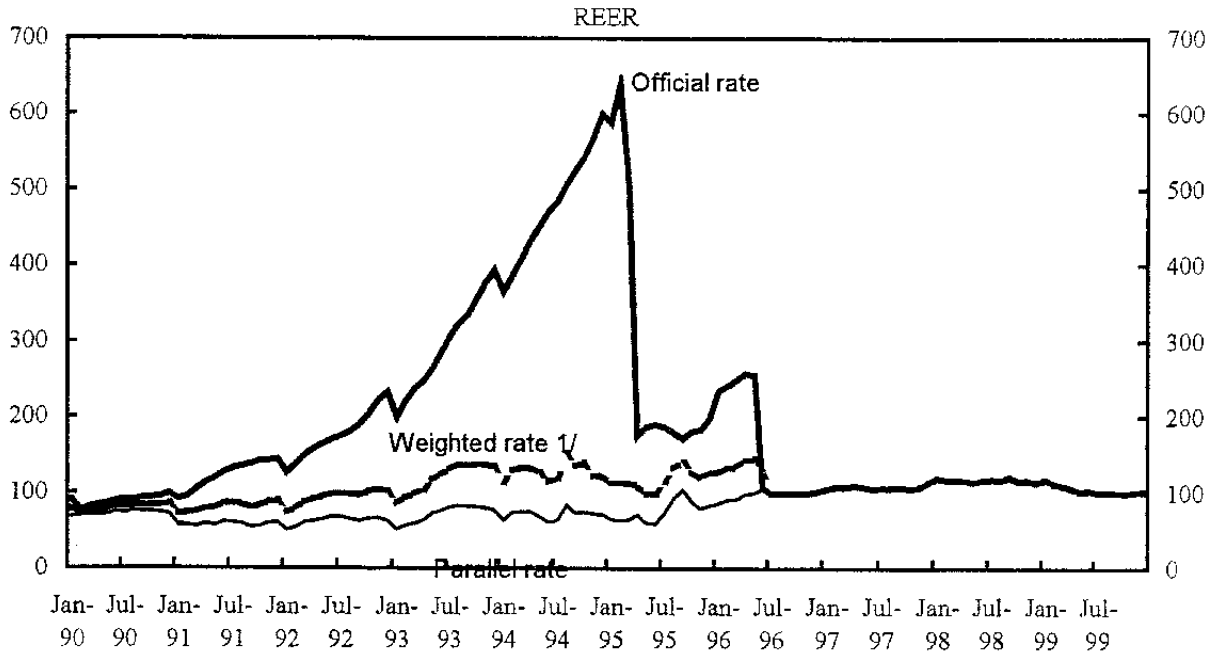
43. The macroeconomic policy mix differed radically between the first and the second half of the 1990s. Unification of the YAR and the PDRY in 1990 joined two countries that already faced considerable macroeconomic policy challenges on their own in the late 1980s. The budget deficits of the YAR ranged from 15 percent to 20 percent in 1988 and 1989, of which about two-thirds were financed by the central bank, keeping inflation in double digits. In the centrally planned economy of the PDRY, the fiscal deficit reached over 50 percent of GDP in both 1988 and 1989, of which 25 percent to 30 percent were domestically financed.<sup>33</sup> Unification added new problems which were related to the merger of the two civil services and tax systems as well as the large number of publicly operated enterprises in the southern governorates. Since unification had resulted from negotiation between two sovereign governments that received equal weight in the new joint government, many conflicts inherent in the different economic philosophies were resolved only after the civil war in 1994.<sup>34</sup> The Middle East crisis of 1990 also added strains to both public and private financial balances in the early 1990s with the return of workers from neighboring countries and the drying up of most external financial assistance. Faced with financial crisis, following some early price liberalization efforts during 1990-91, the authorities' macroeconomic policy mix centered in the first half of the decade around attempts to manage financial imbalances through direct control of the economy, affecting in particular imports, exchange rates, interest rates, and investment. The attempt to defend nominal exchange rates led to a sharp appreciation of the real effective exchange rate in the first half of the 1990s (Chart 3). As it became increasingly clear that multiple exchange rates and foreign exchange controls exacerbated the negative impacts of external shocks, in 1993-94 the authorities took some partial steps to achieve positive real interest rates and more realistic exchange rates.

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<sup>33</sup> As a result of price controls, official inflation in the PDRY remained subdued.

<sup>34</sup> In this respect, the Yemeni experience differs from German unification. In Germany, practically all laws and regulations of the western market economy were immediately adopted by the centrally planned eastern economy, and many high-ranking eastern civil servants lost their jobs.

Chart 3. Republic of Yemen: Real and Nominal Effective Exchange Rate, 1990–99  
(August 1996 = 100)



Source: International Monetary Fund, Information Notice System.

1/ The weighted exchange rate was derived by applying assumptions on the shares of various external transactions taking place at either the parallel or the official exchange rates.

44. However, it was only, during the period 1995–99, that the implementation of the authorities' reform program, with assistance from the IMF and the World Bank, slowly transformed the economy into one of the more open and market oriented systems in the region. This process was supported by rising oil revenue and the return of internal and external stability. Efforts to improve fiscal balances were essential to these achievements, along with the adoption of a unified floating exchange rate system that helped to broadly stabilize the real exchange rate at levels well below the earlier peaks. However, the large swing in oil prices in 1998 and 1999 served as a reminder of the fragility of macroeconomic balances in a country that depends largely on revenue from crude oil exports. The government's ongoing reform program therefore aims at preserving a larger share of the oil revenue to cushion swings in oil prices, and enhancing growth of the non-oil economy by encouraging investment and improving education.

### **B. Crisis, Controls, and Stagnation—Macroeconomic Policies 1990–94**

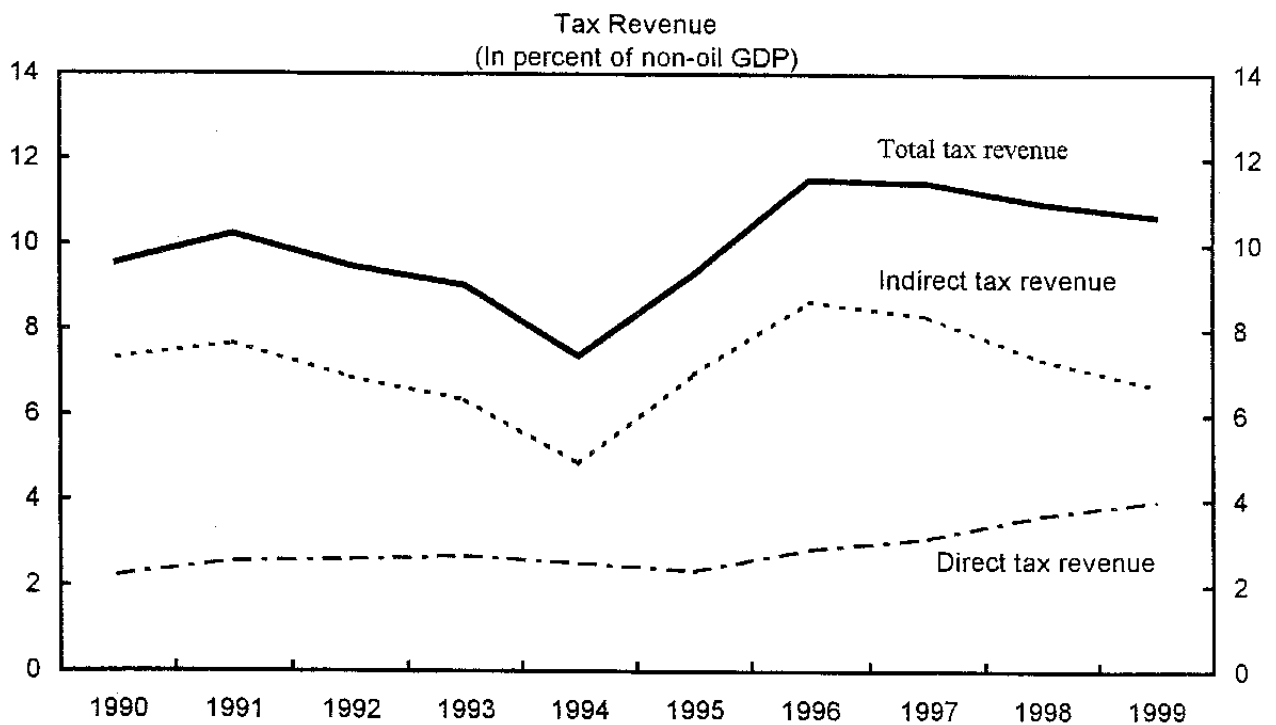
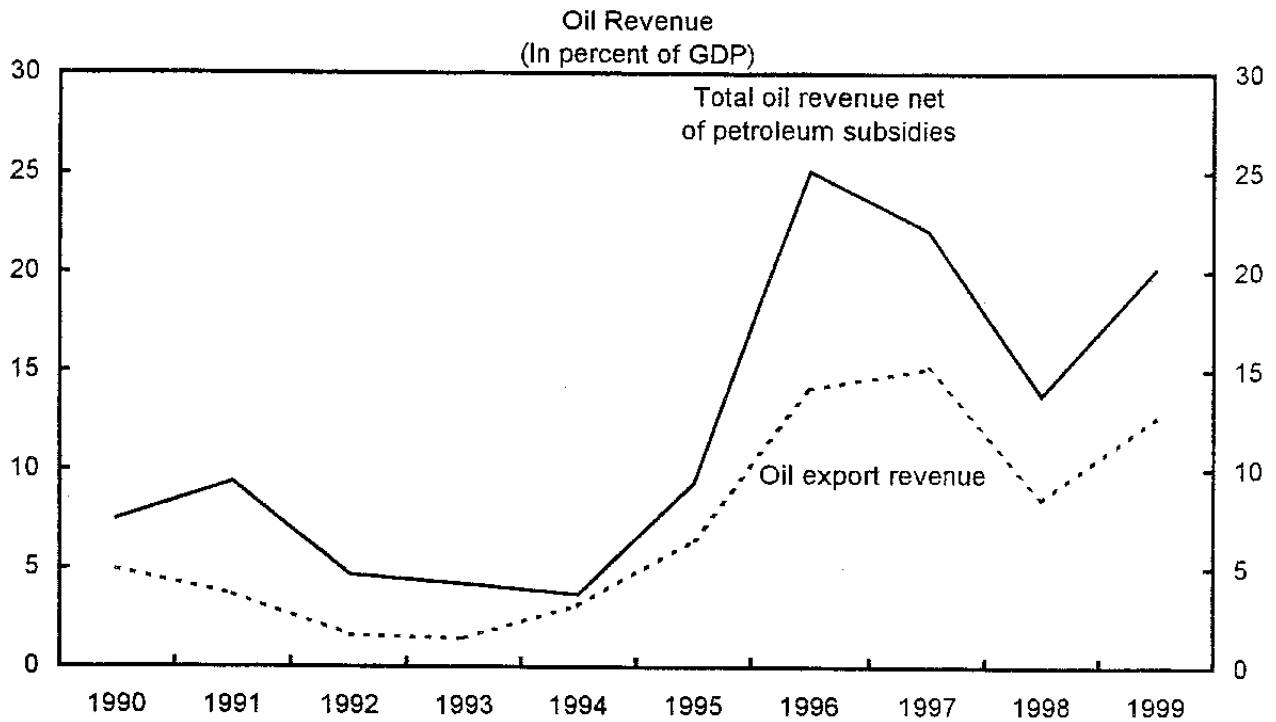
#### **Public finances, 1990–94**

45. Between 1990 and 1994, limited efforts were made to address severe structural fiscal problems in Yemen. Large and rising implicit subsidies for domestic petroleum products and wheat imports weighed heavily on public finances, the customs base was eroding; and the collection of taxes on goods and services was declining as a percent of GDP (Charts 4–5). An already large civil service was afforded large wage increases, albeit below levels of rampant inflation. The resulting financial pressures motivated the maintenance of controls, which, in turn, further aggravated fiscal imbalances and deterred private sector activity. After 1994, the newly constituted government was thus left with a large backlog of economic reforms as well as the task of repairing the physical damage of the war and mending the rift between North and South.

46. The large fiscal deficits were at the core of the severe internal and external imbalances in 1990–94 (Table 1; and Chart 6). With the exception of 1991, the deficit on a commitment basis remained above 12 percent of GDP between 1990 and 1994. Because loan disbursements dried up almost entirely in the years after the Gulf crisis of 1990 and because the dissolution of the Soviet Union, these deficits were largely financed by the accumulation of external arrears, or were simply monetized, and inflation accelerated from 33 percent in 1990 to 71 percent in 1994.

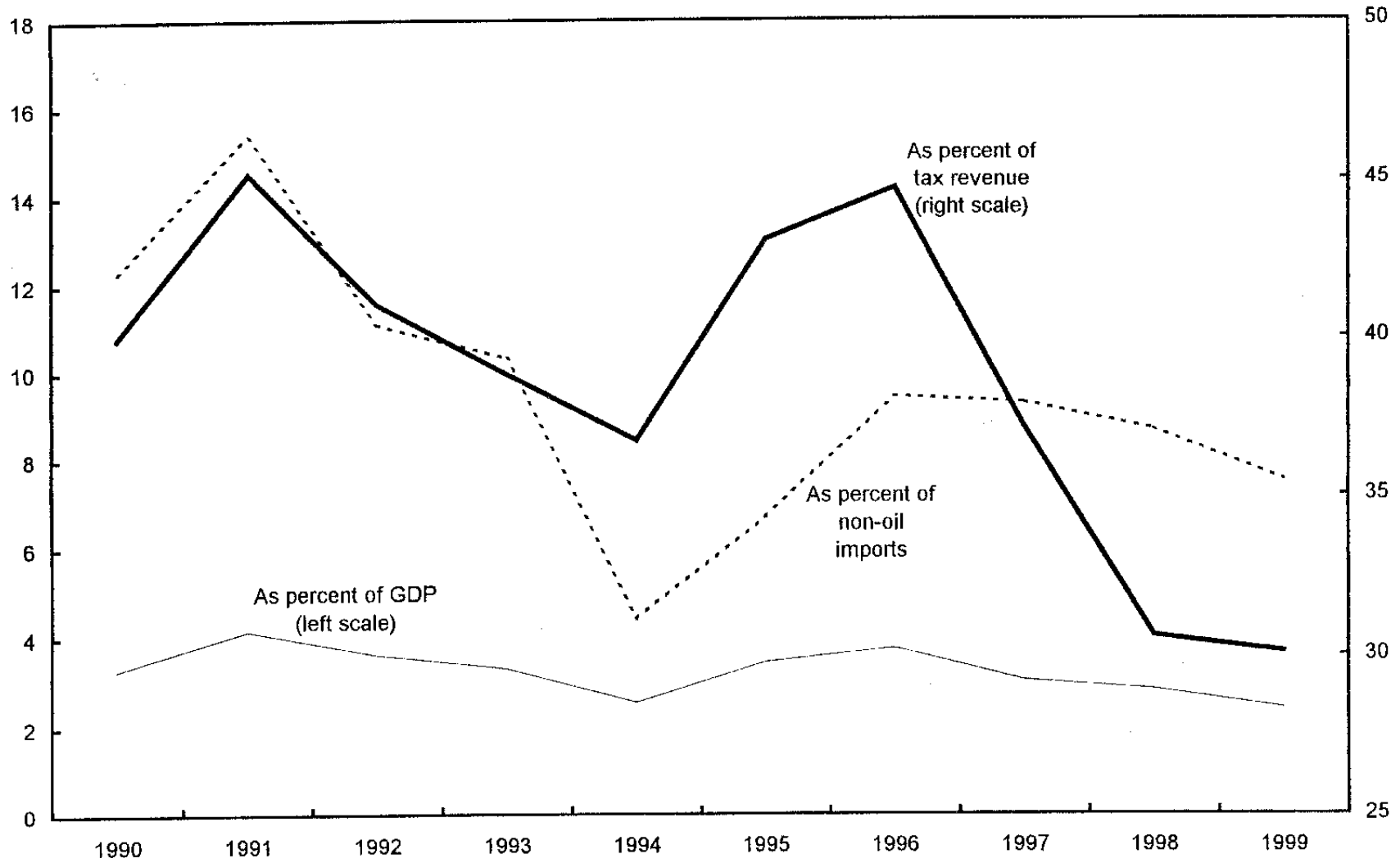


Chart 4. Republic of Yemen: Government Revenue, 1990-99



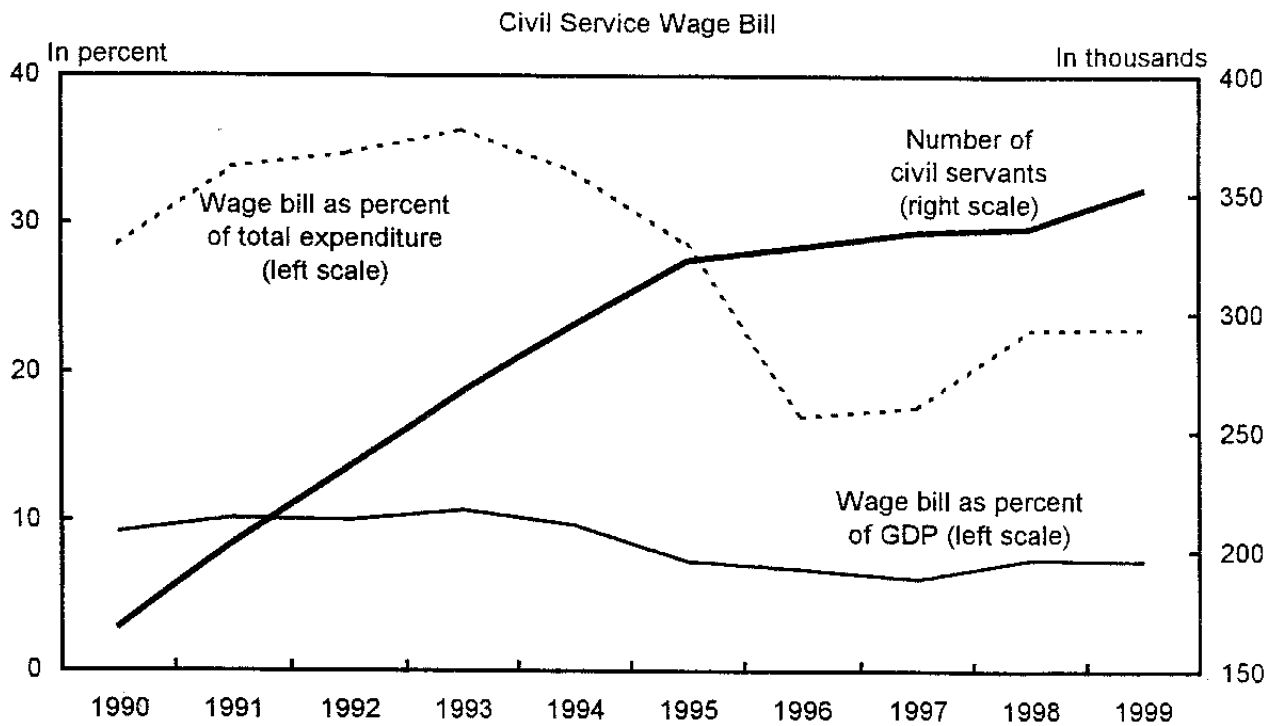
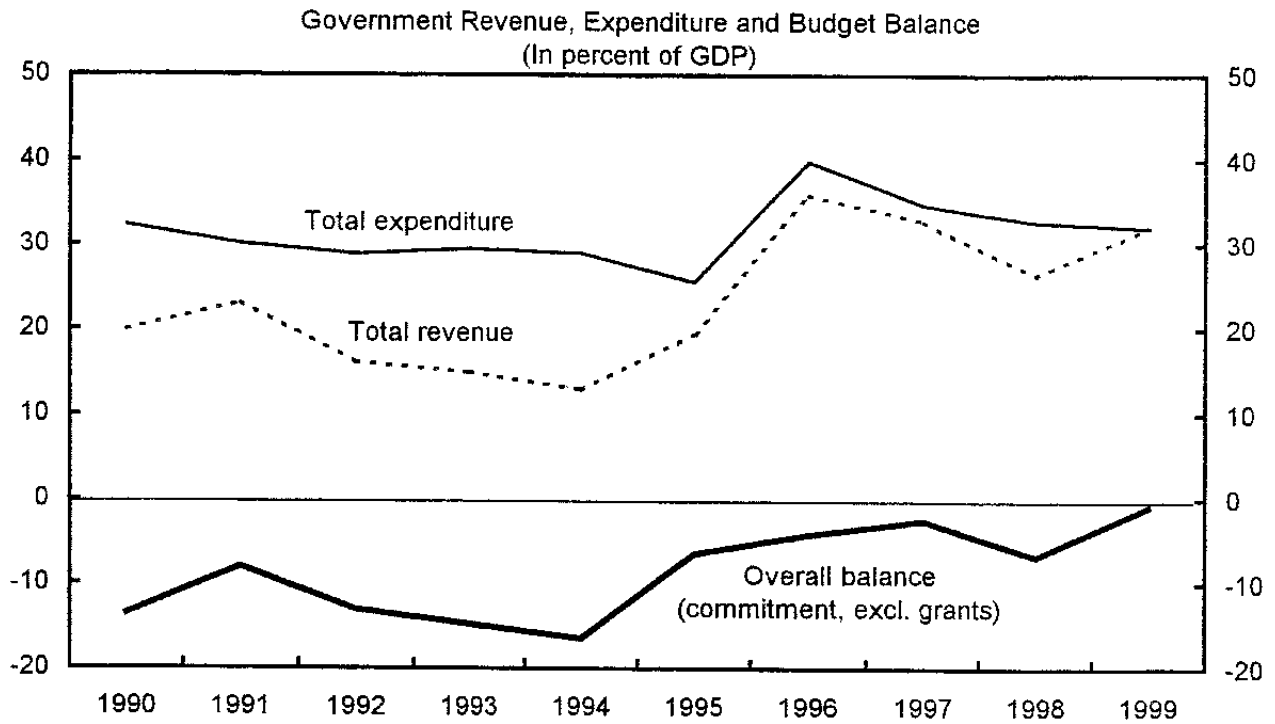
Source: Data provided by the Yemeni authorities.

Chart 5. Republic of Yemen: Customs Revenue, 1990–99



Source: Data provided by the Yemeni authorities.

Chart 6. Republic of Yemen: Fiscal Developments, 1990-99



Source: Data provided by the Yemeni authorities.

47. Overall revenues dwindled from 20 percent of GDP in 1990 to 13 percent of GDP in 1994 (Table 5). Both declining oil revenue and declining tax revenue contributed to these developments. Oil revenues suffered from the decline in oil prices, the impact of the dual exchange rate system, and the rising importance of domestic refining. Oil and gas revenues, which by the time of unification were 7.5 percent of GDP and 40 percent of budget revenues, deteriorated after peaking at 9.4 percent of GDP in 1991. In 1994, oil revenues were only 3.7 percent of GDP, representing 30 percent of budget revenues. Some of the decline in oil revenue can be explained by the fall in oil prices from US\$22 per barrel in 1990 to US\$15 per barrel in 1994. In addition, oil production at Marib, Yemen's major field in the early 1990s; fell by 10 percent in 1992 following technical problems. The widening gap between the market-based parallel exchange rate and the official exchange rate also contributed to the decline of oil revenues as a share of GDP.<sup>35</sup> Receipts were credited to the budget at the official rate and thus assumed a declining share of the overall economy, in which most other external transactions took place at the parallel rate. The revenue loss to the budget resulting from use of the official rate also implied subsidies for those products whose import was financed at the official rate, particularly wheat and petroleum products. The implicit subsidies, including those for domestic petroleum product sales, reached 13 percent of GDP in 1996. Finally, following the Gulf crisis, the government increased oil deliveries to domestic refineries to substitute for previously imported petroleum products. At the same time, domestic petroleum prices were increased by 30–50 percent in 1990. As a result, domestic oil revenues surged in 1991 and continued to exceed export revenues until 1994, when exports increased because the Masila field came on stream for its first complete year and the Aden refinery was damaged during the civil war, disrupting domestic deliveries. Because domestic petroleum prices remained unchanged during 1992–94, their value dropped to about 10 percent of international prices (evaluated at the parallel exchange rate), reflecting a rising subsidy for domestic consumption of petroleum products. This policy implied increasing incentives for smuggling, further eroding the oil revenue base.

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<sup>35</sup> At end-1994, the official rate of YRIs 12.01 per US\$1 was about one-eighth of the parallel rate of YRIs 103 per US\$1.

Table 5. Republic of Yemen: Central Government Finance, 1990-99

(In percent of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prel. 1999
Total revenue and grants	19.8	23.1	16.1	14.9	12.8	19.5	35.9	32.8	26.4	31.8
Total revenue	18.7	22.0	15.8	14.7	12.6	19.2	35.6	32.2	26.0	30.9
Oil and gas revenue	7.5	9.4	4.7	4.2	3.7	9.3	25.1	22.1	13.8	19.8
Crude oil exports	4.9	3.7	1.6	1.5	3.1	6.5	14.1	15.1	8.5	12.7
Domestic oil and gas 1/	2.6	5.7	3.1	2.7	0.5	2.9	11.0	7.0	5.2	7.1
Non-oil revenue	11.2	12.6	11.1	10.5	8.9	9.8	10.5	10.1	12.2	11.1
Tax revenue	8.2	9.2	8.8	8.5	6.9	8.0	8.4	8.2	9.2	8.0
Direct	1.9	2.3	2.4	2.5	2.4	2.0	2.1	2.2	3.1	3.0
Indirect	6.3	6.9	6.4	6.0	4.6	6.0	6.3	5.9	6.1	5.0
Nontax revenue	3.0	3.5	2.3	2.0	1.9	1.9	2.1	2.0	3.0	3.0
Grants (cash)	1.1	1.0	0.3	0.1	0.3	0.3	0.3	0.6	0.4	0.9
Total expenditure and net lending	32.3	30.1	28.9	29.5	29.0	25.6	39.8	34.7	32.7	32.1
Current expenditure	23.6	26.1	25.5	26.0	26.4	22.5	33.2	27.9	26.6	26.5
Civilian wages and salaries	9.2	10.2	10.0	10.7	9.7	7.3	6.8	6.1	7.5	7.4
Materials and services	1.9	2.0	2.4	1.7	1.8	1.5	2.3	2.9	3.0	3.1
Development O and M	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2
Agriculture and road maintenance funds	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.3	0.3	0.2
Defense	8.4	8.9	8.9	8.3	9.7	6.7	5.6	6.0	6.1	5.8
Interest obligations 2/	2.4	2.9	1.9	2.6	2.9	1.5	3.3	2.3	3.7	4.1
Transfers and subsidies	1.7	2.2	2.4	2.7	2.3	4.9	14.6	9.3	5.2	5.1
Subsidies	0.0	0.0	0.0	0.0	0.0	3.4	13.0	7.7	3.0	2.5
Petroleum cash subsidies 1/	...	...	...	...	...	1.0	5.3	2.9	...	2.0
Wheat and flour subsidy 3/	0.0	0.0	0.0	0.0	0.0	2.3	7.4	4.5	3.0	0.4
Financial support electricity	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.0	0.0
Current transfers	1.7	2.2	2.4	2.7	2.3	1.5	1.6	1.6	2.2	2.7
Other current expenditure	0.0	0.0	0.0	0.0	0.0	0.4	0.3	0.7	0.5	0.6
Development expenditure	8.7	4.0	3.4	3.5	2.6	3.1	6.6	6.8	6.1	5.6
Net lending	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Overall balance (commitment)	-12.4	-7.0	-12.8	-14.7	-16.2	-6.1	-3.9	-1.9	-6.3	-0.2
Overall balance (commitment, excluding grants)	-13.6	-8.0	-13.1	-14.8	-16.4	-6.4	-4.2	-2.5	-6.7	-1.2
Overall balance (cash)	-11.7	-5.6	-11.7	-13.9	-15.7	-5.2	0.6	-1.8	-7.9	-0.4
Financing	11.5	6.0	11.9	14.1	15.8	5.2	-0.7	1.8	7.9	0.0
External (net)	2.7	1.6	0.2	0.2	0.1	-0.2	0.4	0.3	1.2	2.3
Domestic (net)	8.8	4.4	11.7	13.9	15.7	5.3	-1.1	1.5	6.7	-2.3
Bank	8.8	4.4	11.7	13.9	15.7	5.1	-1.5	-0.1	3.3	-4.4
Central bank	9.1	4.1	11.3	14.0	16.1	4.6	-2.5	-3.4	3.1	-4.8
Commercial banks	-0.3	0.3	0.4	-0.2	-0.4	0.5	0.9	3.2	0.2	0.4

Table 5. Republic of Yemen: Central Government Finance, 1990-99

(In percent of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	Prel. 1999
Nonbank	0.0	0.0	0.0	0.0	0.0	0.2	0.4	1.6	3.4	2.1
Pension funds	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.3	1.2
Public enterprises	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
Others	0.0	0.0	0.0	0.0	0.0	0.2	0.4	1.6	0.2	0.3
Discrepancy	-0.3	0.4	0.2	0.2	0.2	0.0	-0.1	0.0	0.0	-0.4
Memorandum items:										
Primary balance (commitment) 4/	-11.2	-5.1	-11.2	-12.2	-13.5	-4.9	-0.9	-0.1	-3.0	2.9
Public sector savings 5/	-4.9	-4.1	-9.7	-11.3	-13.9	-3.3	2.4	4.3	-0.6	4.4
Non-oil balance (commitment, excluding grants)	-18.5	-11.7	-14.7	-16.3	-19.6	-12.9	-18.3	-17.6	-15.2	-13.9
Tax revenue, as percent of non-oil GDP	9.5	10.2	9.5	9.0	7.4	9.3	11.5	11.4	11.0	10.7
Direct	2.2	2.6	2.6	2.7	2.5	2.3	2.9	3.1	3.7	4.0
Indirect	7.3	7.7	6.9	6.3	4.9	7.0	8.7	8.3	7.3	6.7
Taxes on goods and services	2.3	2.3	2.4	2.2	1.6	2.4	3.0	3.5	4.1	3.1
Custom duties, as percent of non-oil imports	12.3	15.4	11.1	10.3	4.4	6.7	9.4	9.3	8.7	7.5
Average oil price for government exports (\$/bbl)	...	...	...	...	15.5	17.3	18.3	18.2	13.1	16.3
Net domestic oil revenue 6/	2.6	5.7	3.1	2.7	0.5	1.8	5.7	4.1	5.2	5.1
GDP (at market prices in billions of YRIs)	122.1	144.8	183.9	227.7	292.3	488.5	702.1	852.9	855.9	1,063.6
Social expenditures (in percent of GDP) 7/	...	...	...	...	...	...	4.6	5.8	8.8	9.3

Sources: Ministry of Finance; Ministry of Planning; and staff estimates.

1/ 1990-95: Revenues net of subsidies.

2/ Profit transfers from the Central Bank of Yemen were netted out against interest payments to the CBY until 1998.

3/ Until the unification of exchange rates, subsidies were implicit by applying a preferential exchange rate to wheat and flour imports.

4/ Revenue excluding grants, net of expenditures excluding interest obligations.

5/ Primary cash balance excluding grants and development expenditures

6/ Domestic oil revenue net of cash petroleum subsidies.

7/ Comprises spending on wages, salaries, materials, services, capital in the education and health sectors, and spending by the social welfare fund.

48. The fall in indirect tax revenue as a share of non-oil GDP over time was partially compensated by rising direct tax revenue as a share of non-oil GDP. The latter reflected largely the rising government wage bill as a share of GDP and “bracket creep” in the progressive tax system in a high-inflation environment.

49. Public expenditures were dominated by the heavy weight of the civil service wage bill (Chart 6). Following unification, the public work force of the YAR and the PDRY were merged, and the pay scale in the South was adjusted to the higher level of the North. Moreover, many civil servants received allowances for moving from the former PDRY capital Aden to Sana’a, the former YAR capital and capital of the unified country. The government also reinstated a policy that guaranteed employment to all university graduates and employees of public enterprises. In 1991–94, the government afforded sizable pay raises to public employees, which kept the wage bill in the order of 10 percent to 11 percent of GDP.<sup>36</sup> Between 1990 and 1993, the share of wages in total expenditures rose from 29 percent to 36 percent, largely at the expense of development expenditures whose share fell from 27 percent to 12 percent. Defense spending ranged between 8.4 percent and 8.9 percent of GDP between 1990 and 1993, with a sharp increase to 9.7 percent of GDP in 1994 due to the civil war. Moreover, many of the loss-making public enterprises relied on government transfers, reflected in the rise of current transfers from 1.7 percent to 2.7 percent of GDP between 1990 and 1993.

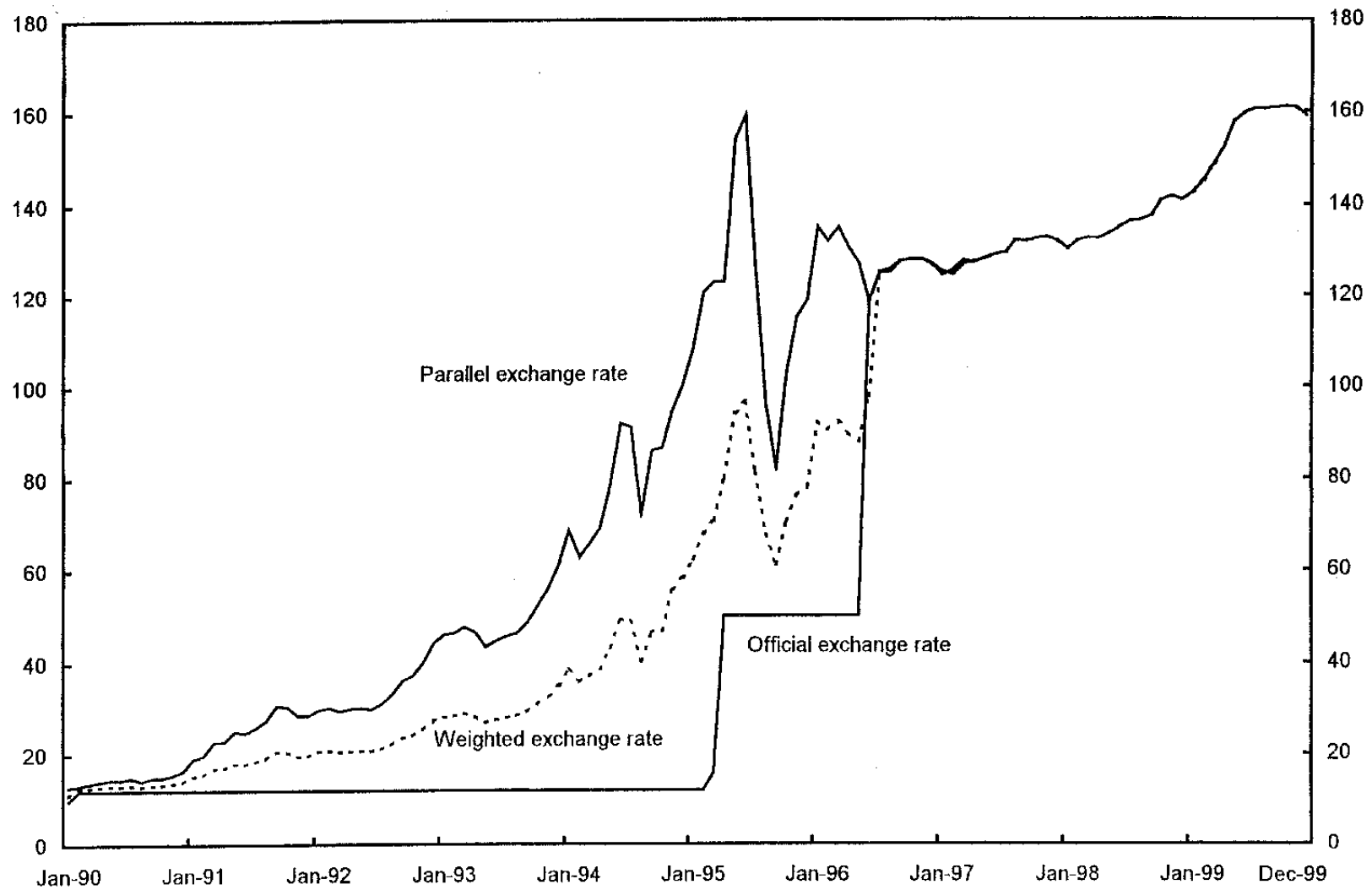
#### **Controls in the monetary and exchange rate systems, 1990–92**

50. To contain the spillovers from the fiscal imbalances to the external account, the authorities maintained a “hybrid” exchange system involving a large and relatively free parallel exchange market—with occasional ad hoc attempts to tighten control over this market—and a highly administered exchange system for certain (including official) transactions (Chart 7) involving quantity rationing and a highly appreciated exchange rate (Section IV.A).

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<sup>36</sup> Despite increases in the order of 25–30 percent, wages did not keep pace with inflation, which accelerated from 33 percent to 71 percent in that time period. The fact that the wage bill as a share of GDP remained stable while real wages declined reflects the large differences between GDP deflators and the consumer price index (CPI). The GDP deflator gave a higher weight to official transactions recorded at the stable official exchange rate than the CPI. Comparisons with later years should be made cautiously because of substantial adjustments in the calculation of national accounts after unification of exchange rates.

Chart 7. Republic of Yemen: Nominal Exchange Rates, January 1990–December 1999  
(Yemeni Rials per U.S. dollar)



Source: Data provided by the Yemeni authorities; and staff estimates.



51. Thus there was little scope to formulate an independent monetary policy in the period immediately following unification. Rapid expansion of net domestic assets was driven by the need to provide financing for the budget given the absence of nonbank financing.

52. Commercial banks were reluctant to lend to the nongovernmental sector due to the absence of effective recourse within the legal system for the timely recovery of overdue loans. Accordingly, banks preferred to deposit their resources with the central bank for on-lending to the government at a remuneration of 1.5 percentage points above the banks' average cost of funds.

53. The continued existence of separate interest rate structures after unification posed special problems for the monetary authorities. While the authorities were targeting a unified system based on the structure of the former market-based YAR, the National Bank of Yemen—the only commercial bank (state-owned) in the South—was allowed to set its own rates as an interim measure. The statutory interest rates that existed in this period were very low and highly negative real rates (Chart 8) discouraged the mobilization of savings, facilitated inefficient consumption investment choices, and added further pressures on the foreign exchange market. Indeed, the level of foreign currency deposits in 1992 doubled from the level attained in 1991, while Yemeni rial deposits increased by only 15 percent over the same period. Also, negative real interest rates continued to facilitate financial disintermediation, as the absence of controls in the parallel financial market for rials spurred growth in this market at the expense of the banking sector.<sup>37</sup>

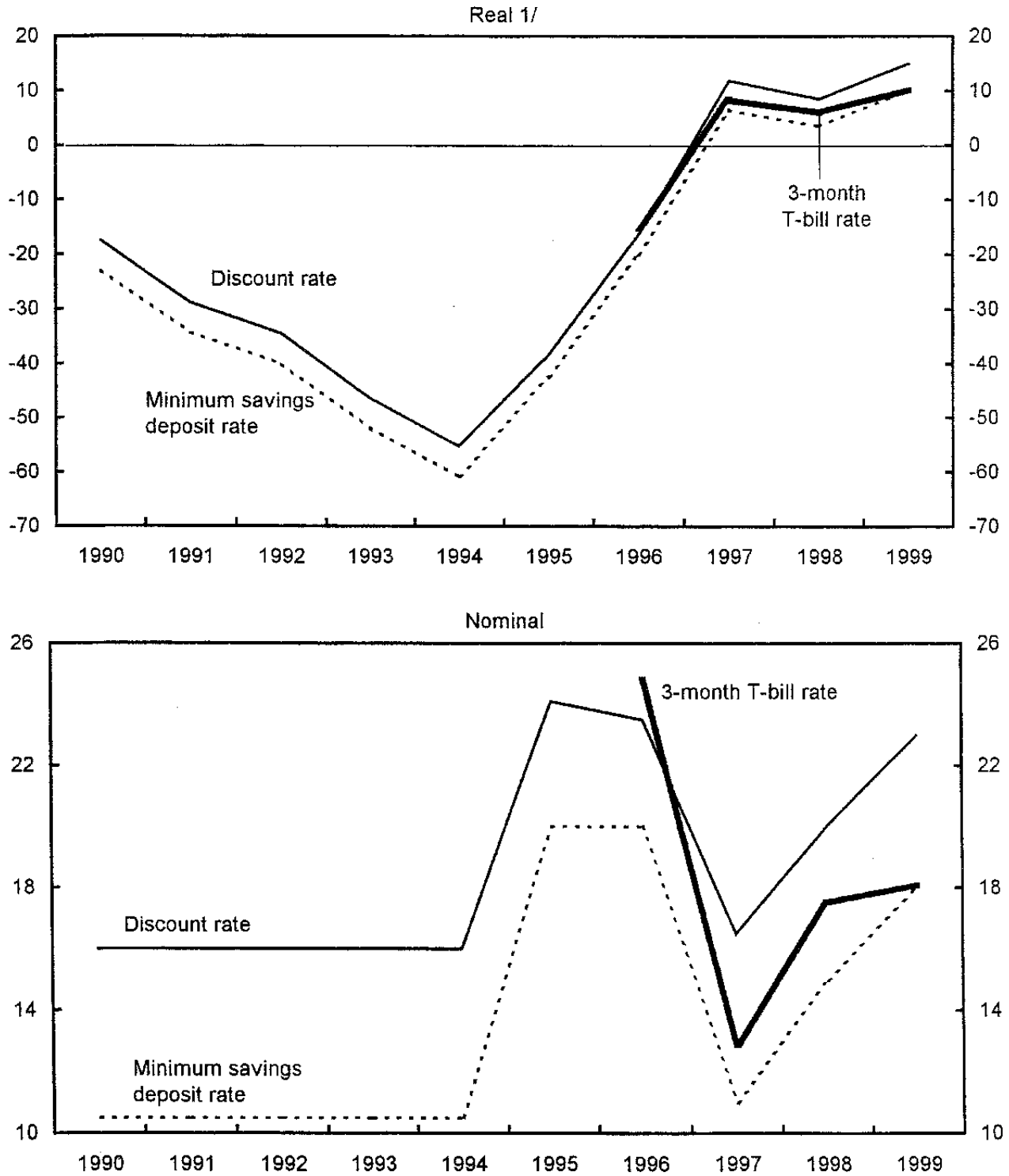
#### **Partial liberalization of the exchange and interest rates, 1993–94**

54. During the period 1993–94, economic structures became more unified and conducive to national macroeconomic policy making, and the authorities increasingly recognized the need for strong corrective fiscal policy actions, establishment of positive real interest rates, and unification of exchange rates at a realistic level. However, initial reform efforts remained partial and extensive controls remained. In particular, the appreciation of the real effective exchange rate accelerated, undercutting efforts to contain fiscal and external imbalances. For example, faced with a growing gap between the free market parallel rate and various official rates in November 1994, the authorities introduced a “managed official parallel market rate” at YRls 84 per U.S. dollar, to be “guided” by a committee of moneychangers and commercial bank representatives under the supervision of the central bank, taking into account market indicators. This attempt to manage the parallel market failed, however, and already by end-1994, the unofficial parallel market rate depreciated to YRls 100 per U.S. dollar.

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<sup>37</sup> The informal financial market was dominated by moneychangers, the largest of whom accepted deposits from the public.

Chart 8. Republic of Yemen: Interest Rates, 1990-99  
(In percent per annum)



Source: Data provided by the Yemeni authorities.

1/ Nominal rates minus inflation (CPI).

55. To allow a greater role of market forces in financial intermediation, the authorities took some steps to improve the competitiveness in the banking sector. First, they adopted a more liberal policy towards licensing of branches of banks, removing the monopoly of the National Bank of Yemen in the south. Second, the central bank began strengthening prudential regulation and supervision (Section IV.F). In particular, the banking system's vulnerability to exchange depreciation had to be addressed to prepare for liberalization of the exchange rate. The largest commercial bank, the Yemen Bank for Reconstruction and Development (YBRD) had built up sizable foreign currency deposits, but its net foreign assets position was negative. Unification of the exchange rate at a realistic level would thus trigger large valuation losses. This bank's problem was addressed by the government's assignment of most of this debt to public sector enterprises for which the (foreign) credits had been opened, shifting the vulnerability to the corporate sector. The foreign liability position of the central bank was also large, mainly reflecting deposits from foreign governments prior to unification, outstanding liabilities related to oil imports, and short-term liabilities to foreign banks.

### C. Reform and the Return of Stability and Growth, 1995–99

56. A new phase of post-unification macroeconomic policy making began in early 1995. By this time, the political situation had stabilized and the new government embarked upon a macroeconomic adjustment and structural reform program with support from the World Bank and the IMF. The program included strong fiscal adjustment measures, liberalization of most interest rates, and reform of the exchange rate system, including in 1996 the elimination of the official exchange rate and unification of exchange rates at the free market level, and the adoption of a floating rate regime.

57. Fiscal improvements during the second half of the 1990s were the basis for the gradual return of some measure of macroeconomic stability to Yemen. Integrating the official and parallel exchange rates helped reduce the subsidy bill and, combined with rising government oil exports, strongly boosted revenues. As a result, the fiscal imbalance declined from 6 percent of GDP in 1995 to 2 percent in 1997. However, as a stark reminder of Yemen's oil dependence, macroeconomic stability suffered a blow in 1998 with the collapse of oil prices, and the budget deficit rose to 6 percent of GDP. The reverse outcome could then be observed in 1999 when a surge in oil prices led to a balanced budget and a substantial strengthening of the external position.

58. Total **revenues** increased from 19 percent of GDP in 1995 to 32 percent in 1999, in large part due to improving oil revenues. Following the enforcement problems of the 1994 civil war, the government also improved its tax collection and introduced several simplifying reforms to tax and customs laws, which contributed to a rising ratio of tax revenues to non-oil GDP.<sup>38</sup>

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<sup>38</sup> Because of the rising oil share in GDP, the ratio of taxes to total GDP remained roughly flat.

59. Rising production and prices as well as the stepwise unification of exchange rates in July 1996 raised **oil export revenue** accruing to the budget from 3 percent of GDP in 1994 to 15 percent of GDP in 1997. The government's crude oil volume available for domestic deliveries and exports almost doubled between 1993 and 1997, partly because overall production rose and partly as investment costs had been recouped by concession holders, reducing the companies' share in production. Moreover, the stepwise adjustment of the official exchange rates to the parallel market rate substantially raised the value of oil revenue recorded in Yemeni rials while eliminating the implicit subsidization of certain economic activities resulting from preferred access to foreign exchange.

60. **Domestic oil revenues** increased from 3 percent of GDP in 1995 to 7 percent of GDP in 1999. Exceptionally high domestic revenues in 1996 resulted from a settlement of excess cost recovery charges with an oil company yielding 2.3 percent of GDP, as well as rising international prices and the integration of the exchange rates. While the unification of exchange rates removed one source of implicit subsidization, the transactions between the government, oil refineries, and distributors remained opaque and involved nonmarket-based transfer prices and free inputs. Only in 1999 was pricing of all wholesale transactions moved to be based on world prices.<sup>39</sup> Therefore, the domestic revenues have to be evaluated together with the subsidy payments to receive a clear picture of domestic efforts. As shown at the bottom of Table 5, the resulting measure of net domestic oil revenue rose steadily over time.<sup>40</sup>

61. **Tax revenue** rose strongly to 11.5 percent of non-oil GDP in 1996, but then began to erode slowly, reaching 10.7 percent of non-oil GDP in 1999. The initial strengthening of tax revenue was a consequence of exchange rate unification, economic recovery, and several tax reforms undertaken in 1995 and 1996 (Section IV.B). Higher exchange rates applied to import valuation; the recovery of the economy that was followed by higher import volumes, and the simplification of the tariff structure with concomitant improvements in customs administration led to a rebound of customs revenues to more than 9 percent of non-oil imports in 1996. Taxes on goods and services also benefited from higher economic activity, a widening of the tax base, and higher tax elasticity after some specific taxes was replaced with ad valorem taxes. Direct tax revenues rose with a simplification of corporate rates at 35 percent. After 1996, direct taxes and—until 1999—taxes on goods and services continued to rise faster than non-oil GDP, but the decline in customs revenue pulled down overall revenue growth. Direct taxes benefited from the rising share of government wages in GDP, improving business income tax revenue after the 1996 rate unification, improving economic conditions, and an increase in top tax rates in 1999. Taxes on goods and services grew strongly after their base was broadened in 1996 but fell as a share of non-oil GDP after the

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<sup>39</sup> As a result, the government is now indifferent between exporting oil and selling it to domestic refineries while implicit consumption and production subsidies have become transparent cash subsidies.

<sup>40</sup> Recall that excess cost recovery settlements accounted for revenues in the order of 2.3 percent of GDP in 1996.

1999 tax amendments changed a number of tax rates. The poor performance at customs likely reflects the rising importance of smuggling, continuing weaknesses in administration, and to a certain extent elimination of import surcharges in 1998.

62. **Large swings in expenditures** were driven by the move to unify exchange rates and related subsidy reform. After the unification of exchange rates over 1995–96, the implicit subsidy through below market foreign exchange rates was replaced by explicit cash subsidies for wheat, flour, and petroleum products. In 1996, these subsidies rose to 13 percent of GDP because of a widening gap between domestic and international prices. In later years, these subsidies declined when domestic prices were moved closer to world market prices, and wheat and flour subsidies were eliminated entirely by mid-1999 (Section IV.C). The civil service wage bill declined to 6 percent of GDP in 1997 as wage increases were kept below inflation and despite rising currency costs for foreign workers (mainly teachers) paid in foreign exchange. However, following large wage increases in 1998–2000, the civil service wage bill has recently been on the rise again. These wage increases largely reflected the implementation, phased over three years, of a teachers' law passed by parliament in 1998 that granted 100 percent wage increases to workers in the education sector, where the majority of civil servants work. Similar wage increases were granted to health workers. Defense spending declined from 6.7 percent of GDP in 1995 to less than 6 percent in 1999. Development expenditures doubled as a percent of GDP in 1996, but were cut back in 1998 and early 1999 after the fall in oil prices.

63. The financing of the **government deficit** through central bank credit remained a critical source of macroeconomic instability. Although disbursements of foreign grants and loans in the order of 2 percent of GDP resumed in 1996, the government continued to face large amortization obligations and, hence, net external financing remained small until rescheduling agreements were reached with Paris Club creditors in 1996–97. To develop sources of noninflationary financing and deepen the financial system, a market for treasury bills was introduced in 1995 and the central bank subsequently closed its term deposit facility for banks and for pension funds to channel resources into this market (Section IV.F). Thus, in 1996 and 1997, the government reduced its indebtedness to the central bank, financing deficits with accumulation of arrears to wheat importers, as well as increasing treasury bill sales to commercial banks and nonbank. However, as oil revenue shrank dramatically in 1998, the government had to borrow 3 percent of GDP from the central bank, and the concomitant expansion in money supply resulted in an immediate spurt of inflation. Fortunes were reversed in 1999, and inflation rates fell when rising crude oil revenues led to a balanced budget, permitting the government to reimburse almost 5 percent of GDP to the central bank.

64. The use of monetary policy instruments became more flexible, responding to macrofinancial conditions. In the context of the reform program, in 1995 the central bank unified the reserve requirement at a rate of 25 percent, without remuneration, for all rial deposits to be lowered to 15 percent in December 1996 and to 10 percent in December 1997. A rate of remuneration of 5 percent on these deposits was initiated in December 1996, and rose the following year to the same level as the benchmark deposit rate. In December 1997,

the reserve requirement on foreign currency deposits was lowered from 25 percent to 15 percent, and the rate of remuneration was set at half of a percentage point less than the rate received on the central bank's deposits abroad. The higher reserve requirements for foreign currency deposits and the much lower rate of remuneration on these deposits reflected the central bank's objective to stem the trend of increasing dollarization of the economy and to enhance the attractiveness of the rial as a store of value; undoubtedly, such discriminatory measures induced capital flight. The effectiveness of reserve requirements as an instrument of monetary policy might have been hampered by the less than full implementation of the penalties for shortfalls. While the central bank can impose a maximum daily penalty of 5 percent, in practice this figure lies in the 0.5–2.0 percent range. The central bank has used credit ceilings as an instrument of monetary policy in the early post-unification period, but this instrument was hardly effective then and subsequently lost all importance.<sup>41</sup>

65. Two sharp real exchange rate depreciations took place in early 1995 and mid-1996 (Chart 3). While the latter reflects the nominal depreciation that occurred at the time of unification of the exchange rates, the former was the result of a partial reform of the exchange rate system implemented at the time, including the elimination of special official rates and the depreciation of the only remaining official rate from YRls 12 to YRls 50 per U.S. dollar.

66. With the authorities' move to a floating exchange rate system throughout the period, the rial broadly stabilized in real effective terms; some small appreciation in real terms between end-1996 and end-1999 partly reflected a reluctance to tolerate substantial variability in the exchange rate. Indeed, exchange rate stability remains, in the eyes of the public, the main yardstick for the success of government policy. Accordingly, through interest rate policy, moral suasion, and the regular auctioning of foreign exchange to moneychangers and banks, the central bank attempted to stabilize the exchange rate in times of turmoil. In part, intervention reflected also an attempt to smooth sharp seasonal peaks in demand for foreign exchange (especially around the Ramadan and Hajj seasons), given the limited depth of the private market. For example, reflecting the impact of low oil prices on macroeconomic performance in 1998, the central bank employed its limited monetary tools to ease the pressure on the exchange rate. It raised the official benchmark interest rate (up to 3.5 percent in real terms) and removed remuneration on foreign currency deposits at the central bank, but still had to spend half of its reserves to limit exchange rate depreciation during 1998 to 7 percent against the U.S. dollar. Only in early 1999 did the authorities allow a faster rate of depreciation, coupled with further interest rate tightening.

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<sup>41</sup> For example, a credit growth ceiling was set at 50 percent in 1996, in a year in which credit actually fell. In early 1997, credit growth ceilings were once more set at 25 percent, and again these ceilings were not binding. The central bank has not renewed these ceilings since, but prefers to keep the option to impose new ceilings should extreme circumstances warrant their usage.

67. In light of sharply improved macroeconomic balances in the latter half of 1999, the Central Bank of Yemen (CBY) initiated a gradual lowering of benchmark interest rates. As a result, the real effective exchange rate showed a modest depreciation in 1999, reversing some of the appreciation of 1998.

#### **D. Preserving the Oil Wealth—A Long-Term View of Yemen's Fiscal Policy Stance**

68. For oil exporting countries, an added complexity of fiscal policy involves the management of finite oil wealth. Yemen derives a significant share of government revenue from oil exports and oil-related economic activity. Unless further exploration activities result in new discoveries, most of the country's proven recoverable oil resources—estimated at 2.8 billion barrels in April 2000—will be depleted within 18 years.<sup>42</sup> Chart 1 presents the amount of crude oil accruing to the government after subtraction of cost oil and the oil producer's share between 1990 and 2020. Under these projections, the government's crude oil share will peak in 2000 and drop steeply after 2009 with the exhaustion of the Marib field. Unless revenue from the non-oil economy replaces oil revenue in future years, achieving long-run sustainability implies saving a portion of today's oil revenue in the form of financial assets, human capital, or infrastructure. In practice, it is highly uncertain whether spending oil wealth on education and infrastructure will boost growth sufficiently for the tax revenue generated from additional growth to sustain government spending.<sup>43</sup>

69. Fiscal policy decisions must rely on an estimate of oil wealth, i.e., the present value of all future government revenues generated by extracting crude oil. However, calculating oil wealth at any given point in time is subject to considerable uncertainty. It depends notably on a forecast of future oil prices, oil production, and interest rates. Oil prices change in unpredictable ways. Statistical tests of their movements generally have difficulties rejecting the hypothesis that oil prices do not systematically return to a long-run average and that the current price is the best predictor of future prices.<sup>44</sup> As a result, small changes in the current price could lead to large changes in estimated oil wealth because price changes today would lead to revisions in all future prices. New information on oil reserves, extraction rates, and discount factors as well as new technology developments also affects oil wealth and

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<sup>42</sup> Estimates of recoverable resources vary widely and are changing rapidly. In particular, a recent treaty settling border issues with Saudi Arabia could possibly boost exploration activity and thereby the likelihood of discovering additional resources. The following discussion should therefore only be interpreted as illustrative of broad orders of magnitude.

<sup>43</sup> A discussion on the relationship between sustainability and government investment policies can be found in Easterly and Fischer, 1990.

<sup>44</sup> Pindyck, 1999, can reject the unit root hypothesis only after considering more than 70 years of data. Cashin, Hong, and McDermott, 1999, find that petroleum price shocks are infinitely persistent. A survey of stochastic properties of oil prices can also be found in Engel and Valdes, 2000.

permanent income estimates. Therefore, oil wealth estimates underlying long-run policy decisions must be adapted frequently to new information regarding prices, oil reserves, crude oil extraction rates, and long-run interest rates.

70. A simple rule to ascertain the long-run sustainability of consumption out of oil wealth<sup>45</sup> can be derived from the permanent income theory of consumption. It would prescribe that each period governments should consume at most the real interest they receive on their total wealth.<sup>46</sup> From the perspective of consumption possibilities, the permanent income model treats oil wealth and other forms of wealth as equivalent. Hence, consumption in excess of permanent income would result in a decline in total wealth over time. In more practical terms, this concept of government wealth would proxy the ability of governments to sustain current levels of spending in real terms. Preserving wealth thus means preserving the ability to deliver to future generations the same level of public services (health, education, etc.) available to the current generation.

71. The permanent income framework can be extended to account for growth of the population. Yemen's population growth exceeds 3 percent. If the government aims at preserving wealth per capita, it must adjust its consumption for the expanding population. The reason for maintaining per capita wealth is that it allows keeping the same per capita income stream over time and thus constant per capita government expenditures. Assuming a population growth rate of 3 percent, the government needs to save an additional 3 percent of wealth each period to keep per capita wealth at the same level. Returning to the example above, at a 4 percent real interest rate with a population growing at 3 percent, Yemen should consume only 1 percent of wealth and save the remaining 3 percent interest earnings to keep per capita wealth constant.

72. Apart from oil and financial assets, the non-oil sector provides an additional source of income for the government. Revenue generated by an expanding non-oil sector per capita could over time replace revenue from exploiting oil. In allocating consumption over time the government should thus take into account the expected future growth in non-oil revenue. However, additional non-oil revenue must be generated by growth in per capita non-oil GDP, not by increasingly heavier tax burdens. The latter would not reflect growing overall resources but simply change the distribution of wealth between the public and the private sector. Potential growth of the non-oil sector could be driven by investment into infrastructure or human capital, as well as increased factor productivity. However, as outlined earlier, such investment would have to generate **tax revenue** sufficient to replace oil

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<sup>45</sup> The literature on this subject includes Gunnar Tersman, 1991; Liuksila, Garcia, and Bassett, 1994; Nigel Chalk, 1998; and Alier and Kaufman, 1999.

<sup>46</sup> This statement assumes that a government is not more or less impatient than implied by the interest rates prevailing on international capital markets.



revenue in order to sustain fiscal spending. Since the indirect impact of infrastructure and human capital investment on tax revenue is difficult to ascertain, the subsequent discussion is largely limited to the conversion of oil wealth into financial wealth.

73. To analyze past Yemeni fiscal policy from an intertemporal perspective, a few calculations based on a permanent income framework assessing sustainable consumption if the government were to keep per capita wealth derived from oil constant over time are presented below. These calculations do not consider how future growth of non-oil GDP per capita could enhance the government's revenue base, and thus may understate sustainable consumption.<sup>47,48</sup> Optimal consumption is derived in each year (starting 1990) for the current and future years assuming that oil prices remain constant at current levels. For example, the optimal consumption level out of oil wealth for 1998 is derived under the assumption that oil prices from 1998 onwards remain at US\$11.90 per barrel, Yemen's 1998 average oil export price. This assumption corresponds to the hypothesis that the current price is the best predictor of future prices, i.e., oil price shocks are permanent. Furthermore, the calculations assume that the amount of proven recoverable reserves as estimated today (2.8 billion barrels) constitutes total oil wealth. Other important assumptions are a 4 percent real interest rate and a population growth rate of 3 percent in 1999 declining to 2.5 percent in 2005 and 1.5 percent in 2050. The calculations also incorporate Yemen's initial net financial wealth, which is assumed to be equivalent to its foreign indebtedness. Under these assumptions, oil wealth at the beginning of 1999 stood at about 280 percent of the 1999 GDP, or US\$1,080 per capita. Net total wealth, after subtracting external debt, was US\$13.3 billion or US\$765 per capita.

74. The calculations show that the level of consumption out of oil wealth as a percent of GDP consistent with preserving oil wealth per capita in the early 1990s was virtually nil. It would have been necessary to save almost the entire oil revenue to preserve wealth per capita because population growth rates partly reflecting the return of expatriates, were high and close to the assumed real interest rate of 4 percent. Moreover, the country entered unification with a debt stock of roughly US\$11 billion. As a result, sustainable consumption of oil wealth was only between 0.1 percent and 0.5 percent of GDP. The rescheduling agreement of 1996 reduced external debt by about one-third and, together with declining population growth rates and somewhat higher oil prices, permitted higher consumption out of oil wealth after 1996. Sustainable consumption levels rose to 1.8 percent of GDP in 1997. However, the example of 1998 clearly shows that revaluing oil wealth with current prices would necessitate large adjustments of consumption levels. The fall in oil prices in 1998 resulted in a drop in oil wealth because future production is evaluated at current prices, and sustainable

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<sup>47</sup> At 1999 wealth levels, assuming annual total factor productivity (TFP) growth of 1 percent would add about 1 percent of GDP to sustainable consumption. However, during the 1990s, estimated TFP growth was negative (Section VI A).

<sup>48</sup> The calculations implicitly assume that per capita non-oil revenue remains constant.

consumption fell from 1.8 percent of GDP in 1997 to 1.0 percent of GDP in 1998. Hence, following the permanent income rule would result in sizable fiscal adjustments. Under 1999 oil prices, oil wealth consumption of 2.4 percent of GDP would be sustainable. This level would rise to about 3.5 percent in the long run with the assumed decline in population growth rates to 1.5 percent.

75. The calculation of sustainable consumption out of oil wealth raises the question of how the government's actual policies stacked up against that benchmark. For that purpose, budgetary outcomes must be translated into consumption out of oil wealth. The government budget constraint can be summarized as follows:

$$OR_t + TR_t + rA_{t-1} - C_t - I_t = A_t - A_{t-1}$$

where *OR* stands for total value of oil production accruing to the government, *TR* for tax revenue net of transfers (such as subsidies), *A* for net financial wealth, *C* for government consumption, and *I* for government net investment after subtracting the depreciation of existing capital. Transfers must include the subsidies for domestic petroleum products implied by charging less than world market prices, even if the latter do not appear directly in the budget.<sup>49</sup> Moreover, investment figures must be adjusted for assumed depreciation. The equation can be re-written as:

$$TR_t - C_t + rA_{t-1} = A_t - A_{t-1} + I_t - OR_t;$$

that is, government non-oil savings (left side) equal the change in total public wealth (including financial wealth, infrastructure, and "oil in the ground").

76. Hence, if non-oil savings were zero, total wealth would be unchanged—as prescribed by the permanent income framework for the case of zero inflation and zero population growth. Positive non-oil savings would be required for a growing population. The major difficulty in applying the above concept lies in estimating net investment because depreciation levels are unknown. To overcome this problem, only two extreme cases are discussed, providing upper and lower bounds. The first assumes that depreciation equals investment (zero net investment), the second that depreciation is zero (gross investment equals net investment).

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<sup>49</sup> The reasoning is as follows: oil wealth is evaluated at world market prices and, hence, domestic consumption depletes oil wealth by domestically consumed volumes evaluated at world market prices, not at administered prices.

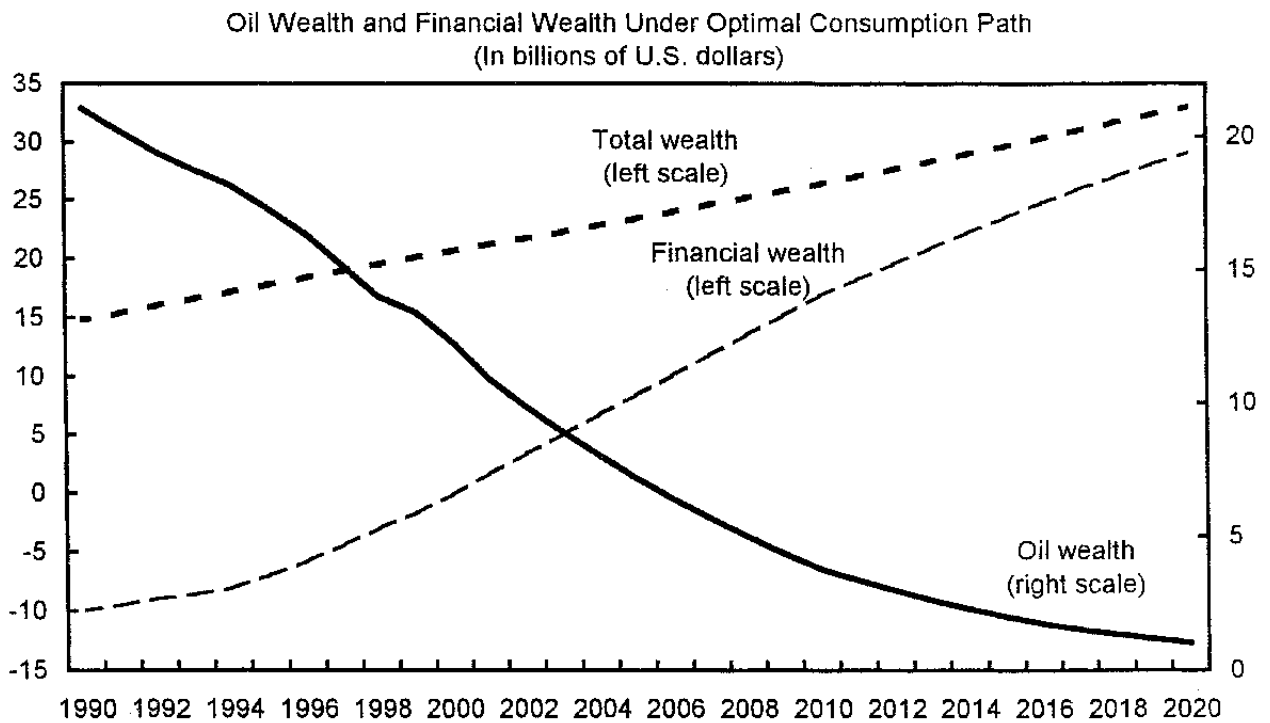
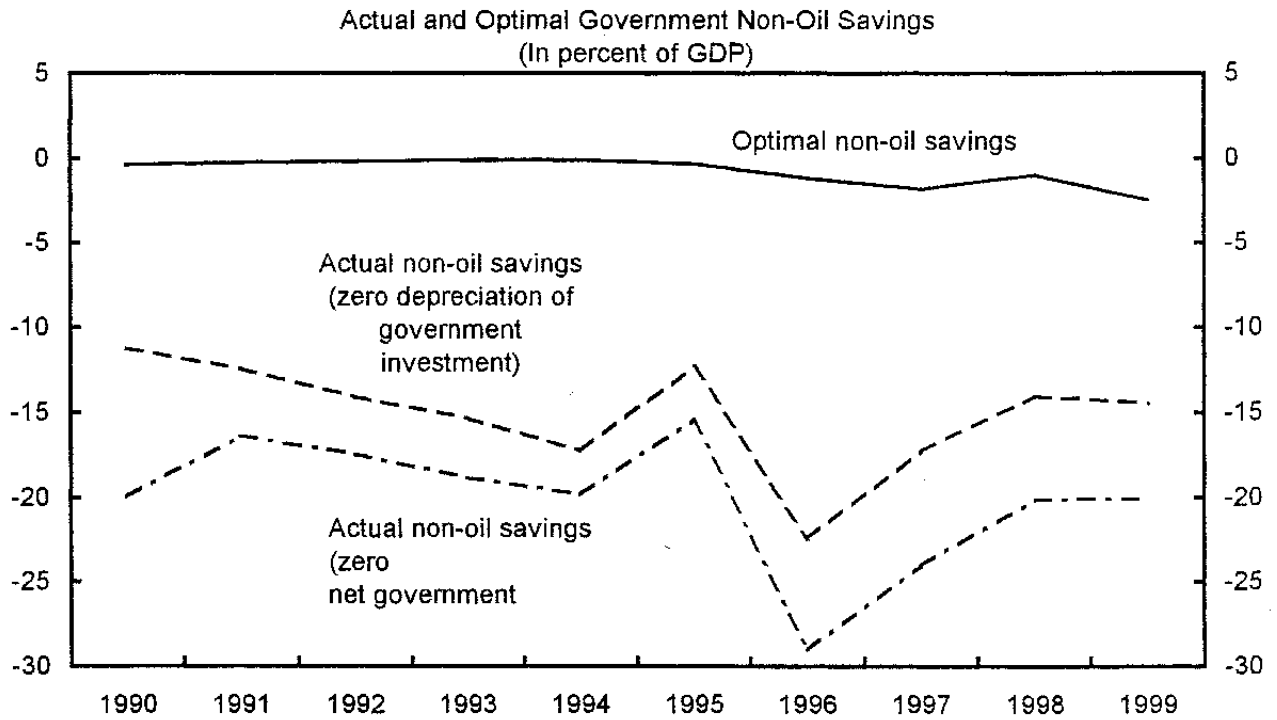
77. In the event, consumption out of oil wealth was much higher than can be sustained between 1990 and 1999. As presented in Chart 9, the difference between the optimal government non-oil saving and the actual such balance was large, between 10 percent and 25 percent of GDP. The results indicate that, under the assumptions made, Yemen has spent on average each year in the order of 10 percent to 25 percent of GDP more than can be sustained, and that up to today oil revenue has not been converted into sufficient amounts of wealth to sustain expenditure, even if all development expenditure are counted as net addition to wealth.

78. The analysis above is subject to great uncertainty regarding future oil and gas resources, as well as the general assumptions of the analysis. Yemen still has unexplored territory and future technologies could render currently inaccessible reserves available. Moreover, the large proven gas reserves, which could last for at least 25 years of LNG production exceeding 5 million tons annually, could prove another important source of revenue. However, developing the capacity to produce LNG is expensive and may produce limited revenue for the government until potential investors in the suggested LNG project have recouped their costs. Another uncertainty surrounds non-oil growth and growth strategies: the analysis implicitly assumes that the return to the government from investing in financial assets will be higher than returns from investing in other assets. It ignores the fact that some of the government consumption, especially in health and education, has contributed to build human capital and thus potential future non-oil growth. This, in return, could boost future government revenues from the non-oil economy. Similarly, structural reforms may eventually bring about positive TFP growth. However, despite increasing budgetary allocations to the education sector, the limited progress in improving social indicators and low non-oil per capita growth may indicate that too much oil wealth has thus far been used to support current consumption rather than the building of human or physical capital.

#### IV. MICROECONOMIC REFORMS

79. In the 1960s, the end of the reign of the *Imam* in the North of Yemen brought about the establishment of a republic which took first steps to introduce a modern market-oriented commercial and civil law; at the same time, the socialist government that took power following the end of the British mandate in the South established a legal regulatory system based on central planning and extensive government control over production. Thus the unification of the country in 1990 led to the unification of two very different legal systems. The product was the establishment of a complex and at the same time ineffective regulatory environment, combining elements of modern western law with *sharia* and tribal law, and at the onset of the 1990s an array of controls covered all economic sectors. For a large set of commodities prices were administratively fixed by the government, with the purpose of ensuring low basic consumer and input prices and to suppress inflation.

Chart 9. Republic of Yemen: Oil Balances and Wealth, 1990-99



Sources: Data provided by Yemen authorities; and staff estimates.

As discussed in Section III, multiple exchange rates and interest controls were in place, the latter mainly to control credit in the economy. Quantitative trade controls, such as bans and licensing, were used to protect domestic agricultural and industrial activities, while export bans (mainly on fish and unprocessed leather) aimed to maintain supply at low prices. Other laws allowed the government to enforce domestic and external trade monopolies. The Agencies Law and the Trade and Supply Law effectively protected certain monopolistic activities and the government-tolerated private monopolistic structures for example, the trucking cartel (Ferzah), a shipping agents' cartel in Aden—or even supported such practices through entry restrictions in various forms. The Investment Law gave the government discretion to approve projects as well as wide-ranging control over implementation. This economic and legal environment failed to attract much investment, especially foreign investment. Hence an important component of the reform program of 1995 was regulatory reform.

#### **A. Exchange Regime and Foreign Trade Reforms**

80. On July 1, 1990, the exchange and trade systems of the former PDRY and YAR were unified using the system of the former YAR; the latter system was adopted for the Republic of Yemen. However, as part of an attempt to contain growing financial imbalances through administrative controls, a complex system of segmented foreign exchange markets, ad hoc administrative measures aimed at curbing “speculative” activity, and wide-ranging trade restrictions were maintained through 1995.

#### **Exchange system**

81. At the time of unification, the foreign exchange market in Yemen was comprised of official and parallel markets. The official market was limited to government external transactions and covered crude oil and petroleum products, official receipts and payments, and external debt service payments. The official exchange rate applied to the allocations of foreign exchange by the CBY to the private sector for imports of wheat, flour, rice, and LPG under government tender, as well as for special purposes such as officially approved medical treatment or study abroad. The CBY prepared indicative foreign exchange budgets in parallel with commodity budgets prepared by the Ministry of Supply and Trade. All other external transactions occurred through the parallel market, which was operated by moneychangers and did not have a legal status until January 1, 1993. At that time a law was enacted establishing regulations for money changing operations including licensing, capital, and reporting requirements, and which assigned oversight powers to the CBY.<sup>50</sup>

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<sup>50</sup> The law also established a parallel market oversight committee consisting of commercial banks, moneychangers, business community representatives, and an observer from the CBY. The committee was empowered to monitor conditions in the parallel market.

82. Commercial banks operated in the foreign exchange market only as agents of the CBY and were permitted to buy or sell foreign exchange only for the accounts of their customers with the CBY, opening foreign currency accounts for residents and nonresidents only subject to a long list of restrictions on the sources and uses of funds.

83. Commercial banks were prohibited from participating in the parallel market or from transacting with each other in foreign exchange, and were required to use the official exchange rate for accounting and foreign exchange transactions with their customers.

84. At the time of unification, the exchange rate in the parallel market was YRls 13 per U.S. dollar compared to YRls 12 in the official market. On April 1, 1991, the exchange rate for imports of wheat, flour, and rice was increased to YRls 16; on January 1, 1992, the customs valuation rate for all imports (except petroleum products, wheat, flour, and at that time rice) was increased to YRls 18; and on May 1, 1992, an incentive rate of YRls 18 was introduced for purchases of rials by bilateral and multilateral assistance agencies and foreign embassies, as well as for imports by the government and public sector enterprises, all of which constituted multiple currency practices.<sup>51</sup> On November 15, 1994, the parallel market oversight committee introduced an "official" parallel foreign exchange market for purchases of foreign exchange for self-financed imports with the exchange rate of YRls 84.<sup>52</sup> The CBY enforced the official parallel market rate by mandating that commercial banks could open letters of credit only if the importer provided documentary evidence that the foreign exchange was purchased at the official parallel rate. By the end of 1994, the free market rate had depreciated by 700 percent compared to May 1990 and stood at YRls 103. In early 1995, the main official exchange rate was devalued to YRls 50 (from YRls 12) while the free market rate depreciated further to around YRls 125. To limit the depreciation of the free market rate, the CBY from time to time suspended the operations of moneychangers, pushing foreign exchange transactions in the parallel market underground.

85. The exchange system was free of surrender requirements or taxes and subsidies on purchases or sales of foreign exchange and, with the exception of local payments for hotel bills and airline tickets by foreign nationals which must be made in foreign currency, there were no prescriptions of currency requirements.

86. In January 1996, the authorities began a two-staged process of unification and liberalization of the foreign exchange market. In the first stage, the official exchange rate was devalued from YRls 50 to YRls 100 per U.S. dollar and all other official rates were eliminated (Chart 7). This rate continued to apply only to budget accounting, customs

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<sup>51</sup> The incentive rate was devalued to YRls 25 on July 1, 1993, and imports by the government and public sector enterprises, as well as imports of LPG, were moved to the parallel market. Subsequently, commercial banks were allowed to operate in the parallel market on behalf of their customers, but the permission was withdrawn on June 7, 1994 with the objective of containing the depreciation of the parallel rate.

<sup>52</sup> In addition, there was a diplomatic rate of YRls 5 for staff working in Yemeni embassies abroad.

valuations, and transactions between the CBY and the Ministry of Finance. Commercial and specialized banks were allowed to fully participate in the parallel market, and foreign exchange regulations were amended to eliminate provisions inconsistent with free market operations. The exchange restriction entailing the prohibition on the issuance of letters of credit unless the foreign exchange was purchased in the official parallel market was eliminated, and the opening of letters of credit for public sector enterprises and purchasing of foreign exchange from foreign oil companies was shifted from the CBY to commercial banks. The government also eliminated the multiple currency practice related to wheat and flour imports by delinking the subsidy payment from the foreign exchange transaction.<sup>53</sup>

87. Following a short transition period under a dual rate system, full exchange market unification was implemented on July 1, 1996, and an independently floating exchange rate regime was adopted. All government and CBY transactions, including customs valuations, began to use the unified market rate thus completing the second liberalization stage by August 1, 1996. Finally, in December 1996, Yemen formally accepted the obligations under Article VIII, Sections 2, 3, and 4 of the Fund's Articles of Agreements, and since then has maintained an exchange system free of exchange restrictions on current or capital account transactions.

88. The CBY is empowered to conduct exchange rate policy, and aims to maintain an independently floating exchange rate regime by limiting its interventions in the foreign exchange market to smooth volatility. If the CBY had intervened in the market between 1996 and early-2000 (virtually always as a seller), it would have invited open bids from commercial banks and large moneychangers to buy dollars, and it would have sold to the highest bidder.

89. The Moneychangers Section of the central bank is responsible for the licensing and inspecting of moneychangers. The number of licensed moneychangers has declined from 260 in 1996 to 170 at present, of which 71 are located in Sana'a. A handful of large moneychangers account for up to 90 percent of total transactions in the market. Moneychangers are not part of the banking sector and their balance sheets are not included in the monetary survey, although their foreign exchange and rial accounts with commercial banks are. Moneychangers are supposed to report their transactions volume to the central bank, but currently less than one-fifth complies. Some of the moneychangers who have significant capital are reportedly involved in informal deposit taking and lending operations, which are not legal; it is also not usually recorded. The interest rate charged by moneychangers is estimated to have a premium of up to 15 percentage points over the lending rate quoted by commercial banks.

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<sup>53</sup> Importers of wheat and flour were required to purchase foreign exchange at the free market rate, and the payment of rial subsidy to the importers was done by the Ministry of Finance upon transfer of ownership of imported wheat to domestic distributors. The rial subsidy was eliminated in June 1999.

90. No firm data are available on the average daily volume of transactions in the foreign exchange market, but the underlying transactions for private current account activities are estimated by the CBY to be in the order of US\$1.0–1.5 billion annually on both the buy and sell side. A fully functioning interbank wholesale market encompassing both spot and forward transactions among banks and moneychangers has not yet developed.<sup>54</sup> The retail spot market continues to be centered largely on moneychangers, which provide easy and efficient transactions with very narrow spreads. According to CBY estimates, moneychangers account for about 60 percent to 70 percent of all transactions in the foreign exchange market, while the commercial banks account for the rest. Currently there is no clearinghouse for foreign exchange transactions, but commercial banks are considering establishing one as noncash instruments would grow in importance, which would shift the balance in favor of commercial banks and away from the moneychangers.

91. All transactions, including those for budget accounting purposes, use the market rate, although not all supply and demand for foreign exchange is channeled through the exchange market; certain transactions go through the central bank. The transactions that go directly through the CBY include mainly oil export proceeds, foreign loans and grants, and public sector debt service payments thus affecting the foreign exchange reserves of the CBY rather than the market rate. The CBY publishes its daily rate by calculating an average from a sampling of rates from a group of the large moneychangers and commercial banks; the CBY then uses this rate for its official transactions such as government debt service and budget accounting. Individual commercial banks usually call large moneychangers to sample the market rates that day and refer to them for their own transactions.

92. Both foreign and domestic banks are allowed to freely conduct all foreign and domestic currency operations. Effective January 15, 1996, commercial and specialized banks were required to observe prudential regulations regarding currency exposure and to begin reporting their positions. The open positions (both oversold and overbought) are limited to 25 percent on all foreign currencies and 15 percent on one currency. Banks report their daily open positions to the CBY at the end of each week, although the central bank only checks the last day's position against the limit.

### **Foreign trade**

93. Upon unification, the foreign trade regime (adopted from the former YAR) was inward-oriented and was characterized by import prohibition (through a positive import list), licensing, and a mean nominal tariff in the order of 27 percent. Virtually all imports required licenses from the Ministry of Supply and Trade, and the importation of certain products required the permission of particular government agencies.<sup>55</sup> The annual commodity and

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<sup>54</sup> Available information indicates that neither the CBY nor other market participants are involved in forward or derivative operations.

<sup>55</sup> The only exceptions were: the importation of equipment by foreign oil companies; the importation of spare parts to meet emergency needs of manufacturing enterprises subject to the annual limit of US\$50,000 for each

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foreign exchange budgets provided the basis for issuing import licenses. These budgets gave priority to imports of foodstuffs, medicines, petroleum products, and inputs for production. Imports of petroleum products were reserved for the YPC and the Aden Refinery. Foreign exchange for both private and official transactions had to be purchased at the official exchange rate from the central bank, which also had to approve its availability.

94. Imports were subject to a customs duty under a tariff structure, which incorporated 15 bands with the tariff rate ranging from 5 percent to 200 percent. In addition to the applicable customs duty, imports were subject to numerous taxes and surcharges, including an earthquake damage reconstruction tax, a Ministry of Finance surcharge, a Chamber of Commerce surcharge, and a Health Department surcharge.

95. Beginning August 1, 1990, the authorities permitted the self-financing of licensed imports through foreign exchange obtained from the parallel market. A commercial bank guarantee equivalent to 2 percent of the value of the imports was required for an import license to be issued. The commercial banks were then authorized to open letters of credit for holders of import licenses provided that the full foreign exchange value of the imports was deposited with a commercial bank. All importers holding an import license for wheat, flour, rice, and LPG could obtain the necessary foreign exchange from the central bank at the special official rate of YRls 12 per U.S. dollar, which also served as the customs valuation rate.<sup>56</sup> In January 1991, the 100 percent import deposit requirement was reduced to 50 percent for commercial imports and to 25 percent for industrial imports, and was finally abolished altogether in January 1992.

96. In May 1993, the positive import list was replaced by a negative list which included 63 categories of items competing with domestically produced goods. Import licensing remained in effect due to foreign exchange shortages. The government assigned priorities among the import categories and granted licenses only up to a ceiling for each category. Export bans, such as the 1994 temporary ban on exports of fish, were imposed from time to time on commodities considered to be in short supply in the domestic market.

97. Over the period January–March 1996, a comprehensive reform of the tariff and trade system was implemented in order to reduce effective protection, enhance the economy's allocational efficiency and growth prospects, and facilitate its integration into the world economy. The main elements of the reform included:

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enterprise; and the importation of machinery and spare parts for up to US\$40,000 by the Yemeni nationals returning from abroad to set up a small business. In the latter case, an authorization from the Ministry of Supply and Trade was required and the payment had to be made out of the expatriated foreign exchange savings.

<sup>56</sup> On April 1, 1991, the exchange rate for imports of wheat, flour, and rice was increased to YRls 16 per U.S. dollar, and on January 1, 1992, the customs valuation rate for all imports (except petroleum products, wheat, flour, and at that time rice) was increased to YRls 18. With the elimination of the domestic subsidy for rice, imports of high quality rice were moved to the parallel market on May 1, 1993, and imports of low quality rice were moved on May 1, 1994.

- All import bans maintained for economic reasons were abolished except for fresh fruit, vegetables, and coffee.<sup>57</sup>
- All import licensing by the Ministry of Supply and Trade was eliminated except for wheat, flour, and petroleum products.
- The 15-band tariff structure was replaced with a 4-band structure with tariff rates of 5, 10, 15, and 30 percent ad valorem.<sup>58</sup>
- The tariff reform was accompanied by excise tax harmonization whereby excise taxes on industrial inputs and a production tax on local manufacturers applied uniformly on imported and domestic products.
- A process of phasing out import fees and surcharges was initiated and, by September 1997, all import fees and surcharges were eliminated.
- Duty exemptions for imports by the government and public sector enterprises were abolished.
- Any new discretionary project-related import duty exemptions were not to be granted anymore except under the Investment Law.
- Any government controls over exports were eliminated except for security, public health, religious, or environmental reasons.<sup>59</sup>

98. Following the unification of the exchange system on July 1, 1996, the customs valuation rate was unified with the market exchange rate on August 1, 1996. To mitigate the one-time price increase effect of the customs rate devaluation on the politically sensitive imports, tariff rates were reduced at that time for imports of seven basic food items and medicines. In October 1997, the maximum tariff was further reduced by 5 percentage points to 25 percent, and the tariff rate on inputs for production was lowered from 10 percent and 15 percent to 5 percent. Tariffs for goods prone to smuggling were also reduced on a selective basis.

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<sup>57</sup> In addition to coffee, import bans continued to apply to 21 categories of fruit and vegetables classified according to the four-digit Harmonized Nomenclature System (HNS) code, which was introduced in October 1997. The importations of the following items were prohibited for security, religious, or environmental reasons: weapons and explosives, narcotics, pork and pork products, alcohol, and rhinoceros horn.

<sup>58</sup> A special tariff rate of 70 percent applied to tobacco and tobacco products for revenue reasons.

<sup>59</sup> Export licensing is required for statistical purposes, and the Ministry of Fisheries limits the export of certain categories of seafood products. Exports of antiques and archeological items exceeding US\$100 in value are prohibited.

99. In March 1998, the government began a phased elimination of the remaining import bans maintained for economic reasons, replacing them by the maximum tariff. By the end of 1999, the importation of 14 categories of fruits and vegetables had been liberalized and the remaining import bans were scheduled for removal in 2000.

100. These trade system reforms brought the trade regime in Yemen closer to standard international rules. Consequently, in 1999, the government initiated the process of accession to the World Trade Organization (WTO). Following the granting of observer status to Yemen at the WTO in 1999, the government is working toward full membership.

101. Under the reformed tariff structure, the mean tariff rate was reduced from 27 percent to 12 percent. This—together with the elimination of import bans, licensing, and other nontariff trade barriers—had reduced Yemen's trade restrictiveness index from 10 (closed or very restrictive) at the time of unification to 2 (open) by the end of 1999.<sup>60</sup> The relative ranking of Yemen in terms of trade restrictiveness among the Middle Eastern countries is below:

Table 6. Middle Eastern and North African Countries:  
Trade Restrictiveness Rating

Index	1	2	3	4	5	6	7	8	9	10
Rating	OPEN				MODERATE		RESTRICTIVE			
Country	Djibouti Qatar U.A.E.	Bahrain Yemen	Mauritania	Kuwait Oman	Saudi Arabia	Jordan	Algeria Lebanon Pakistan	Egypt Morocco Sudan Tunisia	—	Iran Syria

Source: IMF, Trade Policy Information Database.

## B. Tax Reforms

After unification, the parliament of Yemen passed three new tax laws to give the country a consolidated new tax structure. Law No. 31/91 regulated the taxation of incomes and profits, Law No. 70/91 introduced a tax on production, consumption, and services (TPCS), and Customs Law No. 14/90 introduced a new tariff structure. All three laws remained virtually unchanged over the period 1990–94, but between 1995 to 1999 were amended several times in an initial effort to make some improvements in the tax system. However, more comprehensive reforms are underway to modernize the entire tax code.<sup>61</sup>

<sup>60</sup> See EBS/97/163, *Trade Liberalization in Fund Supported Programs*, for the description of the underlying methodology for deriving the trade restrictiveness index.

<sup>61</sup> Amendments over the period 1995–99, as well as current reform efforts, benefited from recommendations developed with technical assistance from the IMF's Fiscal Affairs Department. A substantial part of the

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### *Taxes on income and profits*

103. The 1991 law specified an individual income tax with four brackets. Tax rates on wages, salaries, and rental income varied between 3 percent for the lowest bracket and 16 percent in the top bracket (22 percent for nonresidents). Owing to the high levels of inflation, by end-1994 virtually all taxpayers were in the highest 16 percent bracket and the income tax had become essentially a proportional tax. Businesses were taxed at rates between 28 percent and 36 percent varying for proprietary status, monopolies, and residency status.<sup>62</sup> Under the 1991 code, individual taxpayers were taxed differently depending on the source of income, and tax from different sources was not aggregated. Moreover, income taxes suffered from the numerous exemptions contained in the 1991 Investment Law. In 1996, the income tax law was amended and tax rates for corporations were unified at 35 percent. Proprietors continued to pay a flat rate of 28 percent.

104. Further changes to the income tax law were introduced by presidential decree in early 1999. These amendments replaced previous provisions with a progressive rate structure for personal income (including from proprietorship) above YRIs 36,000; raised the top tax rate on wages and salaries from 16 percent to 20 percent, included foreign income in the tax base; simplified the depreciation schedule, and clarified the penalty regime.<sup>63</sup> The authorities recognize that further adjustments to the income tax code are desirable to achieve a consistent treatment of income from different sources and restrict exemptions, and are therefore working towards a more comprehensive reform. Of particular concern are the integration of corporate and personal taxes to limit tax avoidance, the taxation of income from agricultural sources and rental income as regular income, the simplification of the depreciation schedule, the clarification of international tax rules, the simplification of procedures, and the design of an effective penalty regime.

### *Taxes on goods and services*

105. The 1991 TPCS law consolidated numerous excise taxes. Despite its name, the tax covered originally only about 35 products, including qat, and tax rates varied between 5 percent and 40 percent with twice the rate applied to imported goods. Specific excises were levied on petroleum products and cigarettes. In 1996, the tax base was broadened to about 100 goods and services, and the rate differentiation for domestic and imported goods, was eliminated by presidential decree. The decree also established a limited tax credit mechanism

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technical assistance program was financed under two three-year joint UNDP/IMF/DFID programs (1994–96, 1997–99).

<sup>62</sup> Tax regimes for oil companies, the major foreign investors, were negotiated separately and individually and were not covered by the income tax laws.

<sup>63</sup> Presidential Decrees No. 12 and 255 of 1999; they also included a provision to tax rental income, but the tax was limited to one month's rent.

to reduce cascading under the TPCS. Moreover, the specific taxes on petroleum products were converted to an ad valorem tax, mostly at the rate of 2 percent, and specific cigarette taxes were converted to ad valorem taxes at rates of 60 percent for domestic products and 80 percent for imported products.

106. The amendments introduced by decree were later altered by parliament, which reduced the number of goods and services covered by the TPCS in 1997.<sup>64</sup> Additional minor changes regarding coverage were introduced by decree in January 1999. These related to the list of exempt goods, the tax base for certain imported goods, and confiscation of cigarettes. The administration of the tax suffers from the multiple rate structure. In addition, it has limited revenue potential owing to a restricted base. The authorities are therefore committed to replace the TPCS with a broad based value-added tax (called General Sales Tax or GST). A tax law providing for a 10 percent broad-based GST with a strictly limited list of exemptions, a credit mechanism, and zero-rating of exports was approved by the government in 1999 and is pending before parliament. The GST would originally apply only to all imports and to domestic sales of the 800–1,000 largest taxpayers, depending on turnover. A few excises on petroleum, tobacco products, and qat would remain in place under the cover of the TPCS.

107. Parliament removed stamp duties on banking and customs transactions in May 1998. Stamp duties were applied to commercial and government transactions and based on the value of transactions. The application of customs and banking stamp duties was complicated and the lost revenue was largely replaced by taxing services and imports.

### *Tax administration*

108. The authorities have taken several steps to improve revenue collection and tax administration. The most important was the introduction of a new taxpayer identification number (TIN). While a TIN system existed before 1997, it suffered from shortcomings due to unnecessary codlings. A new computerized pilot system allowing for online registration of taxpayers in several tax centers was recently introduced and online registration of taxpayers should begin in 2000. The new system will allow for a range of tax reports based on the taxpayer database. Customs clearance of imports now also depends on the presentation of a valid TIN. In addition, the tax administration introduced cigarette bandrolls in 1997 to improve identification of untaxed cigarettes. Moreover, through improvements in manual procedures, efficiency gains have been realized in the tax authority. Jointly with the introduction of a GST, the tax administration plans further reform steps. These include the creation of a large taxpayer unit, which would handle all taxes, including income taxes and withholding taxes, paid by taxpayers above a certain threshold for turnover. Further, the Tax

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<sup>64</sup> Law No. 4 of 1997.

Authority plans to modernize tax administration through self-assessment procedures, targeted auditing, and enhancement of taxpayer services provided by the taxpayer services unit established in 1999.

***Customs and customs administration***

109. The 1990 customs law contained a complicated rate structure, with 15 rates ranging from 5 percent to 200 percent. Most imports were taxed at the rates between 20 percent and 30 percent. Although the 1990 law already constituted a major simplification over the pre-unification customs laws, it still gave rise to classification difficulties and disputes. Until the stepwise exchange rate unification in 1995–96, customs revenue was also affected by the application of the highly appreciated customs valuation rate. In 1996, the customs tariffs were simplified to 4 bands entailing rates of 5, 10, 15, and 30 percent, with a further reduction of the top rate to 25 percent in 1997. The customs base also benefited from a stepwise elimination of import bans in 1998 and 1999. Further amendments of the customs law are planned for the future to bring the regulations and valuation procedures in line with WTO specification. Other than customs duties, Yemen also imposed a number of import surcharges such as a health department surcharge on cigarettes, a profits tax, and an earthquake tax. The last two of these surcharges were removed by parliament in December 1998. Customs revenue also suffers from broad exemptions introduced through the Investment Law of 1991. It exempts fixed assets for establishment, expansion, or upgrade of a project licensed by the General Investment Authority from all types of customs duties and taxes. Moreover, it provides for simplified customs procedures as soon as a project license is presented at the border.

110. Customs administration reform focused initially on customs procedures and regulations. Reforms covered the simplification of clearance procedures, and the improvement of the functioning of the Customs Authority. The control of the authority over arrival and exit of imports was strengthened and payment of duties before release of goods was enforced. Further reform steps included the elimination of the deferment of customs duties, the improvement of controls over temporary admissions, and the development of new customs forms. The Customs Authority is now working on introducing the ASYCUDA system with support from UNCTAD at three or four points of entry in 2001.

111. In spite of reform efforts, enforcement of customs regulations remains difficult. The long shoreline and before the recent signing of the Jeddah border treaty, the disputed borderlines led to major difficulties in controlling points of entry. In addition, the security situation was seen as necessitating a strong military presence at the border. To the extent that responsibilities between the military and customs are ill defined and the military has little incentive in prosecuting smugglers, border enforcement has been hampered. The declining share of customs revenue in imports likely reflects increasing smuggling activity and tax evasion.

### C. Public Expenditure Reforms

112. High levels of public expenditures were the root cause of unsustainable public deficits from 1990 to 1995. The major elements of high expenditures were subsidies for wheat, wheat flour, and petroleum products, as well as the civil service wage bill. In the second half of the 1990s, the government took several steps to contain expenditures particularly through changes in administered petroleum prices and the removal of subsidies for wheat and wheat flour imports.

#### Subsidy reform

113. Until 1997, wheat and wheat flour subsidies constituted the government's primary social safety net and transfer program. Those 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 used up by importers, distributors, and by smugglers to neighboring countries. Moreover, the poorest groups of the population benefited very little from subsidies because they spent disproportionately less on wheat and wheat flour than high income groups.

114. Substantial petroleum product subsidies were instituted to support the rural population. Subsidies for petroleum products other than diesel have been substantially cut over time but diesel prices have remained unchanged since 1997, when an YRI 1 increase led to political unrest and widespread violent riots. Diesel fuels rural transportation as well as agricultural machinery, particularly to pump ground water. The diesel subsidy has caused large distortions in the Yemeni economy. Car engines have been changed from gasoline to diesel engines. Diesel fueled pumps have depleted water tables rapidly, mostly to provide water for qat plantations, and richer households as well as many businesses have begun to generate their own power with concomitant losses for the electricity company (PEC). As PEC has been losing its best customers, affecting its ability to cross-subsidize its poorest customers.

115. From 1990 to 1994, subsidies for wheat, wheat flour, and petroleum products were implicit, resulting from the multiple exchange regimes.<sup>65</sup> Importers of wheat and wheat flour had access to foreign exchange at the official exchange rate, which at end-1994 was about one-eighth of the parallel rate. Likewise, import of petroleum products and later sales to domestic refineries took place at exchange rates far removed from market rates. With the move to unified exchange rates, those subsidies that had previously been implicit through reducing oil export revenue, have to be recorded explicitly on the expenditure side. This became clear in 1996 when the explicit subsidy bill reached 13 percent of GDP after the exchange rates were unified. In addition to the explicit subsidies, there continued to be implicit subsidies through the application of nonmarket based transfer prices in the domestic

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<sup>65</sup> In addition to wheat and wheat flour, the Yemeni government also subsidized rice, milk, sugar, and medicine. These subsidies were relatively unimportant in magnitude, and were eliminated in 1995.

oil and petroleum sector. In particular, the Aden refinery charged an additional US\$15 per ton of delivered petroleum products (raised to US\$17 in 1999), from transport services, but part of this is likely to reflect a production subsidy.

116. Reducing subsidy have played an important role in the fiscal adjustment efforts of the government since 1995 (Box 1). Jointly with its move to unify the exchange rate, the government began to raise domestic petroleum retail prices in March 1995. Gasoline retail prices were raised by 100 percent and the fuel oil price by 74 percent. Despite these increases, domestic wholesale prices (retail prices net of taxes and distribution fees) remained far below world market prices in 1995 (Chart 10). Gasoline prices were closest to world market levels at about 60 percent followed by fuel oil at 30 percent and diesel and kerosene at 15 percent. Further substantial administered price increases of 58 percent (gasoline), 100 percent (diesel), 167 percent (kerosene), and 133 percent (fuel oil) took place over January–March 1996. They brought price levels for gasoline close to world market levels, but left diesel, kerosene, and fuel oil heavily subsidized (Table 7). Prices were raised again in 1997, 1998, and 1999 but the price for diesel remained unchanged since September 1997 (Table 8). Owing to these measures, by 1998 gasoline prices were 80 percent above world market prices and allowed to cross-subsidize diesel and, to a lesser extent, fuel oil and kerosene. However, in 1999 rising oil prices were not matched by equivalent price adjustments and led to the reappearance of a substantial cash subsidy bill (Table 5). In 1999, the government also changed its transfer pricing system to charge world market prices for crude oil in its transactions with the domestic refineries, as explained in Section II.

117. Sales to refineries are now conducted at export prices. Refineries charge world market prices to the distribution company for petroleum products (YPC) plus a surcharge (see above). The YPC's losses at administered retail prices are covered by subsidy payments from the budget.

118. Progress in utility tariffs took place at a slower pace (Table 6). After a 120 percent increase in water tariffs and a 161 percent average increase in electricity tariffs in January 1996, small-step increases took place in 1997 and 1998 for the latter. Electricity tariffs have not been changed since then, however, despite the fact that at this level, the average tariff currently covers about 90 percent of the average cost of production of 1 kwh. The previous opaque system of transfer prices and artificial exchange rates for domestic transactions led to implicit subsidies for consumers and utilities. Higher prices and the new settlement mechanism combined with the price distortions favoring diesel generation of electricity led to arrears of the electricity company vis-à-vis the petroleum distributor. The government reimbursed these arrears implying a subsidy of electricity consumption in the order of 0.4 percent of GDP in 1999.



### Box 1. Reduction of Subsidies, 1995-99

- Domestic prices of wheat, flour, and petroleum products have traditionally been set administratively well below market prices involving large subsidies. After the unification of exchange rates in mid-1996, many of the subsidies that were implicit giving importers access to foreign exchange at non-market rates became explicit in the budget.
- The subsidies created incentives against domestic wheat production and for inefficient use of petroleum products (especially in the case of diesel). They also encouraged smuggling of subsidized goods to neighboring countries. Moreover, the untargeted price subsidy benefited all groups of the population independent of income levels and gave rise to rent-seeking activity by importers and distributors.
- The government began in 1996 through several rounds of administered price increases to reduce the subsidy bill. The wheat and flour subsidies, which reached 7.5 percent of GDP and put wheat and flour almost 75 percent below world market prices in 1996, were eliminated entirely in mid-1999.
- The decline in world market prices in 1997 and 1998 affected overall oil and petroleum subsidies which fell with the increase in administered prices, which resulted to violent unrest. However, domestic prices particularly diesel prices which have been unchanged since 1997, did not keep pace with the increase in oil prices in 1999 and the subsidy rose to about 2 percent of GDP.

#### Republic of Yemen: Subsidies, 1995-99

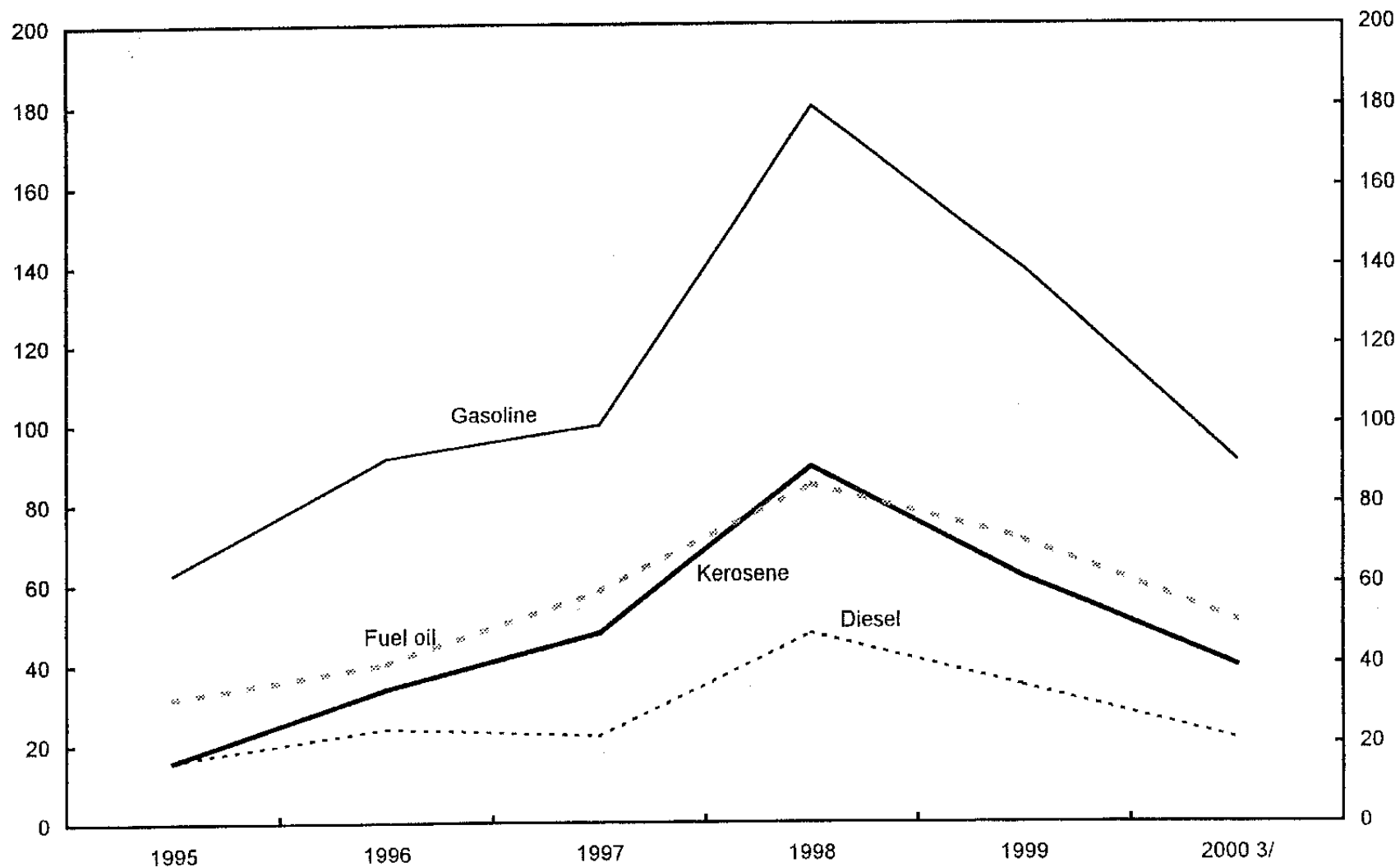
	1995	1996	1997	1998	1999
<b>Wheat and flour subsidy</b>					
In percent of market value of consumption 1/	...	73.7	65.3	50.5	9.2
In percent of GDP	...	7.5	4.7	3.1	0.4
<b>Domestic oil and petroleum subsidy 2/</b>					
In percent of market value of consumption 1/	85.3	48.9	12.0	10.6	27.0
In percent of GDP	10.7	5.5	1.0	0.7	2.1

Sources: Ministry of Finance; and staff estimates.

1/ Evaluated at world market prices and parallel exchange rates.

2/ Calculated as the difference between world market value at parallel exchange rates of domestic crude oil consumption and domestic oil revenue net of explicit budgetary subsidies. This calculation ignores the value added by refining and the potential additional subsidy or tax implied by selling refined products below or above world market prices.

Chart 10. Republic of Yemen: Petroleum Product Wholesale Prices, 1995–2000 1/2/3/  
 (In percent of world market prices)



Sources: Data provided by the Yemeni authorities; and various oil publications.

- 1/ Wholesale prices are defined as retail prices net of taxes and distribution fees.
- 2/ World prices are Mediterranean ex-refinery prices.
- 3/ Data for 2000 is for the first quarter only.

Table. 7. Republic of Yemen: Petroleum Products Prices Compared to World Market Levels  
(March 2000)

(YRls per liter unless otherwise stated)

	Domestic Retail Price	Domestic Wholesale Price 1/	International Wholesale Price	International / Domestic Price Ratio
Gasoline	35	28.35	32.18	0.88
Diesel	10	6.45	30.72	0.21
Fuel oil	13	10.09	20.23	0.50
Kerosene	16	12.76	31.80	0.40

Sources: International Energy Agency, Oil Market Report (March 2000); Ministry of Finance; and staff estimates.

1/ Domestic wholesale price is calculated by deducting from retail prices appropriate taxes and surcharges imposed for each product. International wholesale prices are actual average prices for February 2000, converted to rials at the current period-average exchange rate. (Gasoline prices are regular northwest Europe prices, while the other products are Mediterranean-based prices; fuel oil corresponds to the 3.5 percent sulfur type). The International/Domestic Price Ratio is the ratio of the two wholesale prices. For example, the wholesale price for gasoline in Yemen in February 2000 was 88 percent the level of the international wholesale price.

119. Wheat and wheat flour subsidies were entirely phased out by mid-1999 through increases in administered prices. Small increases, ranging from 10 percent to 30 percent, took place between the second half of 1996 and January 1999, following a large increase (150 percent) in January 1996.<sup>66</sup> The administration of wheat subsidies was complicated, giving rise to substantial rents of a few privileged import companies and distributors.<sup>67</sup> The government gave importers access to foreign exchange at below market rates such that the latter were willing to sell at administered price levels.<sup>68</sup> The government furthermore negotiated distribution fees with distributors. Import contracts were distributed through a tendering system but the latter was not transparent and generally invited only bids from the same few companies. There was little competition among distributors.

<sup>66</sup> The government was still engaged in settling some remaining arrears with wheat importers in early 2000.

<sup>67</sup> Since the removal of the wheat subsidy, the amount of foreign exchange sales by the CBY has not exceeded US\$200 million a year compared to the direct provision of US\$400 million to US\$600 million annually to wheat importers prior to the liberalization of wheat imports. At the same time, wheat imports have declined by about US\$100 million relative to their pre-liberalization levels. This suggests that, as a result of the subsidy, between US\$100 million to US\$300 million a year was accruing as rents to wheat importers and distributors probably in the form of over invoicing and smuggling to the neighboring countries where the price of wheat was higher than the administered domestic price.

<sup>68</sup> The subsidized exchange rate equalized the administered predistribution price with the actual price of imported wheat at the port of entry.

Table 8. Republic of Yemen: Adjustments in Administered Retail Prices, 1994-99

	<u>Dec.</u> 1994	<u>Jan.</u> 1995	<u>Mar.</u> 1995	<u>Aug.</u>	<u>Jan.</u> 1996	<u>Mar.</u>	<u>Jul.</u> 1997	<u>Sept.</u>	<u>Jul.</u> 1998	<u>Jan.</u> 1999	<u>Jun.</u>
(Percentage change in unit price)											
Gasoline	...	...	100	...	50	7	30	...	40	...	...
Diescl	...	...	...	...	100	...	...	67	...	...	...
Fuel oil 1/	...	...	74	...	133	...	...	57	...	...	18
Fuel oil 2/	...	32	100	...	40	...	...	57	...	...	18
Kerosene	...	...	...	...	167	6	53	...	15	...	7
Aviation fuel	...	67	150	...	8	...	...	...	...	...	85
LPG	...	25	60	50	38	...	...	...	21	...	...
Electricity (average tariff)	...	60	...	...	161	...	...	7	50	...	...
Wheat	...	38	...	...	150	...	15	...	30	25	FL
Flour	...	38	...	...	150	...	11	...	28	17	FL
Rice, milk, sugar, medicine	...	...	FL	...	...	...	...	...	...	...	...
Water	...	...	...	...	120	...	...	...	...	...	...

Sources: Ministry of Oil and Mineral Resources; Ministry of Finance; and World Bank.

1/ For electricity plants.

2/ For cement plants.

3/ FL stands for full liberalization.

120. As a result of the reduction in subsidies, the subsidy bill fell substantially over time and reduced the pressure on expenditures. Owing to rising domestic petroleum prices and declining differentials with world market prices, net domestic oil revenue, a measure that tracks domestic oil revenue net of explicit subsidies, rose from 1.8 percent of GDP in 1995 to 5.4 percent of GDP in 1999. Wheat and flour subsidies, which peaked at 7.4 percent of GDP in 1996, fell to 3 percent in 1998 and will be completely eliminated in 2000.

### **Civil service and wage reforms**

121. Unification and the following political and economic events resulted in a large, partially redundant and poorly paid civil service. In 1990, the civil service of the North Yemen and the South Yemen were merged; and the southern pay scale adjusted to the higher levels in the North. With the return of expatriates and the re-instituted policy to hire university graduates, the civil service (excluding public enterprises) grew from 168,000 in 1990, to 322,000 in 1995, and to 336,000 in 1998; as a share of the total civil service population rose from 1.3 percent in 1990 to 1.9 percent in 1998.<sup>69</sup> An estimated additional 83,000 were working in public enterprises in 1998. Most civil servants are employed in the education sector, followed by the health sector, and general administration (Table 9). Owing to high levels of inflation, real wages eroded substantially from 1994 to 1997. While these developments helped to reduce the wage bill from almost 11 percent of GDP in 1993 to 6 percent in 1997, it also left Yemen with an under qualified, underpaid, and overstaffed civil service that lacked in delivering adequate services to the population.

122. The government recently initiated a comprehensive reform program. The program aimed at reducing the size of the civil service through retrenchment and retirement to allow higher pay increases for the remaining civil servants. It also envisions a restructuring of public administration, beginning with six pilot ministries, the introduction of a new grade structure, and minimum qualifications for each job.

123. Several steps have been implemented. In 1998, a civil service census was conducted that identified all civil servants by age, occupation, time of service, and other characteristics. The census identified potential double dippers and overage workers as a precondition for future reduction in staff and established a database allowing computer-based management of the civil service. The Ministry for Civil Service has also begun to issue employee identification numbers. A law allowing the establishment of a Civil Service Fund (CSF), which would continue to pay laid off public workers for a certain period of time, and benefit from World Bank financial assistance. This was promulgated by presidential decree in January 1999.

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<sup>69</sup> Estimates of the Ministry of Civil Service and Administrative Reform.

Table 9. Distribution of Civil Public Employees by Sector, 1998

Sector	Employees	Total Percent
Education	223,368	53
Health	33,328	8
General administration	33,006	8
Construction	21,751	5
Manufacturing	15,803	4
Other	92,153	22
Total	419,409	100

Source: MOCSAR Employee Database.

124. Despite these preparations, no progress was made in reducing staff or containing the wage bill. The retirement of over age workers (estimated at 24,000 in total) has been delayed through early 2000. Since the CSF was not yet operational in early 2000, the so-called “at-home workers,” who were supposed to be the first group transferred to the fund continued to be on government payroll. Hiring continued at a level of 20,000 people in 1999; given about 2,000 retirees, this amounts to a net addition of 18,000 civil servants. Average wages continued to rise at over 20 percent in 1998 and 1999, largely owing to a bill passed by parliament that granted a 100 percent increase of wages for teachers and health workers in 1998–2000.

125. As a result, the civil service wage bill has increased from 6 percent of GDP in 1997 to 7.5 percent of GDP in 1999. Moving ahead with retrenchment and organization will therefore be essential to make progress in refocusing government expenditures.

### **Other expenditure reforms**

126. Since 1994, the Yemeni government has reduced its defense spending. At unification, total defense expenditures stood at 8.4 percent of GDP, over 80 percent of which went to pay salaries. During the first years of unification, defense spending remained high and peaked at 9.7 percent of GDP in 1994 during the civil war. Starting 1995, expenditures for the military began to fall to about 6 percent of GDP and reached 5.8 percent of GDP in 1999. At the same time, in parallel with the overall decline of the civil service wage bill, the importance of military wages declined from 60 percent to 70 percent of total defense spending.

127. Development expenditures remained volatile because it served as a first resort for expenditure cuts in difficult times. Immediately after unification, the government spent more than 8 percent of GDP for development. However, with financial difficulties emerging in 1991, less than 4 percent of GDP were spent for development. This declined further to 2.6 percent of GDP in 1994. With easing pressures after the unification of exchange rates and rising oil revenue, the government sharply increased development spending to more than 6.5 percent of GDP in 1996 and 1997. However, because development projects belong to the few discretionary items, the drop in oil prices in 1998 and continuing low prices in early 1999 led to a cut back in spending to 6.1 percent and 5.6 percent of GDP, respectively.

128. Between 1990 and 1997, government interest obligations fluctuated between 2 percent and 3 percent of GDP. Domestic interest payments, which in that period were recorded net of central bank profit transfers remained from 1 percent to 2 percent of GDP, with the exception of 1994. External interest obligations also remained within the range of 1 percent to 2 percent of GDP. In 1996, obligations were particularly high when the first Paris Club rescheduling agreements were reached, which required the settlement of some deferred interest payments. In 1998 and 1999, after the Paris Club agreement took full effect, foreign interest obligations were only about 1 percent of GDP. Domestic interest payments, since 1998 have been recorded on a gross basis and rose from 2.5 percent in 1998 to 3 percent in 1999, reflecting the rising interest rates in the wake of tight monetary policy.

129. Social indicators in Yemen point to major deficiencies in human development. For example, Yemen is the country in the Middle Eastern and North Africa region with the highest fertility rate, highest maternal mortality rate, and highest infant mortality rate (Section VI.C). The public sector is the major provider of basic social services, particularly health services. The Ministry of Public Health (MOPH) administers more than 2,200 public health facilities, among which are about 100 hospitals, 500 health centers, and 1,600 health units.

130. In addition, there are two hospitals outside the MOPH structure which receive direct allocations from the budget. The MOPH employs more than 30,000 people including 3,800 physicians and 9,400 nurses. However, health services are distributed unevenly among regions and between rural and urban areas.

131. Spending on education and health has been on the rise since 1996. Data on education and health expenditures have only been compiled since 1996. In 1996, education expenditures were 3.5 percent of GDP and health expenditures were 1 percent of GDP. Among those, 70 percent and 41 percent were spent on wages and salaries, respectively. Spending on education rose sharply since 1996 and reached 7.4 percent of GDP in 1999, and out of these expenditures, 61 percent went to wages and salaries. Thus, although the wage bill has grown more slowly than overall allocations to the education sector, the share of wages remains high. In contrast, the share of materials and services fell between 1996 and 1999 from 17 percent to 13 percent of expenditures. Development expenditures, largely school construction in rural areas, therefore took an increasing share of education

expenditures. Health expenditures were increased much less rapidly from 1 percent of GDP in 1996 to 1.3 percent of GDP in 1999. Wages and salaries continue to take up about 40 percent of these expenditures.

132. Comparing Yemen's expenditure profile across the region, Yemen appears to have lower military expenditures than regional comparator countries but also lower education and health expenditures (Table 10). Some of these comparisons should be interpreted cautiously, owing to different definitions across countries. Nonetheless, measured as a share of GDP, military and security expenditures in Saudi Arabia, Oman, and Jordan have been much higher than in Yemen during the 1990s. Only Egypt shows considerably lower military spending than Yemen. Regarding education, spending in Yemen has risen sharply, largely on account of rising employment of teachers and increasing wages. As a result, Yemen's spending now is considerably higher than Oman's but remains smaller than Saudi Arabia's spending on manpower (including vocational training). Health spending remains exceptionally low also within a regional context; Yemen's 1 percent to 1.4 percent of GDP are lower than spending in Oman (2 percent of GDP) and Saudi Arabia (3 percent of GDP), but higher than Egypt.

#### **Budget management reform**

133. The budget management reform program attempts to address shortcomings in budget formulation, budget execution, and budget control mechanisms. Budgets were traditionally prepared without regard to a macroeconomic framework or financial limits, leading to a sub optimal budget process that did not address priorities. Moreover, the Ministry of Finance did not follow macroeconomic developments or prepare a macroeconomic framework. Budget execution is cumbersome because each ministry or independent government agency has three accounts at the central bank: one for current expenditures, one for development expenditures, and one for revenue. Until 2000, the ministry could follow account movements but had no information on subchapters. Budget control suffers from a clear system of guidelines and procedures as well as weaknesses in independent auditing.

134. The first phase of an IMF/UNDP supported technical assistance program resulted in improvements in budget preparation and accounting procedures. The 2000 budget was prepared with a revised circular and was based on a macroeconomic framework. It also followed the classification of the *Government Financial Statistics Yearbook (GFSY)*. Budget reports are now regularly requested in standardized format from budgetary units. The accounting software at the central bank, which executes the treasury functions of the Ministry of Finance, was modified to a two-level classification (budget chapter and subchapter) in 1999. Recently, a deputy minister has been appointed to head the new macroeconomic studies unit and its staffing has begun. This unit will track and forecast revenue and expenditures and prepare a basis for a medium-term budget framework.



Table 10. Republic of Yemen: Regional Comparison of Expenditures on Defense, Education, and Health, 1994 - 98

(In percent of GDP)

	1994	1995	1996	1997	1998
Defense					
Yemen	9.7	6.7	5.6	6.0	6.1
Oman 1/	15.6	14.5	12.5	12.4	12.4
Saudi Arabia 2/	9.7	10.0	8.7	9.7	10.3
Jordan	13.4	14.4	15.3	16.0	17.5
Egypt	3.3	3.2	3.1	2.9	2.8
Education					
Yemen	n.a.	n.a.	3.5	4.6	7.0
Oman	3.1	3.1	2.9	3.0	3.4
Saudi Arabia 3/	8.4	7.8	8.0	8.8	9.9
Jordan 4/	n.a.	n.a.	n.a.	4.4	n.a.
Egypt	2.9	3.4	3.3	3.5	3.9
Health					
Yemen	n.a.	n.a.	1.0	1.0	1.4
Oman	2.0	2.0	1.9	1.9	2.2
Saudi Arabia 5/	2.6	2.3	2.6	2.9	3.3
Jordan 4/	n.a.	n.a.	n.a.	3.0	n.a.
Egypt	0.6	0.6	0.7	0.7	0.8

Sources: Various Recent Economic Development reports.

1/ Includes security expenditures and capital expenditures.

2/ Includes health expenditures.

3/ Manpower expenditures.

4/ The amounts reported for 1997 reflect only direct budgetary spending by the central government and exclude some transfers.

5/ Social development, including health, social welfare, and labor affairs.

#### **D. Reforms of the Regulatory Environment**

135. A number of traditional rules and practices in the Yemeni economy effectively sheltered producers from competition and protected monopolies in various sectors. Such obstacles to market entry likely contributed to relatively weak non-oil growth and job creation. The government has recently initiated a number of reforms in this area—such as overhauling the Investment Law, Agencies Law, and Trade and Supply Law—but is also preparing for the privatization and liberalization of monopolistic activities in the airline and telecommunications sectors. Furthermore, the government has established the Aden Free Zone, where deregulation seems to have taken place at a faster pace albeit with modest results (Box 2).

136. The current Investment Law aims at regulating and promoting investment of domestic and foreign capital in Yemen.<sup>70</sup> It determines the sectors in which such investment could take place and the procedures needed to obtain legal authorization to undertake a business enterprise. It establishes the guarantees and benefits accorded to projects, including tax and customs duties and exemptions, and extensively elaborates on the rights and obligations of investors in their foreign exchange transactions. Many of its features likely deter potential investors. For example, the General Investment Authority (GIA) is granted a high degree of control in approving projects through licensing; in having access to annual balance sheets of projects which investors were obligated to provide; and in micromanaging aspects related to the disposal of property associated with terminated projects, including controls on foreign exchange transactions related to licensed projects. The law limits the kind of commercial activities that could be undertaken within a particular project, and provides a potential shelter for local production by allowing the imposition of additional customs duties on inputs used in the execution of some projects.

137. A major reform of the Investment Law was initiated in mid-1999. Amendments, to be considered by parliament shortly, aim at making the law more transparent and at streamlining the procedures to obtain registration for investment projects and carry out financial transactions related to them. In particular, investment licensing by the GIA is to be eliminated and replaced by a simple registration process; equitable treatment of all investment projects is to be ensured; tax exemptions are to be streamlined and clarified; and controls on foreign exchange transactions related to projects registered under the law would be liberalized.

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<sup>70</sup> Law No. 22 of 1991.

## Box 2. Aden Free Zone

- Aden was once one of the world's top ports for ship bunkering and transshipment warehouses. About 7,000 vessels per year used its facilities in the 1950s and 1960s. The closing of the Suez Canal in 1967, subsequent security problems in the region, and changes in international routes of cargoes led to a sharp decline in business and loss of prosperity in Aden. Shortly after reunification, however, the government decided to initiate a development program for a free zone in Aden to restore some of its former importance.
- With Aden's attractive location on the main Asia-Europe shipping routes, the Aden Free Zone and Aden Container Terminal (ACT) offer distance advantage over many other regional ports and could provide an international gateway to businesses in three continents (Africa, Asia, and Europe) provided it can compete with several other free zones in the region that have emerged. The development of modern transportation facilities and infrastructure related to the free zone area could spur regional trade, business opportunities, and economic growth.
- The Yemen Free Zones Public Authority (YFZPA) was established in 1991 to develop a free zone in Aden and grant concessions and regulate development therein. The free zone, covering approximately 31,000 hectares within the Governorate of Aden, was established in 1993. In 1995, Yeminvest, a joint venture between Port of Singapore Authority Corporation Ltd. (PSA) and Yemen Holdings Ltd. (a Saudi-owned company), was awarded exclusive rights to develop the ACT and the industrial estate of the Free Zone. The PSA currently holds 60 percent of the project.
- The beginning of the operations of the ACT on March 19, 1999, marked the completion of the first phase of the project, which gives the port a handling capacity of 500,000 twenty-foot equivalent units (TEUs) annually. This phase included the construction of two berths and a 700-meter quay wall, as well as dredging the harbor channel and berths to 16 meters. The second phase of the project will include the construction of an additional 325 meters of quay with a terminal capacity of up to 1.5 million TEUs annually. Future plans include expansion of the Aden airport and development of larger tourist facilities.
- As of mid-1999, the YFZPA had received 653 local, Arab, and international applications to invest in the new free zone of Aden for a total value of US\$1.5 billion. These applications range across industrial, storage, commercial, and tourism sectors. However, apart from shipping through the ACT, projects in the free zone have not yet started, and even activities in the ACT remain far below the container's total capacity.
- Besides stipulating the formation of a "Competent Court" in the free zone (in compliance with the Judiciary Law in force) to settle disputes (in the spirit of the commercial U.K. law), the free zone law provides various investment incentives including: exemption from taxation on industrial and commercial profits for 15 years with a possible additional 10 years; the possibility of 100 percent foreign ownership; free transfer of capital and profits outside the free zone, not subject to exchange controls; and exemptions from income tax on salaries, wages, and bonuses of non-Yemeni employees working on projects in the free zone.

138. Entry restrictions were also implicit in the original "Agencies Law," aimed at regulating the establishment of commercial ventures between foreign companies and Yemeni representatives (which must be locally owned companies registered with the Ministry of Supply and Trade).<sup>71</sup> The law made it illegal to act as an agent for a foreign supplier without a license.<sup>72</sup> Enforcement was in great part achieved through import licensing, as licenses were not issued to importers who are not approved agents of foreign companies. In its original form, the law gave discretionary powers to the ministry in the process of granting licenses and in allowing import activities without the agent's approval. This led to effective enforcement and protection of import trade monopolies. Amendments to this law decreed in 1997 and 1999 redefined the government's authority and should ensure a more competitive environment for these activities.

139. Similarly, the original Trade and Supply Law effectively allowed the government to mandate and enforce prices in the private sector, with the purpose of guaranteeing a stable supply of basic commodities and to avoid overpricing and monopolies.<sup>73</sup> It also aimed at supervising trade activities in the private sector to avoid disruption in supply in the spirit of a centrally planned economy. Amendments decreed in 1998 cancelled the authority of the government to set prices except for the limited number of basic commodities. Moreover, a law to promote competition and prohibit monopolies and commercial fraud was recently issued by presidential decree.<sup>74</sup> It includes explicit provisions for the market determination of prices of goods and services and for the prevention of the collusion of producers. It calls for the establishment of a Competition Promotion and Anti-Monopoly Authority within the Ministry of Supply and Trade with the purpose of identifying and eliminating monopolistic practices and activities that disrupt the competitive operation of markets.

140. The transportation sector is another part of the economy that has long remained under the control of various state monopolies (such as the National Shipping Company in the Port of Aden, the Yemen Navigation Line, the General Land Transportation Company, and Yemenia, the state airline) and that was consequently plagued by inefficiency. The government set tariffs in all areas of transport and kept the provision of all related services under its control through licensing requirements. In the context of the economic reform program, a privatization and liberalization process has been initiated, covering land and maritime transport and to some extent, air transport.

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<sup>71</sup> Law No. 36 of 1992.

<sup>72</sup> Annual fees are collected for renewal of these licenses.

<sup>73</sup> Law No. 24 of 1990.

<sup>74</sup> Decree No. 19 of 1999.

141. In particular, a draft Surface Transportation Law was approved by the cabinet in 1999 calling for establishing the General Land Transport Authority in charge of granting trucking licenses and posting suggested tariffs, a practice that will replace administrative tariff-setting by the government. By-laws specifically regulating the trucking sector have already been issued, allowing any trucker to obtain a license for operation, which would be valid anywhere in Yemen.<sup>75</sup> Previously, the trucking sector was controlled by the (private) Ferzah cartel, which had kept transport costs high through price fixing and preventing free entry as well as preventing private sector producers and traders from providing their own transport. Although the regulations recently introduced do not abolish directly the cartel, the government's intention is to provide a competitive environment by allowing other truckers to enter the market.

142. Progress in other parts of the transport sector includes the liberalization of stevedoring and the privatization of the National Shipping Company. However, the latter led to the establishment of a cartel of shipping agents at Aden, supported by the government in exchange for the absorption of former public sector employees by these agents. In the air transport sector, privatization of ground handling operations is on hold until the exclusive right of the airline Yemenia to provide these services expires in 2001.

143. Deregulation of the telecommunications sector is only at an initial stage. The Public Telephone Corporation (PTC) has a monopoly on local services, while international services is another monopoly which was renewed in 1999 for four years, of TeleYemen, a joint venture between PTC and a U.K. company. The only liberalization currently taking place is in the market of mobile services: the government recently tendered two GSM licenses, and a few offers were received but no decision had yet been reached. While these licenses will break the monopoly enjoyed by TeleYemen in the mobile sector, GSM providers will still have to go through TeleYemen to ensure international communications services to their customers.

144. **Reforming the judicial system and, in particular, the functioning of the commercial courts** has been initiated. The increasingly recognized problems in the way courts were run, records were kept, cases were processed and judgments enforced were important obstacles to private investment. Moreover, tribal affiliations hindered the administration of court decisions, and lack of manpower and judges' absenteeism rendered the process slow and inefficient. To address these issues, the government in recent years consolidated jurisdiction over the administrative functioning of the courts in one ministry with a view to streamlining processes to reduce the backlog of pending cases; created a special unit to monitor the courts and organize training of judges and provide technical assistance on legal issues; and in early 2000 started publication of judgments and reasoning.

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<sup>75</sup> The Minister of Transport reported that these by-laws are already being implemented; trucking licenses are being granted to all applicants that have the adequate equipment to run such freight businesses.

145. The current Land Law also presents obstacles to investment. The system for land registration and proof of ownership is considered ineffective, and, indeed, the majority of litigation cases in Yemen are related to land ownership disputes. Yemen uses the registration of deeds system in recording land ownership: a deed, registered by a public officer and with copy held in a registry, testifies to ownership. Land registration is governed by Law No. 12 of 1976, which is considered by many experts to be ambiguous and ineffective.<sup>76</sup> Consequently, many land sales are currently done without registration partly to avoid paying the sales tax and the *zakat* tax but also because the parties involved often have little confidence in the Land Registration Authority, the government body in charge of applying the law. Major problems in certifying ownership arose after unification, leading to the issuance of Decree No. 65 in May 1991 to ensure the return of land in the south to former lawful owners. The decree was not adequately implemented, however, and appears to have led to several instances of "land grab" and corruption. Current steps taken to help remedy the shortcomings in the Land Law include the formation of an interministerial committee, which is currently working on streamlining procedures for proving clear title and registration for all properties that will be privatized pending a broad review of the law.

146. In a step to improve the overall legal environment, the authorities plan, with support from the World Bank, to carry out a diagnostic assessment of the overall legal framework governing economic activity; an awareness campaign on the importance of the law in a society is also being planned. In addition, a steering committee was formed in early 1999, involving both private sector and government institutions to review the regulatory structure and administrative procedures for trade and investment and assess the obstacles to private sector investment. This committee is expected to make recommendations on further reforms needed to increase efficiency and transparency in the regulation of private sector activity.

### E. Privatization

147. Following the end of the civil war, the government initiated in early 1995 the privatization of public enterprises in various sectors of the economy (industry, tourism, agriculture, fishing, transportation, oil, trade, and finance). In order to identify the enterprises to be privatized within the program, a census was compiled in mid-1996 listing a total of 192 enterprises, of which more than 110 were located in the former socialist south. These public enterprises, employing over 86,500 employees (more than 25 percent of total civil servants at the time), inefficiently run and sometimes even shutdown, constituted a heavy burden on the budget as operational losses had to be covered by budget transfers or accumulation of arrears.

148. Over the period 1994–97, over 60 small enterprises were privatized—16 tourism enterprises, 8 of which by lease, and 8 by restitution; and 53 other mostly agricultural units primarily through restitution to their original owners. In the absence of a general strategy and

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<sup>76</sup> World Bank CDR Phase I, "Judicial and Legal System Building Block."

a strong institutional framework, these privatization operations were mainly conducted at the discretion of the ministries involved and in an ad hoc manner. Ministries independently established their own internal committees to privatize or liquidate some of the enterprises under their jurisdiction. In cases where the Technical Privatization Office (TPO)<sup>77</sup> was in charge of privatization, these ministerial committees still participated in each step of the process (such as in approving the short list of consultants and the report that the eventual consultant submits), and there were delays in bringing the committee members to meet and in obtaining these members' input to short-listing, report evaluation, etc. During 1998 and most of 1999, privatization operations were largely put on hold, while the government was putting in place an overall legal framework to conduct these operations in a more systematic and transparent way.

149. After a long gestation period, a Privatization Law was promulgated in November 1999, which aims at organizing and unifying privatization procedures across state-owned economic units. Subsequently, the World Bank approved in November 1999 a project for financial and technical assistance to the government's privatization program. The Privatization Law stipulates the establishment of a High Commission (HC) and a TPO to ensure the implementation of standardized, unbiased, and transparent privatization procedures. The HC was established in December 1999 and held its first meeting in June 2000. It is chaired by the prime minister; other members include the ministers of planning, finance, legal affairs, and state. It is expected to provide policy oversight of the privatization program, approving transactions and program designs, and appointing temporary executive board members to the state-owned units approved for privatization. The TPO is expected to act as a secretariat to the HC, coordinating the whole program. Its functions include the formulation of privatization strategies (mostly by way of carrying out studies and reviewing proposals) and the monitoring of their implementation. Monitoring operations entail for example the provision of advice and assistance to individual ministries in carrying out privatization transactions as well as the preparation of necessary documents and contracts and coordinating with all concerned institutions such as labor unions.

150. In addition to the above two bodies, the law stipulates the establishment of temporary committees representing each concerned ministry and/or its economic unit approved for privatization.<sup>78</sup> Each committee would participate in privatization operations of the concerned enterprise under the supervision of the HC and in coordination with the TPO. While the sector ministries will have responsibility for carrying out privatization operations of small/medium enterprises in collaboration with the TPO, full authority for approving large privatization transactions remains with the HC.

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<sup>77</sup> The TPO was operationally established in 1996 and formally re-established as secretariat to the High Commission for Privatization by a ministerial decree in March 2000.

<sup>78</sup> Such committees have already been established in various ministries (agriculture, supply trade, and industry) as these have already carried out the privatization of some of the enterprises under their jurisdiction.

151. According to the Privatization Law, any person—citizens and foreign nationals alike—is eligible to buy or lease the units offered for privatization, and sufficient land will be provided for the investor with the winning bid to carry on the activities of the enterprise taken over, either on a lease or on a sales basis. The negotiated terms of contract between the government and potential investors will also cover the number of employees that will be hired to remain on the job and the conditions offered to these workers should be at least as good as the current ones (in terms of salaries, bonuses, and other benefits). Those employees that investors would choose to keep would be guaranteed the job for a minimum period of five years, while the remaining workers would be transferred to the Civil Service Fund. While intended to protect workers, many observers fear that as a result of this provision investors will agree to take on only a small number of the former employees, to avoid being locked into long-term contracts. Privatization proceeds are to be deposited with the Central Bank of Yemen, in a special account earmarked to finance economic and social development projects.

### **The privatization strategy**

152. Privatization strategies for each of the five large enterprises have already been prepared and endorsed by the government, including implementation steps and schedules. For the **Aden Refinery**, new shares would be issued in return for capital contribution by investors, and an internationally recognized refinery operator would be attracted to ensure expert control over the enterprise. The privatization of **Airport Ground-Handling Services** is also projected to result in a joint shareholding and/or revenue sharing venture between the government and the private sector. The privatization of the **General Land Transport Company** is expected to start with strategic restructuring in the perspective of creating a joint-stock limited liability company partly funded by the government and potentially also by employee stock ownership. The **Yemen Cement Company** and the **Yemen Drug Company** will be privatized through issuing shares to strategic investors and selling government equity.

153. The aforementioned IDA project aims at providing assistance to achieve an effective and transparent government management of Yemen's privatization program. There are three components to this program: (a) the privatization of five large enterprises (Aden Refinery Company, Airport Passenger and Cargo Ground-Handling Services at six airports, General Land Transport Corporation, Yemen Corporation for Cement Production and Marketing, and Yemen Drug Company); (b) the pre-privatization strategy work on three other large enterprises (Port of Nashtoun, Public Telecommunications Company, and Yemenia Airlines);<sup>79</sup> and (c) financial and legal assistance in the privatization of about 50 of the 70 small- and medium-sized enterprises earmarked for privatization by the government.

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<sup>79</sup> The PTC is not included in the list of large enterprises to be privatized under the project, largely due to the government's decision to renew for four years the monopoly concession for international services granted to TeleYemen, a company with 51 percent Cable and Wireless ownership and 49 percent Yemen Telecom Corporation ownership. Yemenia has a somewhat similar status: an agreement with Saudi Arabia (which owns 49 percent of the airline) includes the granting of monopolistic concession for certain services through 2001.



As of early 2000, the project implementation schedule was on track: consultants were short-listed for all five large enterprises, and consultants' studies were expected to be completed by the end of the second quarter of 2000 for the Aden Refinery, the General Corporation for Land Transport, and the Yemen Drug Company, and by the end of the third quarter of 2000 for the Airport Ground-Handling Services and the Yemen Cement Company.

154. Quantitative estimates of the impact of the privatization program are only available for the fiscal impact of the large-enterprise component of the project, indicating that the privatization of these five units would result in net sales proceeds of about US\$20 million (about 0.3 percent of GDP) and that in the medium term an annual flow of US\$62 million (0.8 percent of GDP) would go to the budget in the form of taxes and dividends. The emergence of new competitors in Airport Ground-Handling Services, Land Transport, and Cement Production and Marketing could generate another US\$7 million in annual flows to the budget.

155. In the financial sector, the five state-owned banks are all earmarked for liquidation, restructuring, or privatization under the government's reform program. Privatization of the Housing Bank was recently turned over to the TPO.

## **F. Financial Sector Reforms**

### **Reforms in the banking system and in bank supervision**

156. In the period between unification and the end of 1994, the authorities' efforts regarding the financial system were focused on unifying the financial structures of the north and the south.<sup>80</sup> Largely reflecting the lack of consensus and coherence in government and civil service, little progress was made in achieving positive interest rates and taking steps to stop financial disintermediation. Genuine financial sector reform did not begin until early 1995 as part of the economic reform program. At the start of this process, the authorities tackled interest rate reform and reform in the area of bank supervision, both of which produced quick and quantifiable results.

157. Interest rate reforms initiated in 1995 entailed the freeing of all lending rates, the elimination of concessional loan rates, and the establishment of minimum benchmark commercial bank savings deposit rates. The benchmark rates were set at high levels in view of the excess liquidity situation and the general reluctance by banks to attract new deposits. The benchmark rates subsequently were adjusted in light of macroeconomic conditions, maintaining positive real rates most of the time (Section III.B).

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<sup>80</sup> See Box 3 for a description of the current status of the banking system.

158. In order to improve the financial intermediation process, reform of bank supervision was also launched in 1995 (Box 3). From early 1996, banks were required to start reporting foreign currency positions and by end-1997 the minimum capital requirement was doubled to YRIs 500 million. During 1996–97, the central bank issued a number of circulars related to risk management, loan classification and provisioning, foreign exchange exposure, and external auditors. Provisioning requirements were set at 15 percent for substandard loans (90 days past due), 45 percent for doubtful loans (180 days past due), and 100 percent for bad loans (more than 365 days past due). Also, the banks were required to maintain a minimum capital adequacy ratio of 25 percent of total amounts and standards for new audit procedures and terms of reference for external auditors and risk management standards were established. The law governing the operations of moneychangers was amended so that moneychangers were required to be licensed by the central bank, while provisions that were inconsistent with the operation of a free market were eliminated.

159. Adoption of a new banking law in 1998 established a more solid legal basis for the central bank to address prudential concerns, and in particular to set limits on credit concentration and insider lending. Thus in 1999 the CBY started to lay down clearer operational rules in the areas of credit concentration, insider lending, and use of overdraft facilities. To address the problem of **concentration of credit** to a small number of companies and groups of companies, a circular was issued limiting total credit to such entities to 15 percent of a bank's total paid-in capital and reserves, and under certain circumstances to 25 percent. If the central bank determines that the interests of two or more groups of persons are so intermingled that they should be considered as one, the liabilities of the two groups are combined and considered as a single liability.

160. To address the problem of **insider lending**, the central bank issued a circular that prevents lending to any insider except to the following: (a) a member of the board of directors, who is not also a senior officer or manager, and for an aggregate amount that does not exceed one-half of 1 percent of the bank's total paid in capital and reserves; (b) a shareholder owning 5 percent or more of the common stock or voting power of the bank, and for an aggregate amount that does not exceed 15 percent of the bank's total paid in capital and reserves; or (c) a senior officer, manager, or employee, including any such person who also is a member of the bank's board of directors, an aggregate amount that does not exceed that person's total annual wage and salary. This circular also streamlined the process of loan application by insiders.

161. To deal with the prevalent use of **overdraft facilities**, which account for about 90 percent of bank credits, the central bank first introduced a new category of classification of exposures, **special attention**, to the existing categories—substandard, doubtful, and loss.

### Box 3. The Yemeni Banking System

1. The Yemeni banking system is comprised of the Central Bank of Yemen, 13 commercial banks, and three specialized state-owned development banks. The commercial banks are made up of three private domestic banks, four private foreign banks, two state-owned banks, and four Islamic banks. The structure of the banking system has been broadly maintained since the political unification of the country in 1990, with the exception of the establishment of the Islamic banks after 1995.

2. At the end of 1999, the assets of the commercial banks totaled YRls 233 billion (US\$1.5 billion), equivalent to 22 percent of GDP. The largest bank, accounting for over 20 percent of commercial bank assets and having 37 branches, is the Yemen Bank for Reconstruction and Development (YBRD), in which the government has a majority share. The YBRD is heavily undercapitalized and has a large portfolio of nonperforming loans; it is being restructured with the objective of bringing the bank to full compliance with prudential regulations. The government also fully owns the National Bank of Yemen, the only commercial bank in the South before the political unification of the country. It will be put up for sale in the near future.

3. The four private banks are all fully owned branches of banks with headquarters in France, Iraq, Jordan and Pakistan. Of the three private commercial banks, one is a joint venture with Saudi Arabian banks, with a share of local ownership amounting to 75 percent. The four Islamic banks began operations between 1995 and 1998 and, thus far, their share of commercial bank assets is about 8 percent.

4. The three specialized banks are all state-owned and were established to promote agriculture, housing, and industry; but especially the Industrial Bank of Yemen was burdened for years by a large portfolio of nonperforming loans and an interministerial committee was recently formed to liquidate this bank.

5. The banking system as a whole is relatively weak as reflected, at end-1999, in high ratios of nonperforming loans (17 percent of total), low capitalization (a Cooke ratio of 5.2 percent), and significant provisioning shortfalls. These problems are particularly acute for public sector banks, which hold about one-third of total commercial bank assets.

6. A number of other problems beset the Yemeni banking system. Bank concentration is high, as almost 70 percent of both deposits and loans are with the top four banks, and the banks are generally located only in a few cities. Cash is the predominant medium of exchange as reflected by the low ratio of quasi-money to broad money. Banks have generally maintained excess reserves for years, reflecting their reluctance to extend loans outside of a narrow group of borrowers in the absence of effective recourse within the legal system for timely recovery of nonperforming loans.

7. A number of actions by the authorities are aimed at an improved banking environment. The Banking Law of 1998 and subsequent central bank circulars have addressed problem areas such as credit concentration, insider lending, and use of overdraft facilities. Measures have also been taken to improve the operations of commercial courts, and the central bank is enforcing a notification system under which delinquent borrowers are disqualified from receiving new loans. The new central bank law gives the central bank more independence to perform its role as the supervisor of the banking system, and resist open-ended financing of the budget. A recent World Bank assessment of compliance with the Basle Core Principles methodology revealed that banks were either compliant or largely compliant with 10 of 24 principles.

This category was intended for banks to identify and remedy potentially weak credit relationships at an early stage. This classification was used to identify and monitor exposures which contain weaknesses or potential weaknesses that, at the time of review, did not jeopardize the repayment of the credit or reflect a potential for loss, but which, if not addressed or corrected could result in the deterioration of the credit to a substandard or more severe classification. Second, to clarify the treatment of bank guarantees, the new regulation allows banks to consider guarantees of other banks as a basis for not classifying an otherwise nonperforming credit exposure, provided that the banks issuing the guarantees have a capital adequacy ratio of 12 percent or higher, are rated A+ or better by a reputable, international bank rating agency, and that the guarantees are unrestricted.<sup>81</sup> However, such credits need to be returned to a performing status or the guarantee called upon within a reasonable time. Third, the central bank streamlined the process that should be used by banks for determining borrower performance of credit lines that are in continuous overdraft for three months or more.

### **Establishment of treasury bills market**

162. To develop sources of less inflationary financing from the nonbank sector, the authorities initiated sales of treasury bills to the public through central bank auctions in December 1995. The central bank started its monthly auctions with 30-day treasury bills, but this bill was discontinued in the following year in favor of three-month and six-month bills. By the end of 1996, the outstanding stock of treasury bills had reached YRIs 12 billion (1.7 percent of GDP), over half of which were held by the banking system. During 1997, the authorities introduced the one-year treasury bill and phased out the term deposits facilities in the central bank. The treasury bills issued during 1996–97 were used mainly as monetary policy instruments for liquidity management during that period, reflecting the strengthened fiscal positions in each of those years. A sharp increase in the amount of bills issued took place after the reserve requirements were lowered from 25 percent to 15 percent in December 1996, in order to mop up the banks' excess liquidity.

163. With the strengthening of fiscal balances in 1999, the authorities' issuance of treasury bills slowed down, although in early 2000 the authorities started to convert large amounts of outstanding government overdrafts into treasury bills. Most of these were used to meet additional bills required by banks for their own liquidity management through repurchases operations (repos), initiated in November 1999. Although the central bank offers clearing and settlement facilities, secondary trading of treasury bills has not yet developed. In part, this reflects banks' lack of information on other banks and a general mistrust of the available information released by individual banks, which to date also prevented development of an interbank market.

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<sup>81</sup> These ratings relate to international banks. This regulation will be modified to include local banks, once a local rating system is in place.

### **Instruments of monetary policy**

164. In addition to the changes in the minimum benchmark interest rate and some use of treasury bills for monetary policy purposes, the central bank has relied on reserve requirements on rial deposits and on foreign currency deposits, intervention in the foreign exchange market and credit ceilings, and central bank credit facilities as monetary policy instruments.

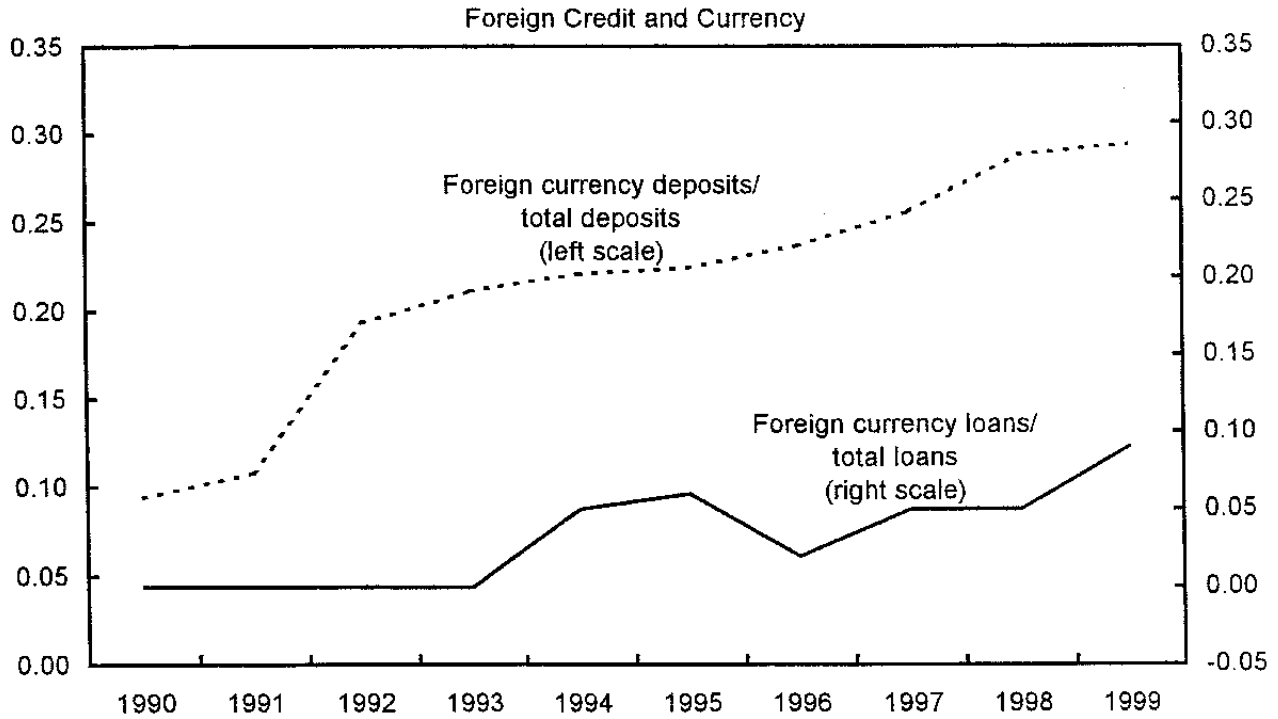
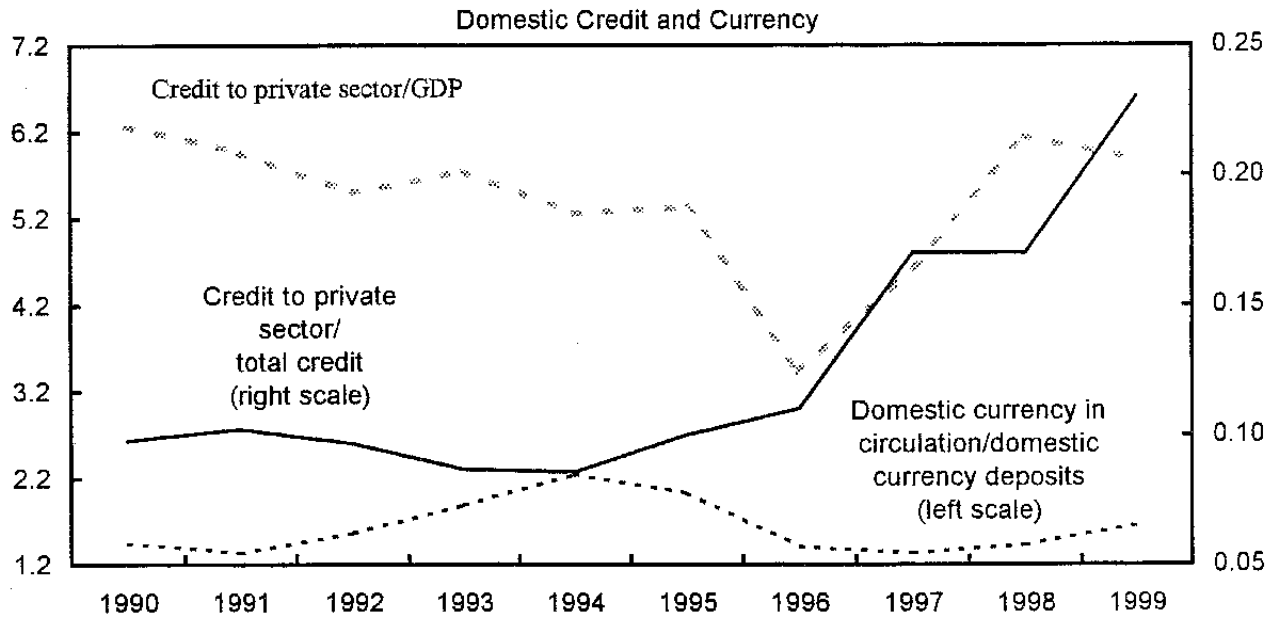
165. Credit facilities were little used, reflecting the excess liquidity situation of commercial banks. The central bank does not have an overdraft facility, but it can discount treasury bills held by commercial banks (and others) at a rate of 2 percentage points above the highest accepted yield on three-month treasury bills at the latest auction. Throughout the period 1990–99, the central bank has also provided a small amount of credit to public enterprises at market rates and on commercial terms. The central bank has intervened actively in the foreign exchange market, especially in late 1998, to smooth volatilities in the exchange rate. Credit ceilings were used in the early post-unification period but were hardly ever binding. Since 1997, the central bank has refrained from setting any ceilings.

### **Financial deepening and economic stabilization**

166. The need for financial deepening was evident since the early post-unification period, as commercial banks maintained excess reserve positions with the central bank, in spite of high legal reserves, reflecting their reluctance to grant loans to the private sector in the presence of fixed interest rates and in the absence of effective recourse within the legal system for the timely recovery of nonperforming loans. Consequently, commercial banks had little interest in mobilizing rial deposits, and were content with placing a large part of their deposits with the central bank at a rate of 1.5 percent above the banks' average cost of funds. Negative real interest rates were, not surprisingly, accompanied by an increasing trend toward dollarization of the economy (Chart 11). The share of foreign currency deposits in total deposits rose steadily from 9 percent in 1990 to 29 percent in 1999, continuing to rise even after real interest rates turned positive in the last three years. Partly this may have reflected expectations of depreciation of the rial; indeed, during 1999, the holder of a U.S. dollar deposit earned a real return of 2 percent, compared to the average minimum saving deposit rate of 10 percent. In addition, Yemeni expatriate workers, reflecting the experience of several years of high inflation and political unrest, traditionally hold part of their remittances in U.S. dollar deposits. On the lending side, the growth of foreign currency loans as percentage of total loans has been much slower, reaching only 9 percent of total loans in 1999, reflecting strict central bank regulations that borrowers of foreign currency must also be foreign exchange earners.

Chart 11. Republic of Yemen: Credit and Currency, 1990-99

(Ratios)



Source: International Monetary Fund, *International Financial Statistics*.

167. The economic stabilization program has so far translated into some limited progress in financial deepening. The trend increase in credit to the private sector as a share of total credit is partly the result of the government repayments to the banking system and the added importance of nonbank financing of the budget deficit. However, it also reflects positive real private credit growth in 1996–99, averaging 2.4 percent, compared to an average annual decline of 15.7 percent during 1990–95. A rising multiplier points to increasing efficiency of the banking system (Chart 12), and a rising ratio of credit as percent of non-oil GDP (from 44 percent at the end of 1996 to 78 percent in 1999) indicates that financial deepening is taking place in the non-oil sector. Other indicators point to an opposite trend; for example, the use of currency has grown relative to that of deposits (Chart 11). A comparison of various indicators of depth and efficiency of financial markets with selected countries highlights the underdevelopment of the financial system of Yemen (Charts 13–14).<sup>82</sup> The ratio of M2 to GDP in Yemen is one of the lowest among the selected countries in 1998, and the same holds for the ratio of private credit to GDP, the share of private sector credit to total credit, and the share of commercial banks' credit as a percent of total credit; the multiplier is much lower than those of the other countries.

### **Soundness of the banking system**

168. One of the objectives of the financial reform program was the implementation of legal reforms that would give commercial banks the ability to take effective judicial recourse to deal with nonperforming assets. Such action, together with a more independent central bank implementing stricter supervision on the credit operations of banks, was expected to significantly improve the soundness of the banking system. While there was considerable progress in the central bank's role as bank supervisor, implementation of the new legal framework has remained timid. Among the more effective steps was the introduction by the CBY in May 1997 of a notification system for delinquent private sector borrowers, and prohibition of new bank loans to such borrowers until they regularized their relations with creditor banks. The notification system has yielded some results, reflected in fewer delinquencies among large borrowers.

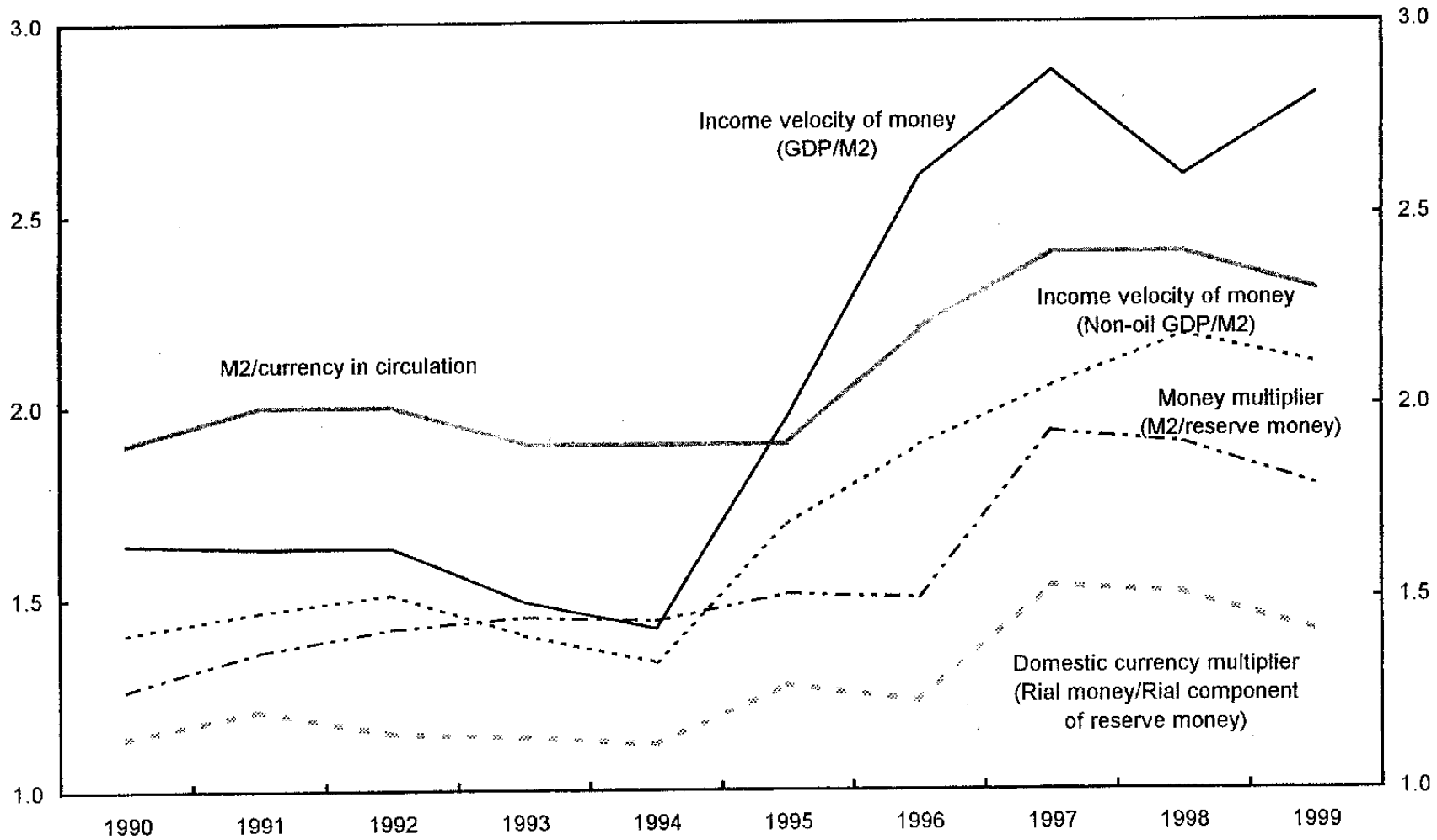
169. Despite the wide spreads between lending and deposits rates (Statistical Appendix; Table 26), banks' profitability has remained low, reflecting large excess reserves (and their lack of interest in granting credit and in mobilizing deposits), as well as large nonperforming portfolios. Wide spreads also reflect the lack of competition from within the banking system, and the nonexistence of a nonbank financial system. Low profitability rates may have also contributed to some erosion of the capital base since the early post unification period, but these were only detected with the strengthening of the provisioning requirements after the implementation of the reform program.

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<sup>82</sup> Saudi Arabia was included because it is a neighboring country; Egypt and Jordan were selected because these countries have close relations with Yemen; Pakistan, because it is also a PRGF country; and the United Kingdom was selected as a representative industrialized country.

Chart 12. Republic of Yemen: Velocities and Multipliers, 1990-99

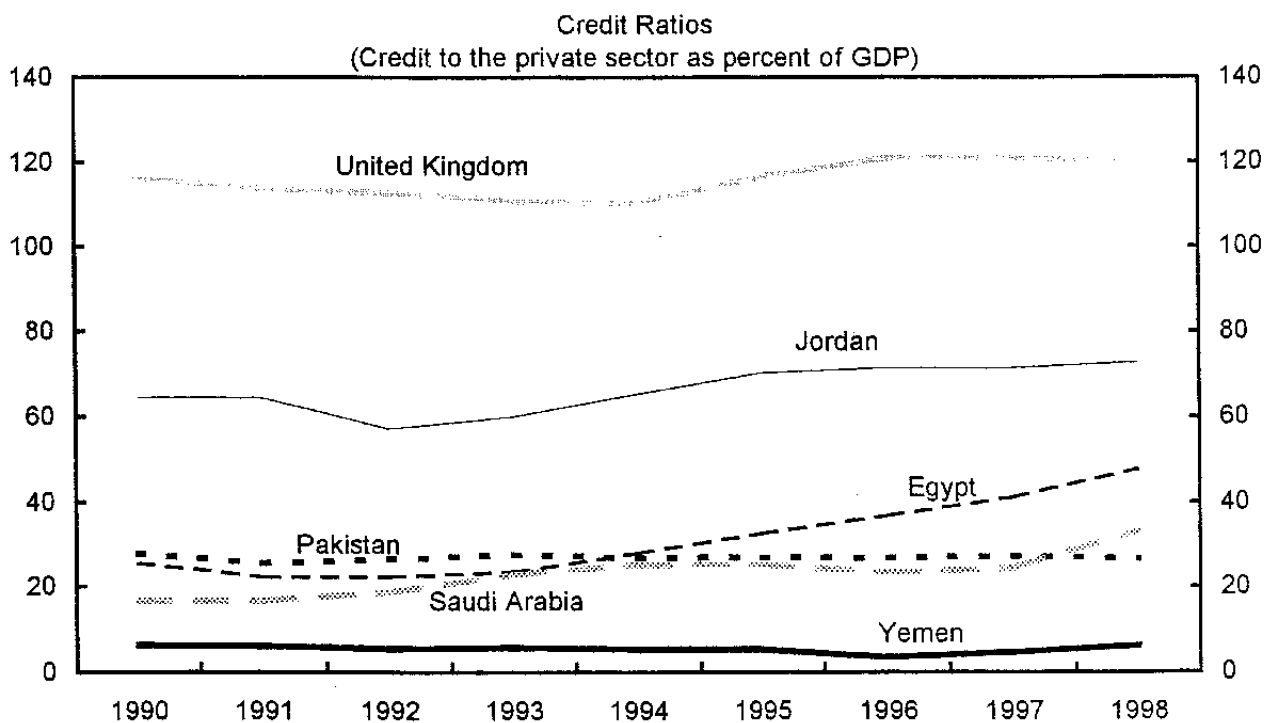
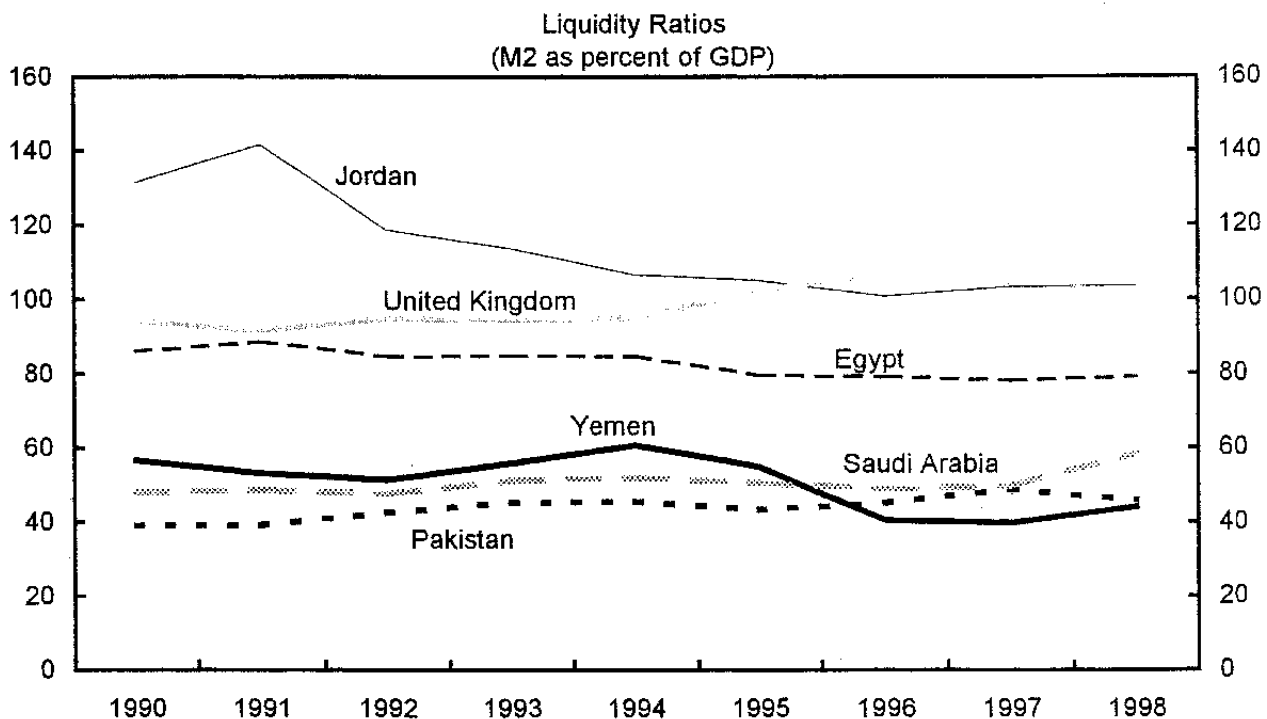
(Ratios)



Source: International Monetary Fund, *International Financial Statistics*.

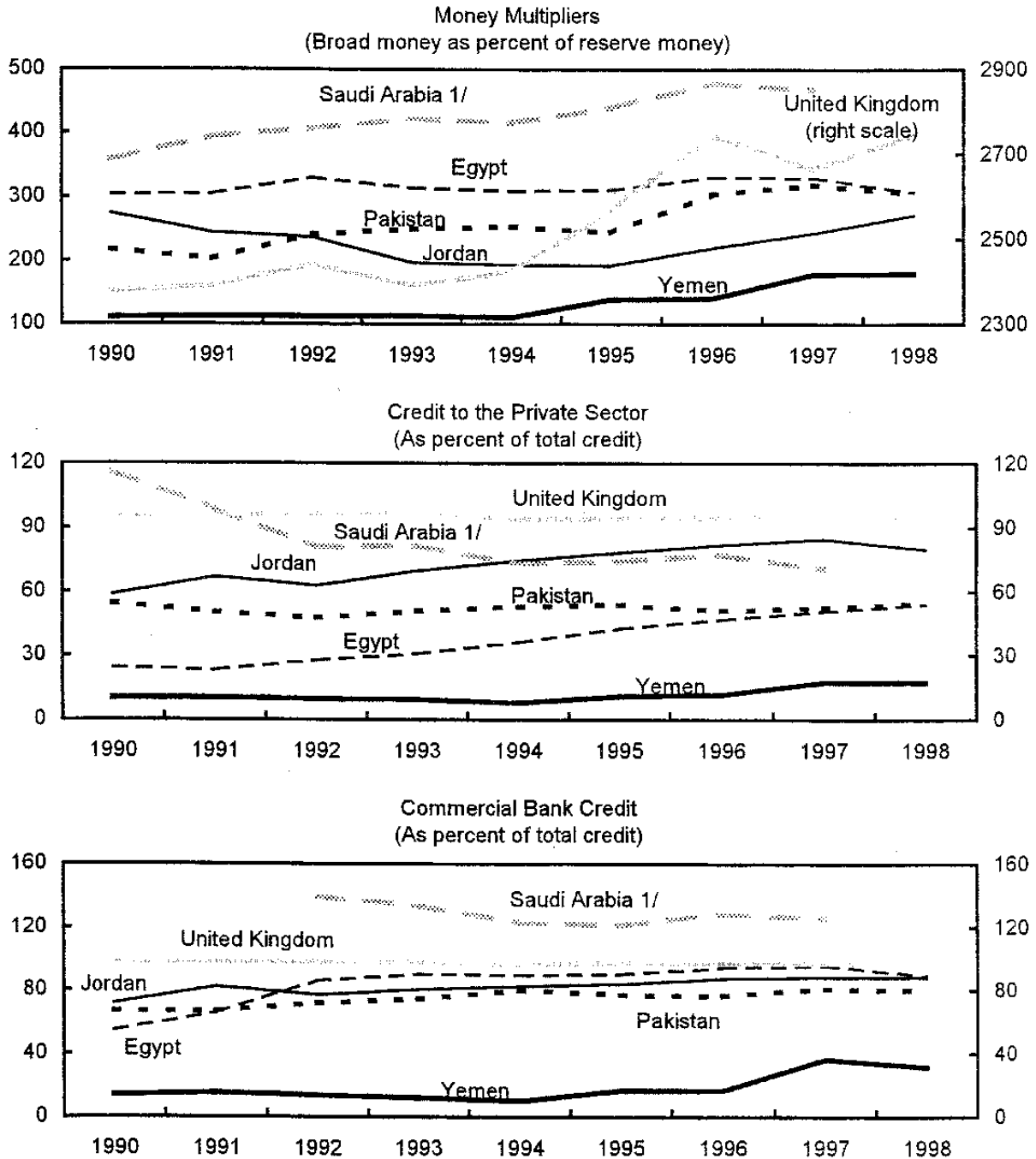


Chart 13. Republic of Yemen: Comparison of Liquidity and Credit Ratios with Selected Countries, 1990-99



Source: International Monetary Fund, *International Financial Statistics*.

Chart 14. Republic of Yemen: Comparison with Selected Countries, 1990-99



Source: International Monetary Fund, *International Financial Statistics*.

1/ The high ratios for Saudi Arabia reflect large claims by the government on the banking system.

170. Partly reflecting the problems of judicial recourse, commercial banks in Yemen have traditionally been reluctant to lend outside of a core group of customers. The strengthening of the central bank's supervision in these areas is therefore creating considerable friction, as banks resist or try to circumvent enforcement of prudential regulation. While the provisioning against problem loans has improved in recent years, the ratio of problem loans to total loans has increased steadily (Statistical Appendix; Table 29). Banks' exposure to foreign exchange risk, as measured by the difference between assets and liabilities denominated in foreign exchange is also a cause for concern, with a large part of foreign currency exposures relating to two public sector banks. In the case of one of them, the government began in 1997 to buy back its foreign overdue obligations at a significant discount and one of these banks is scheduled to be put up for sale shortly. For private commercial banks, the exposure to foreign exchange risk is not large. Concentration of credit risk among the sectors of the economy is broadly in line with the structure of GDP, except that lending for construction accounts for only 5 percent of total credit to the nongovernmental sector, a much lower percentage than in most economies (Statistical Appendix; Table 27). This is probably explained by the absence of property guarantees in Yemen, with the consequence that banks extend housing loans only to their best customers. With regard to maturity structure, over 90 percent of all commercial bank loans have maturities of less than one year, reflecting a lack of willingness on the part of banks to lend for investment purposes, and the importance of import and domestic trade financing in the Yemeni economy and the associated prevalence of overdraft facilities.

## **V. POVERTY AND SOCIAL SAFETY NET POLICIES**

### **A. Evolution of Pensions and Cash Transfer Programs**

171. The government traditionally offered few social insurance and welfare benefits, leaving the majority of the population to rely on informal safety nets within the family or tribal, religious, and other community. The pension system covers only civil servants, the military, security forces, and workers in the tiny formal private sector. Other social assistance is either indirect through subsidization of food and petroleum products through cash transfers or transfers with work requirements such as the Social Fund for Development (SFD) (see below) and the public works program. A formal cash transfer program, the Social Welfare Fund (SWF) was instituted in 1997. Other budgetary cash transfers are medical grants, benefits for war veterans and families, payments for tribal affairs, and discretionary compensations for emergencies.

#### **Pensions**

172. Yemen has four separate pension schemes. Employees in the public sector are covered by a general scheme for civil servants and public enterprise employees, a military pension plan, and a plan for the internal security forces. A private sector plan covers workers in the formal private sector.

173. Relatively little is known about the plans of the military and security forces; indications are for about 50,000 beneficiaries in the military plan and 4,500 beneficiaries in the plan of the security forces. Information for 1993–95 indicates that both funds were running large surpluses. However, neither have the authorities undertaken long-term actuarial studies, nor is the financial status of the investment portfolios known.

174. The **public sector plan** for civil servants resulted from the merger of the North Yemeni Public Social Security and Pension Agency, created in 1982, with the South Yemeni plan that was established in 1967. The South Yemeni plan's surpluses were mostly invested in real estate, which yielded low returns. As a result, the South Yemeni plan added considerable net liabilities to the joint pension system.

175. Law 25 of 1991, as amended by presidential decree in December 1999, governs the public employee pension plan. Participation is mandatory for all public sector employees. Until recently, contributions and benefits were based on the basic wage, which excludes allowances and bonuses and generally amounts to between 50 percent and 60 percent of the full wage. The decree of December 1999 provided that benefits and contributions be based on the full wage. Employees and employers each contribute 6 percent to the public pension plan. An additional contribution of 1 percent is collected for disability and work-related injury insurance. Full public sector pensions of 100 percent of the last wage (until 1999; basic wage) are paid after 35 years of service, and the minimum service requirement is 15 years. Standard retirement ages are 55 for women and 60 for men, but early retirement is possible after 20 years of service (women) or 25 years of service (men). Survivor benefits are generous because the pension of the deceased is divided among the extended family, including parents, children, and children of deceased siblings. As a result, benefit spells can be very long because a number of survivors potentially survive the primary beneficiary by a long time. A minimum pension, which was doubled to YRls 7,000 per month in December, is paid to those with benefits below that threshold. Retirement of civil servants has not been enforced in part because many over age civil servants qualified only for the minimum pension. Moreover, as the administrative capacity of the pension authority is weak, while it tries to reconcile individual records for each applicant for benefits, only about 2,000–3,000 new pensioners per year have been accepted by the authority. Therefore, at end-1999, more than 20,000 over age civil servants were eligible for retirement. The government started to enforce retirement of these employees in early 2000.

176. In the near term, the public pension plan is expected to remain in a favorable financial position. Between 1995 and 1999, the plan was running surpluses between 0.5 percent and 0.8 percent of GDP, reflecting the small number of beneficiaries compared with the number of contributors. In 1999, there were about 40,000 beneficiaries compared with more than 400,000 contributors. Assets, which were estimated at YRls 30 billion at end-1999, are now mostly invested in treasury bills with only minor holding in low-yielding real estate. Because contributions are henceforth based on the full wage (basic wage plus most allowances) in the future, surpluses are expected to rise in the near future. However, owing to the high replacement rates, the plan is projected to run deficits in the medium- and long-term because more and more civil servants will retire and few new employees are expected to be hired. In

light of these projections and the necessity to streamline the civil service, the government is committed to a reform of the public pension scheme that would provide for stronger links between benefits and contributions and support the long-run sustainability of the scheme.

177. The **private sector pension plan** is based on the North Yemeni institution established in 1987 and is governed by Law No. 26 of 1991. Eligibility and benefit rules are very similar to the public plan, with the exception that there is no minimum pension.<sup>83</sup> Employees contribute 6 percent and employers 9 percent of wages, which following a 1995 decree of the Minister of Social Insurance, includes the basic salary and other allowances. Disability contributions are 4 percent of wages but they are rarely paid or enforced. In 1999, the private fund had about 1,000 beneficiaries, many with small pensions, and 40,000 contributors. The plan was also running surpluses between 1995–99 and is expected to continue running surpluses in the near and medium future. Currently, most assets are held in the form of treasury bills. Actuarial studies show that the private sector's plan benefits are also likely to be unsustainable in the long run.

#### **Social Welfare Fund and other cash transfers**

178. The **Social Welfare Fund (SWF)** began its operation in 1997. Previously, the Ministry of Social Affairs paid cash transfers on a discretionary basis to families appealing for assistance. The SWF started with a caseload of 39,000 people. Since then, their number has been growing rapidly to about 350,000 cases at end-1999. Cash benefits are set at YRls 1,000 per month for a one-family household, rising by YRls 200 for each family member up to YRls 2,000 per family, and payments are made every three months.<sup>84</sup> Beneficiaries must satisfy the condition to be without fixed income, without assets, and without support of a family member. Targeted groups are the disabled, orphans, women outside a family support network, and the poor. The law stipulates that each case should be re-evaluated once a year, but owing to the rapidly growing caseload the SWF has not been able to keep up with this requirement. Most of the full-time employees are located in the capital and largely part-time employees perform evaluations in the governorates. The budget of the SWF has grown with the caseload from YRls 2.4 billion in 1998 to YRls 5.2 billion in 1999 and expected YRls 7.7 billion in 2000 (0.7 percent of GDP). Operating costs have remained small at 4 percent to 5 percent of total expenditures. However, the low operating costs also resulted in a number of deficiencies of the SWF coverage. Spending patterns do not match the geographical distribution of poverty and population in Yemen, indicating a deficiency in reaching the rural poor. Much of the administration is centralized in the capital, resulting in long delays between application and payment of beneficiaries and difficulties in verifying eligibility.

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<sup>83</sup> Between 1997 and 1999, the operations of the private and public fund were merged. After expected cost reductions could not be realized and private sector compliance fell, the merger was reversed in 1999.

<sup>84</sup> The poverty line for an individual is estimated at YRls 2,600 per month in 1999.

179. **Other cash transfer programs** include the benefits for veterans and tribal organizations. These benefits are for fairly narrowly defined sets of the population. The number of recipients for veteran benefits is estimated at 28,000–29,000 in 1999, and about 9,000 for tribal benefits. In addition, the government provides medical grants and cash compensation for emergencies. Detailed breakdowns of transfers have not been available before 1997, and the effectiveness of these benefits has not yet been evaluated. Most of these specific transfers have grown little over time and are declining in importance compared with the SWF.

## **B. The Social Fund for Development**

180. The Social Fund for Development (SFD) was established by Law No. 10 of 1997 with the purpose of helping alleviate any negative effects of the Economic Reform Program on the poor. It is headed by a board of directors chaired by the prime minister and with members representing key ministries, NGOs, and the private sector. The board decides on the general policies and orientations of the SFD on its annual operation plan, and monitors its performance.

181. Direct management of all aspects of the SFD's operations is the responsibility of the managing director, however, this is undertaken according to a strict and detailed operations manual developed jointly with World Bank consultants.<sup>85</sup> This institutional set-up provides a large degree of autonomy within the SFD for quick and efficient decision-making and program implementation.

182. By the end of 1999, the SFD had grown to include over 85 employees and 6 branches. At inception, a sum exceeding US\$80 million was earmarked for the first five-year phase of operations of the Fund, with various donors involved (IDA, the Arab Fund, and the EU). The government contributes an annual sum of YRIs 98 million to the SFD. The capital made available to the SFD is deposited in private commercial banks; it is directly accessible to management, which provides for efficient disbursement of funds.

183. The SFD carries out three major types of programs: (a) community development services, aimed at directly improving living conditions of the poor and marginalized, and involving, wherever possible, implementation of labor-intensive subprojects to create employment in the targeted communities; (b) small and micro enterprise development, mainly through delivering credit to income-generating activities; and (c) capacity building, to The first type of programs includes the provision of basic education, primary health care, water and sewerage facilities, rural road access, etc. While small enterprise development has not yet taken place, the SFD undertook several projects aimed at micro enterprise development, through loan packages generally accompanied with participation in the design of the economic activity that will benefit from the credit. These programs are often

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<sup>85</sup> The managing director is also member of the board and acts as a secretariat to it.

implemented through NGOs and community-based associations, while the first type of (i) enable local community groups to initiate, operate, and maintain development projects;<sup>86</sup> and (ii) enhance capacity in various NGOs, associations, and government institutions.<sup>87</sup>

184. programs are usually implemented through committees of beneficiaries, specifically set up for that purpose with SFD support.<sup>88</sup> Projects in education, health, and water and sewerage are also implemented through institutions that can provide for a legal (and hence accountable) umbrella to ensure sustainability of operations (for example, local councils or NGOs). There is generally close coordination with the corresponding government institution to avoid duplication of projects and to ensure the supply of employees to work on the projects—the government particularly supplies the necessary providers to run education and health care facilities.

185. The SFD follows a two-pronged approach in program development, by both responding to demand and targeting specific needs; it also attempts to cover fairly the Yemeni territory, including remote rural areas and all marginalized groups.<sup>89</sup> Targeting is necessary because most needy communities are often hindered from submitting any demand for various reasons, ranging from helplessness, desperation and frustration to illiteracy and physical illness, and to domineering by local sheiks. The Planning and Monitoring Unit of the SFD designed a separate measure of poverty based on nine indicators capturing basic socio demographic and economic characteristics. This measure is regularly updated and refined, and the SFD relies on it in its targeting policy.

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<sup>86</sup> For example, the SFD provided management and skills training in accounting for 68 agricultural cooperatives in the governorates of Sana'a and Ibb, in close cooperation with the Federation of Agricultural Cooperatives.

<sup>87</sup> For example, the SFD provided the Social Welfare Fund with technical assistance in developing a new survey to determine eligibility, establishing an electronic database of beneficiaries, and acquiring skills in relevant software to maintain this database.

<sup>88</sup> The SFD insists on a participatory process in most of its projects—local communities participate both in defining the needs and setting up and running the projects—sometimes their contribution reaches 50 percent of design and implementation work.

<sup>89</sup> In the context of targeting marginalized and excluded persons, the SFD pays particular attention to females and juveniles. In 1998 a project to improve the living conditions of jailed women was implemented, whereby a school was established in the central jail to provide literacy classes and skills training. The SFD took juveniles out of the central jail and placed them in a hostel. Civil orphan hostels were also established and there are projects to institute seven hostels for boys and girls in the year 2000. Of all micro enterprise development projects implemented so far, more than 50 percent targeted women and more than 60 percent were in rural areas.

186. The SFD succeeded in operating efficiently because of a large degree of autonomy and simple decision-making processes, and because of simplified procurement and disbursement procedures.<sup>90</sup> It started operations early on its inception year, contracting 50 projects at a cost of about US\$4 million; in 1998, it contracted 337 projects with total investments of US\$21.2 million and total disbursements of US\$6.2 million. By September 1999, the SFD had implemented a cumulative total of 785 projects and subprojects covering a large part of the country, with total investments of about US\$47 million, of which about US\$20 million were disbursed (Table 11).<sup>91</sup>

187. The success of the SFD operations shows in both the high repayment rate on credits delivered and the numbers of beneficiaries and jobs created by its programs. Although the effective rate of interest charged by the SFD is quite high, often exceeding 20 percent, the repayment rate on SFD credit is in the upper 90s.<sup>92</sup> Moreover, direct beneficiaries from SFD programs reached a cumulative total of 1,335,973 persons by end-September 1999, while the number of indirect beneficiaries stood at 263,136. During the same period, these projects have allowed the creation of permanent jobs for 5,580 individuals.

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<sup>90</sup> Some of the SFD projects (education, for example) are implemented at a third of the cost of implementation by the government and at a much quicker pace. For the building of schools it now provides efficiency benchmarks to government contracts with contractors.

<sup>91</sup> This larger-than-expected growth of the SFD programs forced to shorten its first operational phase from five to three years and to apply for a larger grant from the World Bank (US\$100 million) to finance a second five-year phase of operations.

<sup>92</sup> Most of the SFD programs are based on Islamic banking to be consistent with the tradition and expectations of the concerned communities.



Table 11. Republic of Yemen: Social Fund for Development—Accumulated Investment, Disbursement, Number of Expected Beneficiaries, and Job Opportunities, up to September 30, 1999, According to Sector

Sector	No. of Projects	Committed (\$)	Disbursed (4)	Beneficiaries		Job Creation	
				Direct	Indirect	Temporary (Person-day)	Permanent (Person)
Education	490	24,474,98	12,407,008	262,927	40,009	888,057	3,506
Health	101	5,700,093	2,003,775	495,335	38,006	130,951	1,066
Water	85	7,148,680	3,111,320	337,598	8,498	190,217	176
Environmental activities and sewerage	16	2,894,732	338,676	154,575	60,000	104,337	126
Roads	9	855,464	23,255	64,836	55,996	60,709	0
Social services	8	2,859,371	60,929	1,900	0	95,527	138
Capacity building	63	885,498	471,396	7,807	685	13,096	414
Micro enterprise	13	2,220,087	1,582,776	10,995	59,942	2,864	154
Total	785	47,038,913	19,999,135	1,335,973	263,136	1,485,758	5,580

Source: Social Fund for Development Newsletter, Issue No. 8 (October–December, 1999).

### C. Informal Safety Nets and Development Support Organizations

188. Besides programs carried out at the central government level, there were several welfare initiatives at the local government and community levels in the 1980s in both Yemens. Local organizations raised contributions within their own communities to undertake development projects such as roads, clinics, schools, and parks. In the early 1980s, as reported in the World Bank 1996 Poverty Assessment Review (PAR), these organizations completed the construction of 852 kilometers of roads, 783 classes, 267 potable water projects, 71 clinic rooms, and 261 parks and mosques. They also undertook a greater number of maintenance projects. While the organizations in North Yemen (known as LCCDs—Local Councils for Cooperative Development) were initially independent but worked with the collaboration of the central government, those in South Yemen were under direct central government control. However, the government increased its control of these units, which discouraged community involvement and commitment, and led to a large decline in financial, labor, and time contributions of local communities.<sup>93</sup>

While the involvement of Yemeni local communities in welfare operations was on the decline in the first part of the 1990s, mostly due to lack of institutional capacity and financing, the role of international organizations and NGOs increased.

189. Some 15 reasonably active NGOs provide health, education, and other social services to urban areas, and these seem to be relatively successful at targeting low-income groups. However NGOs face problems in terms of limited capacity and resources available to allow them to grow and improve the efficiency of their services.<sup>94</sup>

190. Three types of informal safety nets can be identified in Yemen: religious charity, traditional community-based assistance reinforced by a strong tribal system, and within family transfers. Religious charity can take the form of *zakat*, which represents the donation of 2 percent to 5 percent of wealth to the poor, or *satqa*, which represents voluntary contributions, pecuniary or in kind, donated to the poor. Community support is provided for example through voluntary work or neighbors' labor pooling. In the early 1970s neighborhood groups often grew into organized cooperatives (the latter LCCDs). Although hard to estimate, family support must be an important source of assistance, because society is

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<sup>93</sup> Rural communities organizations in North Yemen were first known as Local Development Agencies. They were funded by private donations, *Zakat*, and remittances, and had a large degree of autonomy. Law No. 12 of 1985 reduced that autonomy by transferring the power and responsibility to provincial governors and re-organizing the cooperatives, into the LCCDs.

<sup>94</sup> These institutions raise money from the government as well as from individuals and businesses. There are, however, no clear guidelines dictating the extent of government assistance, which is then administered on an apparently ad hoc basis, and bilateral international assistance to these institutions is still limited.

very traditional and has a structure based more on family network and solidarity than on economic achievement. This is particularly striking in the rural areas, whereas larger cities are being slowly transformed by the transition to a market economy.

191. Sociologists believe that the informal support systems in Yemen work reasonably well and explain the apparently rare incidence of starvation. However, in the absence of systemic research on the issue, there is no quantitative assessment of the scope and effects of these safety nets.

## VI. ECONOMIC PERFORMANCE, 1990–99

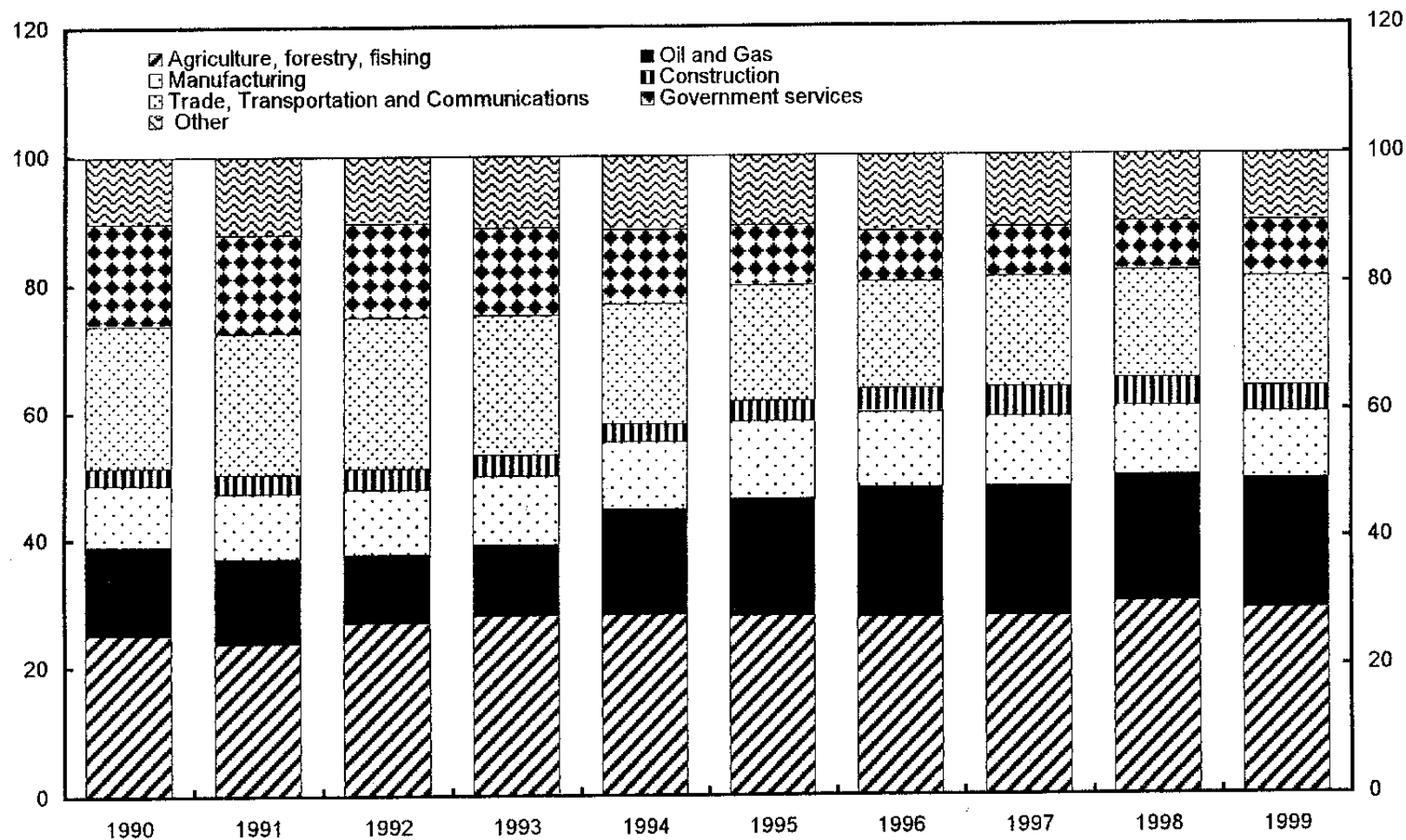
### A. Growth and Employment<sup>95</sup>

192. The external shocks to which Yemen was subject in the 1990s had a strong impact on economic growth. Dislocations associated with the Gulf crisis of 1990 and unification, and again with the civil war in 1994, contributed to sharp economic contractions while resumption of economic activity after both instances was associated with high positive growth (Table 1). These swings in growth rates were exacerbated by a severe drought in 1990–91 and a milder one during the first rain season of 1999. On the other hand, oil discoveries that brought on stream the large Masila field in mid-1993 compensated for anemic growth in other sectors at the time and helped in mitigating to some extent the impact of the civil strife in 1994 on national income. Indeed, the sectoral composition of GDP shows a growing importance of the oil sector over the decade (Chart 15). Government policies have also played a major role in Yemen's growth performance. As described before, controls imposed in the first part of the decade, laws that either created or protected monopolistic practices, and regulations that inhibited or discouraged private sector activities were important obstacles to economic expansion. On the other hand, the liberalization and reform of the regulatory environment initiated after the end of the civil war were probably important elements in triggering economic growth, although such effects are difficult to quantify.

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<sup>95</sup> Despite improvements in the methodology underlying the National Accounts compiled by the Central Statistics Organization of Yemen (CSO), GDP figures remain unreliable, largely because of the lack of basic underlying data in many areas, as well as the lack of adequate deflators for all components of GDP. Moreover, the prevalence of a multiple exchange rate system prior to exchange rate unification in 1996 probably bias the data for 1990–96 downward, as these may overstate the importance of the highly overvalued official exchange rate. In the absence of alternative data sources (except for the oil sector), official CSO data are used as the base for assessing broad trends in various sectors of the economy.

Chart 15. Republic of Yemen: Evolution of the Shares of Key Sectors in Real GDP, 1990–99  
(In percent of total GDP)



Source: Data provided by the Yemeni authorities.

193. The improvement in performance is striking when growth is compared over the pre- and post-reform periods (Table 12). Real GDP growth averaged 5.6 percent in 1995–99, compared with -0.2 percent in 1991–94. Even if the civil war effect is isolated by eliminating the year 1994 from the calculations, the difference in average annual growth remains impressive. While this improvement originates in part in the oil sector, average annual non-oil GDP growth also rose, more than doubling in the second half of the decade, even after abstracting from the adverse effect of the civil war. With population growth little changed between these two periods, the higher growth appears to have come from higher capital accumulation and a considerably better performance of total factor productivity (Box 4).

194. Even so, for the decade as a whole, average TFP growth was negative, pointing to a substantial scope for structural reform to improve non-oil growth performance, without necessarily higher levels of investment.

### **Sectoral growth in the non-oil economy<sup>96</sup>**

#### ***Agriculture and fishing***

195. Agriculture is the largest sector of the Yemeni economy, and in 1998–99 accounted for about 30 percent of GDP and 58 percent of total employment. Seventy seven percent of the population derive its income from agriculture and related activities (such as trade and transport). However, reliance on irrigation in a country with scarce water resources, coupled with a prevalence of traditional methods of cultivation, constrained agricultural growth over the past decade. Real growth in agriculture averaged a modest 4.5 percent per annum between 1990 and 1999, and its contribution to real non-oil growth declined when comparing the two halves of the decade (Box 4). The sector is highly vulnerable to variations in rainfall. For instance, following a severe drought in 1990–91, real agricultural activity contracted by 7.6 percent; it recovered impressively in 1992 (20.1 percent real growth) owing largely to exceptional rainfall.

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<sup>96</sup> Developments in the oil sector have been described in Section II.

Table 12. Republic of Yemen: Macroeconomic Indicators Comparing  
Pre-Reform and Reform Period, 1991-99

	Annual Average		
	1991-93	1991-94	1995-99
	(Growth rates in percent)		
Real GDP	1.0	-0.2	5.6
Oil GDP	-6.1	4.4	9.8
Non-Oil GDP	2.1	-1.0	4.7
<i>Of which</i>			
Agriculture, forestry, fishing	4.8	2.7	6.1
Manufacturing	4.7	2.1	5.6
Construction	8.3	0.7	13.6
Trade, wholesale, and retail	4.4	-0.3	8.9
Transportation, storage, and communications	-1.7	-6.4	0.0
Financial and real estate services	1.3	2.8	4.6
Government services	-4.0	-7.8	-0.3
Real per capita consumption	-20.3	-26.5	2.9
Inflation	52.6	57.3	25.3
M2-growth (Dec/Dec)	27.1	28.9	13.0
	(In percent of GDP)		
External current account (excluding grants)	-14.1	-9.5	-0.2
Fiscal balance (excluding grants)	-12.0	-13.1	-4.2
Gross national savings	6.4	11.3	21.8
Gross investment	19.7	19.9	21.0

Sources: Yemeni authorities; and Fund staff estimates.

### Box 4. Growth in the Non-Oil Sector

On the basis of recent official data on national accounts, real non-oil growth picked up to an annual average of 4.7 percent in the second half of the 1990s, compared with 2.1 percent in 1991-93. While sectoral shares have remained broadly stable, the share of agriculture in non-oil GDP growth rose by 1.5 percentage points during 1995-99, but its contribution to non-oil growth declined from 70 percent in 1991-93 to 43 percent in 1995-99. It was partly compensated by fishing, financial institutions, and real estate, each of which contributed an additional 3 percent to 4 percent with non-oil growth in 1995-99 compared with the pre-civil war period. The share of government services fell slightly over 1995-99. Tourism, although generally perceived as a sector in which Yemen has a comparative advantage, did not perform well as its contribution to non-oil growth (proxied by the value added of restaurants and hotels) increased by only 0.3 percent, from a low base of 0.6 percent of GDP growth (Annex 1).

Title: Sectoral breakdown of Non-oil GDP

	Sector's Share in Non-oil GDP		Contribution to Non-oil GDP Growth	
	1995	1999	1991-93	1995-99
Agriculture and forestry	33.4	35.0	70.5	42.6
Fishing	0.7	1.2	-0.8	3.2
Manufacturing	14.8	13.2	26.0	15.5
Construction	3.9	5.0	13.3	11.6
Transportation, storage, and communications	13.1	11.3	-13.8	0.0
Government services	11.5	10.9	-34.3	-0.9
Wholesale and retail trade	9.1	10.2	17.8	17.3
Restaurants and hotels	0.4	0.5	0.6	0.9
Financial institutions and real estate	7.2	7.6	4.2	7.6
Other	5.4	4.7	16.5	2.2

Sources: Central Statistics Organization of Yemen; and Fund staff estimates.

While poor data quality hinders any precise conclusions, the growth accounting exercise below attempts to shed some light on the roles of factor accumulation and productivity in contributing to growth. For the period 1991-99, non-oil per-capita GDP growth was negative, at -1.3 percent on average, while labor and capital factor accumulation were substantial, reflecting relatively high population growth and investment levels. Thus total factor productivity was significantly negative, and this result holds for a broad range of reasonable assumptions regarding the capital-output share and initial capital stock. Reforms that would enhance factor productivity, thus, emerge as a key element to promote economic growth. Indeed, factor productivity in the reform years 1996-99 was much higher (by about 50-100 percent) compared with the whole period depending on the assumed capital-output share and initial capital stock.

Growth Decomposition in the Non-oil Sector, 1991-99 1/  
Average Annual Percentage Change

Period	Real non-oil GDP	per-capita	Labor	Capital	TFP (a=0.2)	TFP (a=0.4)
1991-99	2.1	-1.3	3.5	10.8	-2.8	-4.2
<i>Of which: 1996-99</i>	4.4	0.3	3.5	9.5	-0.9	-2.1
1991-99	2.1	-1.3	3.5	17.5	-4.1	-6.9
<i>Of which: 1996-99</i>	4.4	0.3	3.5	12.8	-1.6	-3.4
1991-99	2.1	-1.3	3.5	5.6	-1.7	-2.2
<i>Of which: 1996-99</i>	4.4	0.3	3.5	5.9	-0.2	-0.7

1/ Assumes a standard, neo-classical, constant returns to scale, Cobb-Douglas production function:  $Y=AK^aL^{(1-a)}$ , where Y=potential output, A=total factor productivity (TFP), K=capital, L=labor, a=capital/output production share. It is assumed that actual GDP growth equals potential output growth and population growth equals employment growth. Average annual capital stock was calculated as  $K(t)=K(t-1)*(1-0.03) + GKF(t)$  where it is assumed that the depreciation rate of capital stock is 3 percent per annum, GKF is real gross capital formation in year t, and K (1990) was set equal to real GDP in the first two rows, to 50 percent of real GDP in the second row, and to 200 percent of GDP in the last two rows.

196. Government policies had an important impact on agricultural growth. In the first part of the decade, import subsidies on wheat and flour kept prices artificially low, discouraging local production.<sup>97</sup> More importantly, the large depreciation of the parallel market exchange rate in 1992–94 led to an increase in input costs (as seeds, fertilizers, machinery, and parts are imported), which lowered net returns to farmers. At the same time, domestic production was stimulated through import bans on various products such as fruits, vegetables, fats and grains, and high import tariff rates on others. The gradual removal of bans and controls in the context of the reform program that started in 1995, nonetheless, coincided with an increase in production, partly by reducing costs of inputs and liberalizing prices, but also because of the privatization of about 50 agricultural units at the onset of the privatization program.<sup>98</sup> Another factor was some improvement in cold storage and transportation facilities for agricultural production. Hence, average annual agricultural growth rose to 6.1 percent per annum in 1995–99 compared with 4.8 percent in 1991–93.

197. Two decades of rapid growth under the umbrella of protectionism and subsidies had achieved by the mid-1990s near self-sufficiency in both fruits and vegetables. The second half of the 1990s saw a continued rise in the production of these crops, partly underpinned by the spread of irrigation, and despite the gradual removal of import bans imposed on similar products (Statistical Appendix Table 14). However, production of cereals was generally declining over that period with a sharp drop estimated for 1999 due to the drought that occurred in the first rain season of the year. Qat is another important crop in Yemen, capturing more than 7 percent of the total cultivated area (see Box 5). However, there are insufficient statistics on qat production and its contribution to GDP is difficult to assess. Qat does seem highly water intensive, though; with production largely supported by indirect subsidies on diesel and water pumps, its expansion may have contributed to the decline in cereal production.

198. Livestock and other noncrop production significantly increased over the second part of the decade (Statistical Appendix Table 15). Among these products, fish is particularly important. The country is endowed with important resources of surface water fish, as well as deepwater fish, shrimp, and other shellfish. In the first half of the decade, industrial activity related to fishing was protected with the ban on imports of fresh and frozen (but not canned) fish. At the same time export controls maintained the prices of fish at a low level, discouraging the activity. With the removal of trade controls, fishing became more lucrative, and total catch increased by about 60 percent between 1995 and 1998.

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<sup>97</sup> Locally grown wheat is traditionally viewed by the Yemenis as having higher quality and better taste than imported wheat, which creates demand for it despite its higher price; this might have mitigated the adverse effect of import subsidies on local production.

<sup>98</sup> These were mostly farms that were returned to their owners after having been nationalized by the Socialist regime in the South.



### Box 5. The Role of Qat <sup>1</sup>

- Chewing of qat leaves is a widespread practice in Yemen, usually in the context of social gatherings in the afternoon. The leaves, which contain an amphetamine-like substance, come from the hardy and drought resistant small qat tree (*edulis*), and chewing has the effect of a mild stimulant. There are some indications that qat chewing was for a long time confined to the wealthy and only in the 20<sup>th</sup> century spread to the wider population. A study in the 1960s found that in the city of Taiz about 60 percent of males and 35 percent of females were “habitual” chewers. Since late 1999, qat chewing in public buildings and during working hours is prohibited, and a public campaign to reduce chewing has been launched.
- Qat comes in many qualities and prices vary accordingly. Recent household surveys indicate that qat absorbs 5–10 percent of total household expenditure in all regions of Yemen except the desert governorates, and probably accounts for a similar share in GDP. Consumption is in fact widely thought to have increased in recent years, and the area cultivated with qat is thought to have increased by 10 percent between 1995 and 1990 (to 98,000 ha), roughly in line with total cultivated area. Over the same period, qat prices rose faster than the average CPI.
- Qat is appreciated especially by small farmers as a crop with a very high market value and low labor demand. At least in the Sana’a basin qat depends on irrigation and is highly water-intensive. Water is typically pumped with diesel pumps, contributing to the rapid decline in water tables. While reliable statistics do not exist, production expanded during the 1980s and 1990s and partially displaced other crops such as grapes, coffee, and cereals—with the latter also driven out by subsidies that kept grain prices low.
- Qat leaves have to be brought fresh to the market to be consumed within 12 hours from harvesting. Accordingly, a highly efficient transport and marketing system has developed, even in the most remote areas. The qat trade is probably an important mechanism in transferring wealth from urban to rural areas, said to directly benefit 170,000 families (i.e., one million people). Import of qat is banned. Some export to neighboring countries and Yemeni communities abroad may occur through informal channels but no data are available.
- Qat retail sales are taxed at 20 percent but tax collection suffers from logistical and governance problems; in 1999 the qat tax yielded YR1 1.6 billion (0.2 percent of GDP). Shifting qat tax collection to the local authorities and basing it on acreage rather than sales is under consideration. The Yemeni authorities have recently commissioned a study to better understand the role of qat cultivation in the economy, in particular regarding overall production, water use, profitability and distribution of revenues, labor requirements, and substitution with other crops.

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<sup>1</sup> There is little quantified information on qat production and use—partly reflecting official uneasiness with the importance of qat in Yemeni society. The box is based on an unpublished World Bank paper (Ward et. al., 1998) and some information from the authorities.

199. The agriculture and fisheries sector is largely market-oriented, with production privately undertaken by farmers, but encouraged by the government and cooperatives that provide subsidized inputs. The government traditionally financed the purchase of fertilizers and pesticides at low cost through the Agricultural Credit Bank. Farmers also have long benefited from low diesel and electricity prices, which encouraged the reliance on pumping water for irrigation and contributed to the depletion of underground water resources. Other bans and controls have practically been eliminated, however, and the government is shifting its focus toward more market-based ways to promote agriculture.

200. First, the Ministry of Agriculture is becoming active in the development and maintenance of water resources. In 1999 it undertook preliminary studies for 77 dams, prepared the design for 40 other dams and reservoirs, and prepared an irrigation policy that was approved by cabinet; the construction of 12 dams was finished, and 17 other dams are under construction. The ministry also plays an important role in protecting crops from diseases through information campaigns, providing quality control checks on insecticides and pesticides to ensure their adequacy, and assisting farmers in controlling crop and livestock diseases.<sup>99</sup> It provides funding for various activities (fertilizing, transportation using cooling systems, livestock production, water resource management, and agriculture-related activities such as transportation and marketing). While this marks an improvement from earlier neglect of the sector, as recently developed in a broad-based participatory approach in the "Aden Agenda," more needs to be done in terms of encouraging rain-fed crops, eliminating subsidies (particularly on diesel), and improving the overall quality of public services in agriculture.

### *The industrial sector*

201. The industrial sector contributes a meager 16 percent to real GDP, mostly manufacturing (11 percent) and construction (4 percent). Manufacturing, limited mainly to the production of consumer goods and construction materials (Statistical Appendix; Table 13) was steadily growing at about 4–5 percent in the first part of the decade. A boom in construction and real estate activities occurred in the early 1990s following the return of 1 million Yemenis after the Gulf crisis. Indeed, the sector registered a real growth rate of 6.3 percent in 1991 and 16.1 percent in 1992. This boom may have also been partly due to high demand for land and property as a hedge against inflation, running at 45–50 percent in 1991–92. The civil strife of 1994 caused disruption in industrial activity and led to contraction in both manufacturing (5.3 percent) and construction (19 percent). Extensive damage to private property and public infrastructure, including the Aden refinery and electricity generating stations, constrained activity mostly in the south but also in the north.

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<sup>99</sup> For example, the rapid spread of the Newcastle disease among the livestock in the last quarter of 1999 was halted by the government who successfully brought down the percentage of livestock infected from about 26 percent in December 1999 to less than 4 percent in February 2000.

202. Recovery from the war, coupled with the initiation of the reform program in 1995, led to a strong pick-up in industrial activity. A construction boom in 1995 extended into 1997. Similarly a jump in the growth rate of manufacturing took place in 1995, but was not sustained in the following years.

### *Services*

203. Services today account for about 35 percent of real GDP, of which 9 percent for each of transportation, storage and communications; government services; and trade; and 6 percent for financial institutions and real estate. Most of these shares had been relatively stable throughout the decade except for government services, which declined from 16 percent of GDP in 1990 to 9 percent in 1995, and transportation, storage, and communications which declined from a 15 percent GDP-share in 1990 to 9 percent in 1996. While there are considerable doubts on the accuracy of the underlying data, public services may have declined due to the privatization of a large number of small-scale public enterprises in 1995—96. The growth pattern in other sectors related to services also broadly reflects the effect of the Gulf crisis, the war, and the reform program of 1995. Trade and financial services jumped in 1991 following the repatriation of Yemeni immigrants from the Gulf; while trade kept growing at an annual average of 4.2 percent in 1992–93, financial services subsequently contracted. The post civil war period saw another boom in both sectors, as the annual average growth rate reached 9 percent for wholesale and retail trade and 4.6 percent for financial services; wholesale and retail trade even grew by 15.5 percent in 1995, probably triggered by the recovery from the civil war, but also the import and excise tax reforms introduced at the time.

### **Labor market developments**

204. Labor market data in Yemen are scanty and do not go back beyond 1991.<sup>100</sup> Only recently, and motivated by the rise in unemployment in Yemen in the aftermath of the Gulf War in 1990, a more focused monitoring of labor market developments was initiated. The Ministry of Labor and Vocational Training (MOLVT) was created in 1997. In an effort to consolidate labor market statistics, and improve its functions in vocational training, job matching, and labor force planning, MOLVT embarked in 1998 on a major project to develop a Labor Market Information System database (LMIS). LMIS will provide links between various concerned government agencies and the Ministry of Labor and its job offices located in different parts of the country, including information on the supply and demand of labor according to professional description, based on input provided by various government agencies and periodic market surveys.

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<sup>100</sup> Available information is based primarily on the 1994 Population Census, in addition to some other secondary sources such as the Household Expenditure Survey of 1998, the Demographic Survey of 1997, and the Educational Survey of 1998–99. All these surveys were not primarily designed to collect detailed information on the labor market. In early 2000, the CSO for the first time conducted a detailed labor market survey, the results of which will be made public in the summer of 2000.

205. It is estimated by the Ministry of Planning that, in early 2000, out of the 9.7 million-strong Yemeni workforce (population aged 15 and above), the labor force stood at about 4.2 million, implying a 43 percent participation rate. Participation rates are very different between the male and female population with about 72 percent and 15 percent, respectively. By both regional and international standards, these differences are striking. As a result, female labor accounted only for about 18 percent of the total labor force as compared with an average of 41 percent for low-income countries, and 43 percent for high-income countries.

206. Data on the sectoral distribution of employment (Statistical Appendix Table 6) indicate a high concentration in informal sectors such agriculture and fisheries (49 percent), followed by trade, restaurants, and hotels sector (about 11 percent). Female employment in Yemen is concentrated in the informal sectors, particularly agriculture and fisheries, which employ about 86 percent of all female workers. Other important sectors include manufacturing industries and education with each accounting for about 4 percent of female employment. The low female participation and employment in general, and in the formal sector in particular, appear to be attributable to a number of factors such as traditional values which discourages female employment in nontraditional areas; early marriage for females;<sup>101</sup> relatively low educational attainment among females;<sup>102</sup> and labor legislation which imposes additional cost for hiring female workers (Box 6).

207. Available unemployment data suggest a growing unemployment rate among the Yemeni population, as the pace of employment creation during the last eight years was insufficient to absorb the new entrants in the labor force. The 1994 population census estimated an unemployment rate of 10.1 percent (Table 13), while the preliminary results from the recent labor market survey suggest that unemployment has risen to 20 percent in 1999.

208. There are no reliable data relating unemployment to age category, educational level, the duration of unemployment, or the causes of unemployment, and data on wages in the private sector are nonexistent. Data available from the 1994 census suggest that the majority of the unemployed (about 60 percent) were below the age of 24, and that unemployment rates fall sharply as age increases (Table 13). In terms of educational level, the current long list of university graduate applicants at the Ministry of Civil Services (see below) suggests that unemployment is not confined to people with low educational attainment alone.<sup>103</sup>

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<sup>101</sup> The 1998 household survey results indicate that the average age at the first marriage for women is 20 years.

<sup>102</sup> According to 1998 household survey, female illiteracy rate is 71 percent as opposed to 24 percent among men.

<sup>103</sup> According to the UNDP/Ministry of Planning (MOP) report "Higher Education vis-à-vis Development Requirements and Labor Market Demand" (November 1999), registered graduates on the waiting list at the Ministry of Civil Service totaled to 15,400 at the end of June 1999, of whom 51.3 percent were in education; 20.5 percent in arts, science, information, religious studies, and law; 9.8 percent in business and economics; 9.6 percent in medicine; 8.8 percent in engineering, agriculture, computer, and petroleum. In 1999, available

(continued)

### Box 6. Republic of Yemen: Current Labor Legislation <sup>1</sup>

1. **General principles:** The legislation deals with private sector employment only. Certain activities such as traditional agriculture, domestic servants, and international organizations are exempt. Under the law, every citizen has a right to work with **no discrimination of sex, age, or race.**
2. **Hiring and foreign employment:** Firms must **report all vacant jobs** to the Ministry of Labor and Vocational Training (MOLVT) first, and may hire directly from the market only if MOLVT does not nominate candidates within 15 days. Non-Yemeni workers may only be employed in jobs for which no Yemeni expertise is available, and provided their total number does not exceed 10 percent of the workforce in the establishment. Firms hiring **foreign workers** are required to appoint local counterpart workers with appropriate qualifications and proficiency throughout the tenure of the non-Yemeni employee. Companies in certain sectors may be exempted from abiding by these rules.
3. **Work contracts:** Unless specified in the two parties' agreement, contract duration is unlimited for Yemeni employees. After a six-month trial period for a new worker, the latter may not be dismissed unless he fails to comply with the contract terms, displays noticeable negligence, or commits unlawful acts. Yet employers may terminate the contract if needed to reduce staff for economic or technical reasons. In all cases, the employee would be eligible for a special compensation for damages resulting from contract termination. The amount of this compensation, determined by a specialized arbitration committee, must not exceed six-month salary.
4. Special rules apply for employing **women and minors.** Women work at most five hours per day in the six months of pre-natal and post-natal periods; they should not be employed in dangerous jobs, and are not allowed to work at night except during the holy month of Ramadan and as determined by MOLVT. They are entitled to paid leave for 40 days in the case of the husband's death, and to leave without pay for up to 90 days.
5. **Wages and other reimbursements:** Wages and bonuses differ for overtime, night shifts, holidays, and training. An hour of work is equivalent to one hour and a half of basic wage for overtime work, and two hours of basic wage for work at night and on weekends and public holidays. MOLVT may set minimum wages at a general or sectoral level. Wage discrimination based on sex or nationality is prohibited.
6. **Working hours, breaks, and vacations:** Official working hours must not exceed 8 per day, or 48 per week, and must include at least one break. Employees are entitled to at least 30 days of annual leave (net of public holidays), have to take at least half of these every year, and may not trade vacation for financial compensation.
7. Every establishment of 10 employees or more must formulate, within given guidelines on obligations and rights of employees, a charter of penalties and conditions of applying them, displayed in a conspicuous place.
8. **Vocational training:** Employers are required to either provide direct training to their workers or make annual financial contributions to MOLVT training programs in amounts proportional to the number of employees. The ministry organizes public vocational training programs, and supervises the standards of programs offered by the private sector.
9. **Occupational health and safety:** Employers are required to adhere to standards specified by the authorities.
10. **Health and service insurance:** Employers are required to provide medical care and, for larger firms, to establish in-house health facilities. Upon the end of service, employees are entitled to a monthly pension or lump sum reward, according to the rules of the social insurance law and, if not covered by social insurance or a similar system, to severance pay of at least a one-month wage for every year of service.
11. **Work inspection:** MOLVT's safety and health inspectors are responsible for monitoring workplace conditions and its inspectors have the legal power to conduct unscheduled inspections.
12. **Labor disputes** may be resolved by either direct MOLVT intermediation or specialized arbitration committees set up by MOLVT, or through a specialized appeals court. Strikes for nonpolitical reasons are permitted only after exhausting intermediation efforts and reaching a final court decision; must be voted for by union members, with a minimum participation of 60 percent, and approval of at least 25 percent in a secret ballot; and need to be notified to MOLVT three weeks in advance. Some businesses such as hospitals, electricity and telecommunications plants, and banks should maintain a minimum level of personnel during strike periods.
13. **Collective organizations:** Employers and employees have the right to create and join organizations to look after their rights. It is prohibited to take punitive actions against employees participating in union activities.
14. **Punishments:** The law describes the penalties and punishments for violating different articles of the labor law, which include a maximum imprisonment of three months or a fine ranging between YR1 5,000 and YR1 20,000.

<sup>1</sup> As amended in 1997.

Table 13. Republic of Yemen: Distribution of Labor Force by Employment Status, Age Group (+10 Years), and Sex, 1994

(In percent)

Age Group	Unemployed			Total Labor Force		
	Male	Female	Total	Male	Female	Total
10-14	11	39.5	14.7	3.4	14.7	5.7
15-19	23	31.5	23.9	7.7	13.7	8.9
20-24	21	14.7	20.7	11.9	11.1	11.8
25-29	13	6.2	12.1	14.0	12.9	13.8
30-34	8	2.5	6.9	13.2	11.9	12.9
35-39	6	1.5	5.6	13.0	11.6	12.7
40-44	4	1.0	3.9	9.6	8.4	9.4
45-49	3	0.6	3.1	7.6	6.1	7.3
50-54	3	0.7	2.8	6.6	2.2	5.7
55-59	2	0.4	1.7	3.5	2.4	3.3
60-64	2	0.5	1.9	4.3	2.6	4.0
65+	3	0.9	2.6	5.1	2.4	4.5
Unspecified	0	0.1	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (thousand)	286	39	325	2,550	659	3,209
Memorandum items:						
Percentage population age 10-24	56	86	59	23	40	26

Sources: Central Statistics Organization; General Population Census 1994.

### **International labor migration trends**

209. Emigration has a long tradition in Yemeni history for providing an alternative source to absorb new entrants in the labor force and provide much needed foreign exchange. Migration flows have headed mainly toward three regions of the world: for many centuries, migrants went to the far east; particularly India, Indonesia, and Malaysia, and also east Africa; in recent decades migration to the GCC became dominant. Emigrants to the first two regions have mostly settled permanently and were assimilated within the local communities, while those in the GCC still maintain a strong link with Yemen and remit a sizable portion of their income on a regular basis. The Ministry of Immigrant Affairs estimates put the total number of Yemenis abroad at around 6 million to 7 million, of which, about 4–5 million in Indonesia, 0.8 million in the GCC countries, and 0.2 million in African countries—notably Kenya and Ethiopia.

210. As discussed before, international migration has slowed considerably in the aftermath of the second Gulf crisis. Although in 1997, a partial resumption of labor migration to the GCC appears to have taken place on a small scale, prospects for migration to the GCC countries will likely remain limited since most of the GCC countries are currently facing rising unemployment among their national labor force, while former Yemeni labor has been replaced by Asian workers.

### **Labor laws and regulations**

211. The Labor Law governs employment in the private sector as last amended in 1997. Among other features, the law enables the government to set up a minimum wage,<sup>104</sup> provides unrestricted right to form labor unions and to conduct strikes, and sets relatively restrictive dismissal rules, women work conditions and benefits, and working hours (Box 6). In view of the administrative weakness of the implementation agencies, the main effect of the law appears to be to add to fiscal and regulatory incentives for firms to remain in the informal sector, contributing to the predominance of the latter.

### **Education and training**

212. General education in Yemen includes nine years of basic education; three years of secondary schooling; and technical, vocational, and higher education.

213. Technical, vocational, and higher education in Yemen is primarily run by two government bodies; the Ministry of Education, which overlooks professional level education (three-year teachers training, and four-year university education), and the General Authority

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<sup>104</sup> Since 1981, the minimum wage has been set at YRIs 6,000 per month, but apparently has never been enforced by the government.

for Vocational and Technical Training (GAVTT) which falls under the jurisdiction of the Ministry of Labor and Vocational Training. Other ministries that provide specialized education include health, transport, fisheries, agriculture, tourism, civil services, and Awqaf.

214. GAVTT has 3 levels of training institutes: 2-year vocational centers providing semi-skilled and skilled training, 3-year vocational colleges providing crafts level training, and 2 to 3 year post-secondary technical colleges offering technician diplomas. Currently there are 26 such institutes specializing in fields such as tourism, manufacturing, hotels, agriculture, and veterinary medicine. Funding comes primarily from the budget and a 1 percent tax on the wages of workers in medium- and large-sized firms (10 or more workers), plus expatriate labor visa fees (YR1 5,000).

215. Enrollment levels and graduation at various colleges and universities is heavily biased toward the arts and humanity colleges (77 percent and 70 percent, respectively), followed by teaching colleges (11 percent and 19 percent, respectively), and technical colleges run by GAVTT (Table 14). The education system appears poorly tuned to market needs and skill mismatch is likely a major cause of unemployment. The current structure of a ratio of 1:17 technical to university graduates compares to international standards of 4:1. Among the causes cited for the low enrollment in technical training is the insufficient resources made available to these colleges, the inadequate skills covered by its programs, and the general preference among the population, particularly among females, for government and administrative jobs.

## **B. Inflation**

216. Inflation in Yemen is largely determined by monetary developments, which in turn are driven by domestic budgetary financing needs. As monthly CPI data prior to 1995 is not available,<sup>105</sup> annual data was used to derive Chart 16, which illustrates that the path of money growth and inflation closely mirror that of domestic deficit financing. Indeed, the correlation coefficient between CPI inflation and domestic fiscal finance (as percent of GDP) is 0.66, almost equal to the correlation between CPI inflation and broad money growth, while the correlation coefficient between broad money growth and budgetary finance is 0.85.

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<sup>105</sup> CPI data is compiled by the CSO. In January 1995, a new series was introduced, consisting of a weighted average of the price indices for Sana'a and Aden, where the weights correspond to consumption shares obtained from the 1992 Household Budget Survey. Prior to that, the CPI was based on series from five major cities, based on the 1977/78 Household Budget Survey, but weighted across cities by populations shares. Despite the improvement underlying the CPI introduced in 1995, these data remain weak because of poor price collection and absence of monitoring as well as insufficient coverage. Current efforts are concentrated on producing yet another CPI, covering 20 cities and using new consumption shares derived from the 1998 household budget survey.



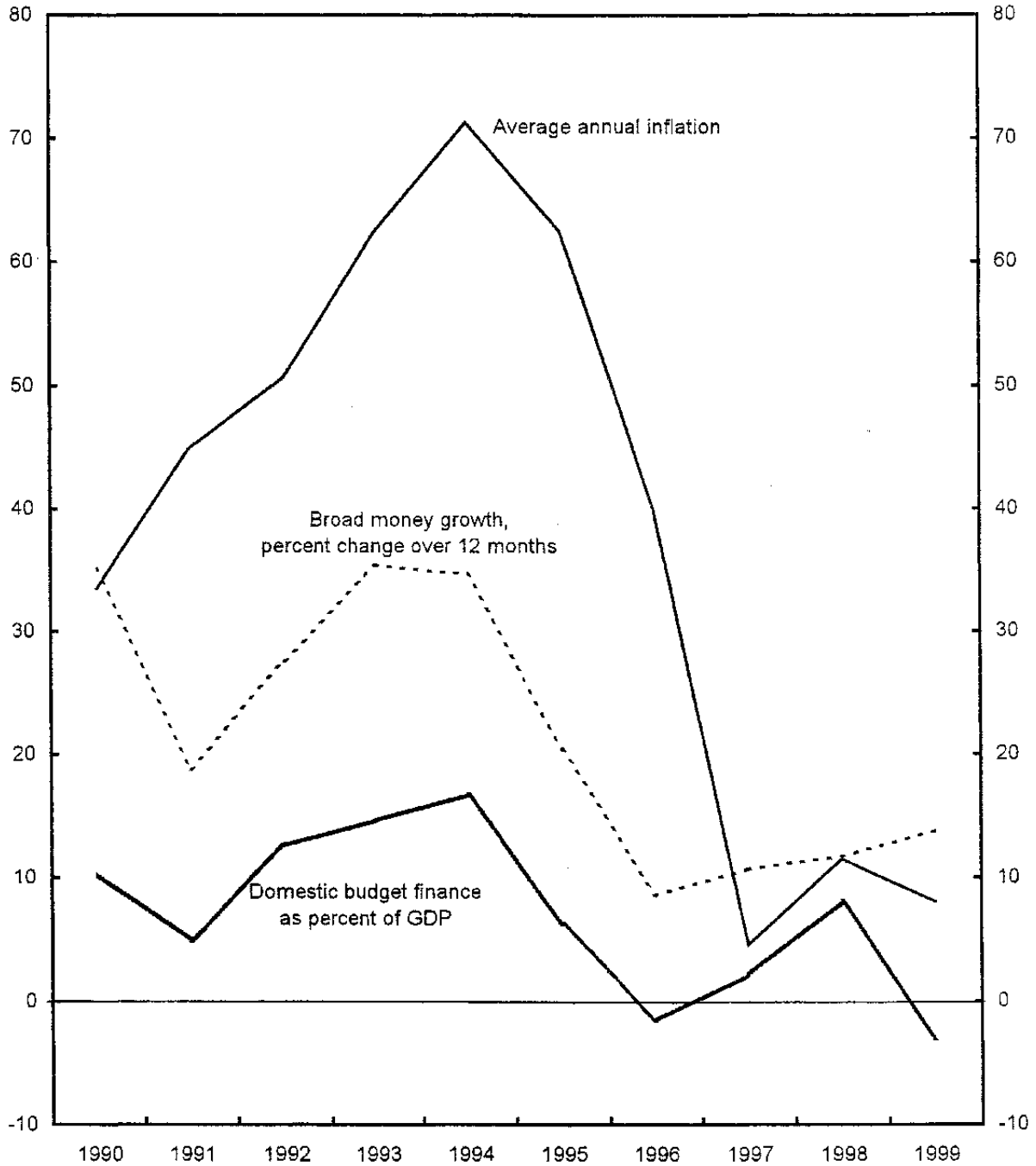
Table 14. Republic of Yemen: Students Enrollment and Graduation from Colleges and Universities in 1998/99

	Enrollment			Graduation		
	Male	Female	Total	Male	Female	Total
(Students)						
Technical colleges 1/	3,326	476	3,802	1,015	132	1,147
Teaching colleges	16,190	3,469	19,659	4,293	678	4,971
Universities	117,967	34,128	152,095	15,063	4,433	19,496
Public	109,135	30,687	139,822	13,805	3,940	17,745
Arts and humanities	99,030	26,729	125,759	12,900	3,637	16,537
Science and technical	10,105	3,958	14,063	905	303	1,208
Private	8,832	3,441	12,273	1,258	493	1,751
Arts and humanities	7,110	2,938	10,048	979	438	1,417
Science and technical	1,722	503	2,225	279	55	334
Total	137,483	38,073	175,556	20,371	5,243	25,614
(In percent)						
Technical colleges	1.9	0.3	2.2	4.0	0.5	4.5
Teaching colleges	9.2	2.0	11.2	16.8	2.6	19.4
Universities	67.2	19.4	86.6	58.8	17.3	76.1
Public	62.2	17.5	79.6	53.9	15.4	69.3
Arts and humanities	56.4	15.2	71.6	50.4	14.2	64.6
Science and technical	5.8	2.3	8.0	3.5	1.2	4.7
Private	5.0	2.0	7.0	4.9	1.9	6.8
Arts and humanities	4.0	1.7	5.7	3.8	1.7	5.5
Science and technical	1.0	0.3	1.3	1.1	0.2	1.3
Total	78.3	21.7	100.0	79.5	20.5	100.0

Sources: Ministry of Planning; UNDP.

1/ Includes training institutes and programs run by GAVTT, Ministries of Health, Communications, Fisheries and Agriculture, Culture, Civil Services, and Awqaf.

Chart 16. Republic of Yemen: Inflation, Money Growth, and Budget Financing, 1990-99  
(In percent)



Source: Data provided by the Yemeni authorities.

217. Price instability in Yemen was particularly acute in 1990–94. These years witnessed very high inflation, fueled by large fiscal deficits translating into high rates of money growth (Table 9). Inflation accelerated from 34 percent in 1990 to peak at 71 percent in 1994, the year of the civil war, as fiscal deficits and the rate of broad money growth surged (Table 1).

218. The structural reform program initiated in early 1995 succeeded at reducing inflation, to single-digit levels by end-1999. This improvement reflects declining budget deficits (from about 16 percent of GDP in 1994 to near balance in 1999) allowing tight money growth.

219. Indeed, the average annual rate of expansion of broad money in 1995–99 was halved compared with the first part of the decade.

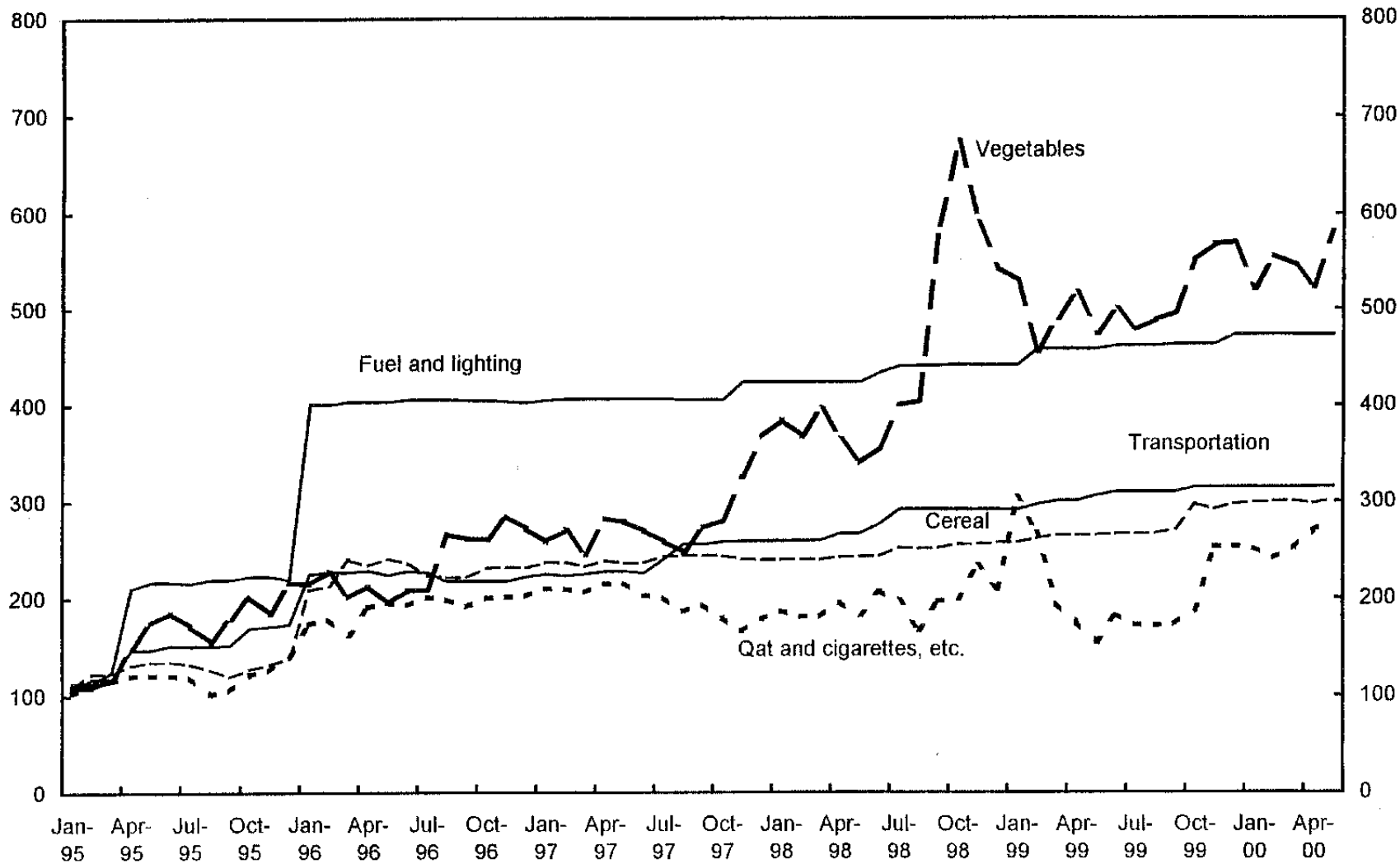
220. Inflation only declined slowly in the beginning of the reform period, from 71 percent in 1994 to 63 percent in 1995 and 40 percent in 1996, partly owing to significant adjustments in administered prices. Indeed, excluding the effect of administered price increases,<sup>106</sup> CPI inflation would have reached a much lower 33 percent in 1996, the year in which the diesel price was increased by 100 percent, wheat and flour prices were raised by 150 percent, and average electricity tariffs were raised by 161 percent. Administrative price increases implemented at different times as part of the reform process (Table 6) accentuated CPI increases and contributed to inflation at least until end-1997 (throughout that period, inflation excluding administered prices was about 7–15 percent lower than overall CPI inflation).

221. Chart 17 attempts to isolate the effect of administrative price increases on several CPI components. The transportation price index shows four jumps: in April 1995 following the doubling of gasoline prices; in January 1996 following another 50 percent increase in these prices and a doubling of diesel prices; in September 1997 following another 67 percent increase in diesel prices; and in July 1998 following a 40 percent increase in gasoline prices.

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<sup>106</sup> The effect of administrative prices is assumed to be captured by the transportation price index (because it partly accounts for petroleum product prices), the fuel and lighting price index (because it partly accounts for petroleum product prices and electricity tariffs), and the cereals price index (because it includes wheat prices). This might not be a precise measure given that information on individual items within these categories is not available (and these categories certainly include other items not subject to price setting) Chart 17 indicates that changes in administered prices seem to be reflected in these categories to an extent sufficient to warrant the assumption made. Hence in this section the CPI without administrative prices refers to the CPI calculated after excluding these items.

Chart 17. Republic of Yemen: Price Indices for CPI Groups that Include Items with Administered Prices



Source: Data provided by the Yemeni authorities.

The fuel and lighting index shows major jumps in May 1995 following increases in electricity tariffs (60 percent, enacted in January 1995) and fuel oil (74 percent for Public Electricity Corporation (PEC)), and in January 1996 following another 161 percent increase in average electricity tariffs and 133 percent increase in the fuel oil price. Subsequent increases in prices of both products were milder (September 1997, July 1998, and June 1999) and had smaller effects as shown by the relatively smooth path of the index from February 1996 and onwards. The price index for cereals also shows an upward effect due to increases in administrative prices of wheat; the two significant responses are registered following the 150 percent increase in wheat prices in January 1996 and the full liberalization in the third quarter of 1999.

222. Other important factors driving inflation were fluctuations in the prices of vegetables and qat. Both products exhibit strong seasonality, with prices affected by rain/drought and seasonal demand (around holidays for qat), and on trend these prices have been rising faster than the overall index. Indeed, CPI inflation has always been lower (by 10–25 percent at least) when both products are excluded from its measurement. Qat and vegetable prices strongly rose in the first part of 1999 following a severe drought, which contributed to more than 50 percent of inflation over the period April–August 1999. Two additional factors affected the price of vegetables in the reform period: the exchange rate unification in July 1996 led to a rise in the price of imported vegetables; and the gradual phasing out of import bans on vegetables (in March 1998 and in mid-1999) contributed to drops in vegetable prices around these dates (Chart 17).

### C. Poverty and Social Indicators

223. With an annual average decline in real per capita GDP by about 0.5 percent over the past decade, resulting from both sluggish real growth and a large increase in population size, it is not surprising that poverty levels seem to have deteriorated in Yemen. According to a World Bank report,<sup>107</sup> 20 percent of Yemenis lived in conditions of absolute poverty in 1992, with below socially acceptable spending levels, poor health status, and limited access to education. A UNDP report<sup>108</sup> states that by 1998 absolute poverty had spread to cover 30 percent of households, and that 15 percent of families lived below the poverty line.

224. The UNDP<sup>109</sup> attributes to Yemen a human development index (HDI)<sup>110</sup> specific measures of basic human needs, all take into consideration a core set of socioeconomic indicators related to levels of income, health, education, and access to basic services. In most

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<sup>107</sup> World Bank *Poverty Assessment Report for Yemen*, March 1996.

<sup>108</sup> Poverty Policy Framework for Yemen, UNDP, April 1999.

<sup>109</sup> *Human Development Report*, UNDP, 1999.

of these categories and despite some improvement over the past two decades, the record of Yemen fares relatively poorly compared to the MENA region average (Charts 18–22). In particular, based on the latest available data, life expectancy in Yemen is almost eight years shorter, the infant and under-five mortality rates are about double and the adult illiteracy rate is 25 percent higher than the corresponding values for the MENA region.

### Measures of poverty in Yemen<sup>111</sup>

225. The extent of poverty in Yemen can be gauged through socio demographic variables, which, although showing improvement over the course of the past two decades, look weak compared with those of other MENA countries. Life expectancy at birth, although having increased by nearly eight years between 1987 and 1998, is lower than the MENA region average by about eight years. Similarly, although infant and under-five mortality rates in Yemen declined by 15 percent and 31 percent, respectively, within a decade, they remain on average nearly twice as high as in MENA countries. Less than half as much people have access to safe water and sanitation in Yemen when compared to the MENA region average. Yemen also falls behind the region in terms of educational achievement, with a higher illiteracy rate and a widening gender gap in education. At the same time, some indicators have even improved faster than in the rest of MENA or the average developing country over the past two decades. For example, between 1985 and 1998, the illiteracy rate decreased in Yemen by about 27 percent; the decline over the same period was about 10 percent for least developed countries and 15 percent for the MENA region.

226. Not surprisingly, poverty tends to be correlated with family size and low education. The household size of poor families, at 8.5 persons on average, is greater than the average for nonpoor households (6.8 persons). Education levels are also significantly worse across the poor, for whom the illiteracy rate was about 66 percent in 1996 compared with 59 percent for the nonpoor. The difference is even more striking at the household level: 77.3 percent of poor households are headed by illiterates while only 7.7 percent are headed by individuals with secondary education or above. Moreover, the poor/non-poor gaps are wider for females than they are for males. In 1998, for example, about 80 percent of poor adult females were illiterate, compared to a 64 percent illiteracy rate among all adult women; the corresponding numbers for males were 44 percent and 31 percent, respectively. Female-headed households are also more likely to be poor—the risk of poverty increases by 20 percent for them vis-à-vis male-headed households.

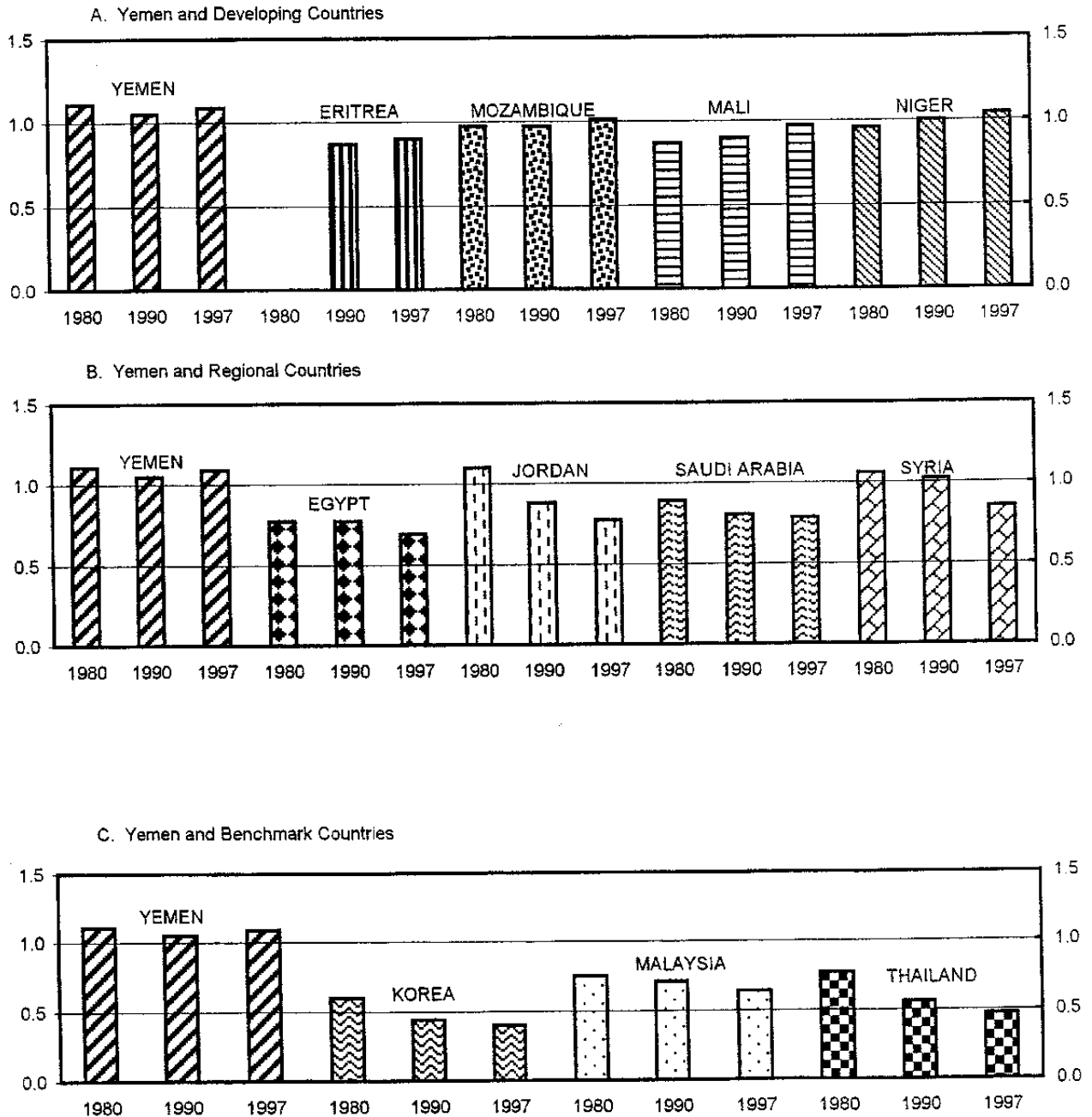
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<sup>110</sup> The HDI is an index constructed annually by the UNDP since 1990 to measure average achievements in basic human development. The indicators used in calculating the HDI are life expectancy, educational attainment measured through literacy and enrollment rates, and per capita income levels.

<sup>111</sup> The sources of the data quoted in this section are the 1998 Household Budget Survey (CSO) supplemented by the UNDP Poverty Policy Framework for Yemen, the World Bank 1996 Poverty Assessment Report, the IMF World Economic Outlook (WEO) database, the CSO Statistical Yearbook, 1998, and World Bank Development Indicators.

Chart 18. Republic of Yemen: Comparison with Selected Countries:  
Age Dependency Ratio

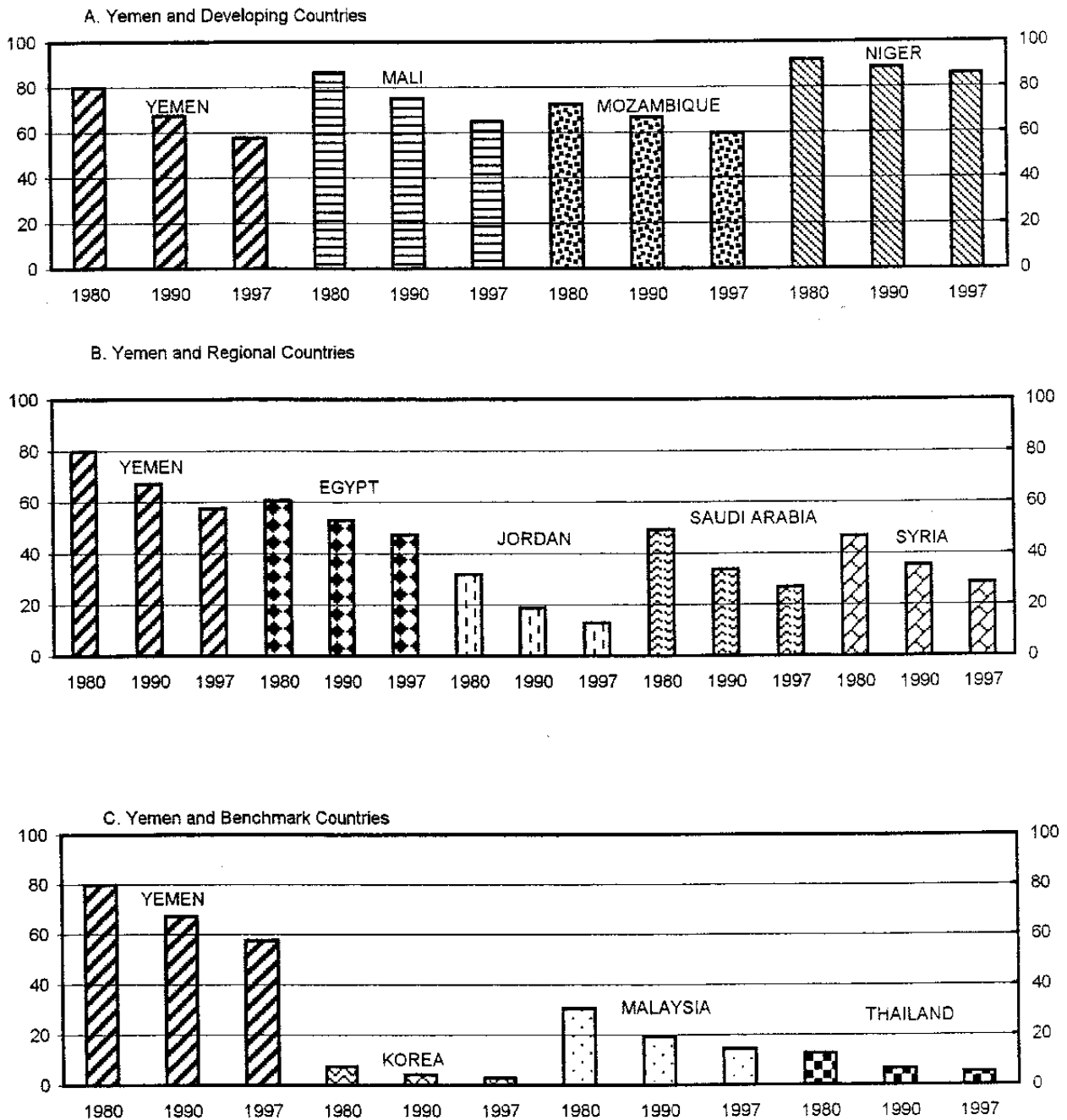
(Dependents to working-age population)



Source: World Development Indicators, World Bank.

Chart 19. Republic of Yemen: Comparison with Selected Countries:  
Total Adult Illiteracy Rate

(In percent of people over age 15)

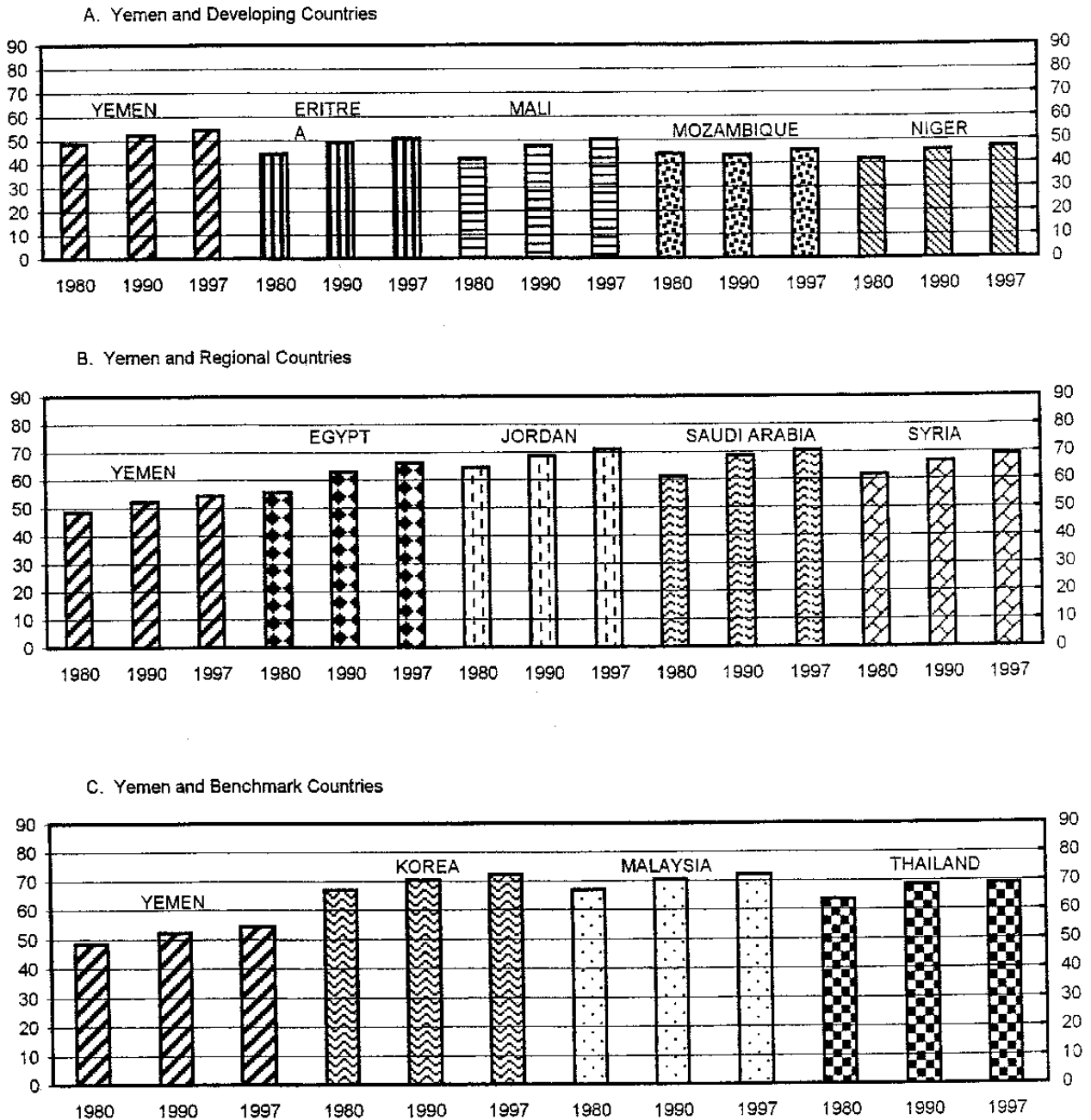


Source: World Development Indicators, World Bank.



Chart 20. Republic of Yemen: Comparison with Selected Countries:  
Total Life Expectancy at Birth

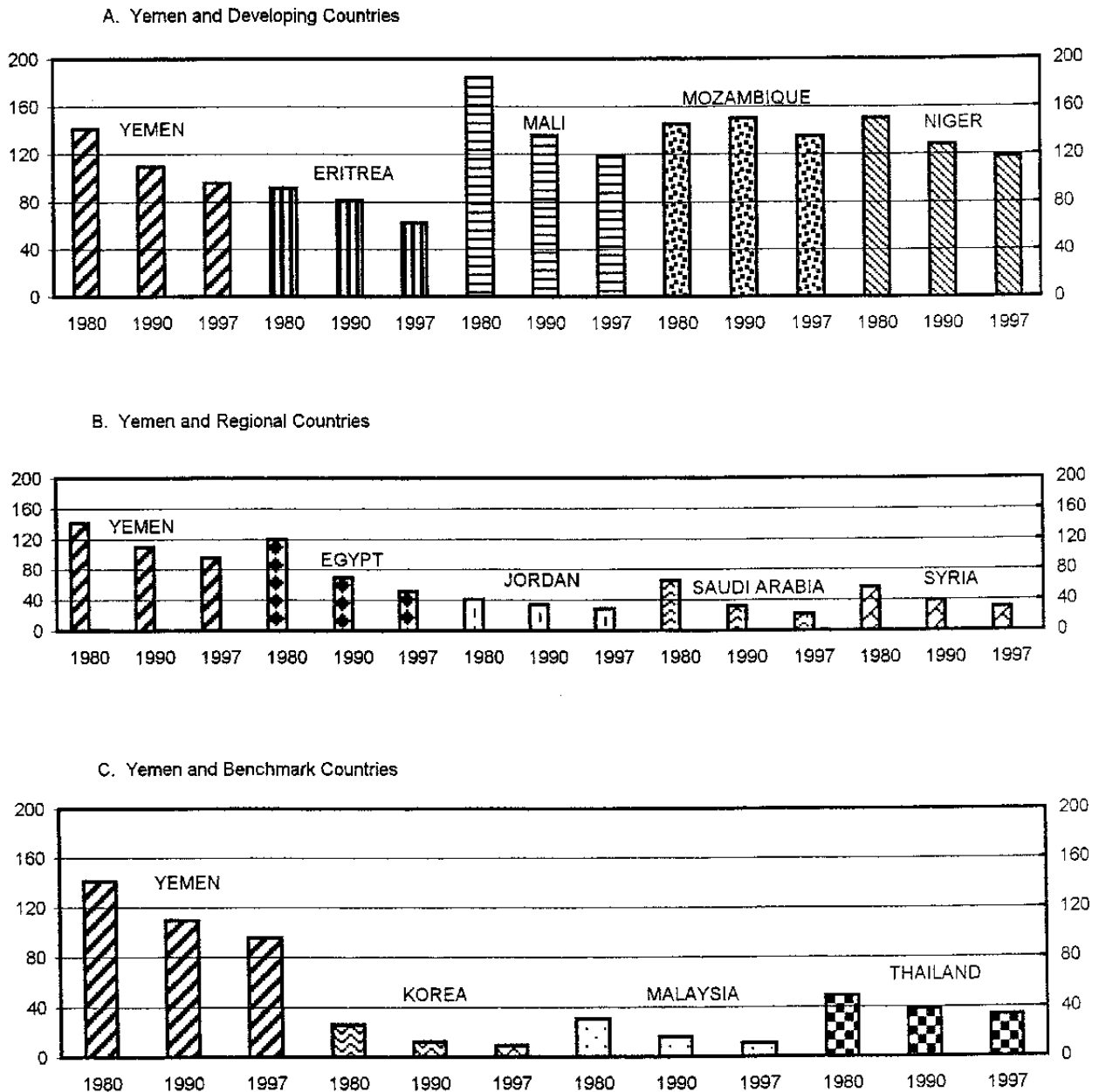
(In years)



Source: World Development Indicators, World Bank.

Chart 21. Republic of Yemen: Comparison with Selected Countries:  
Infant Mortality Rate

(Per thousand of live births)

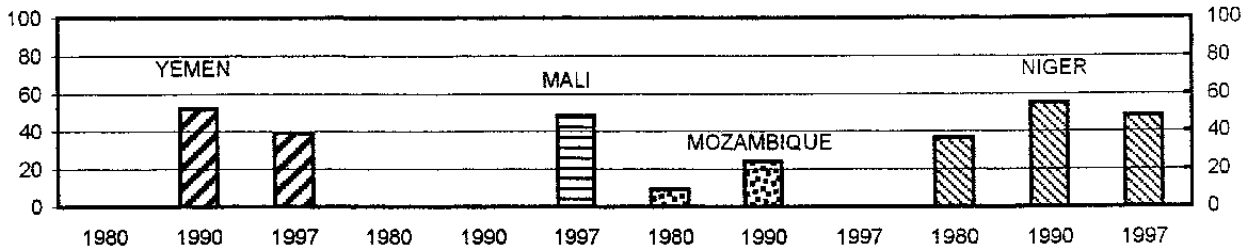


Source: World Development Indicators, World Bank.

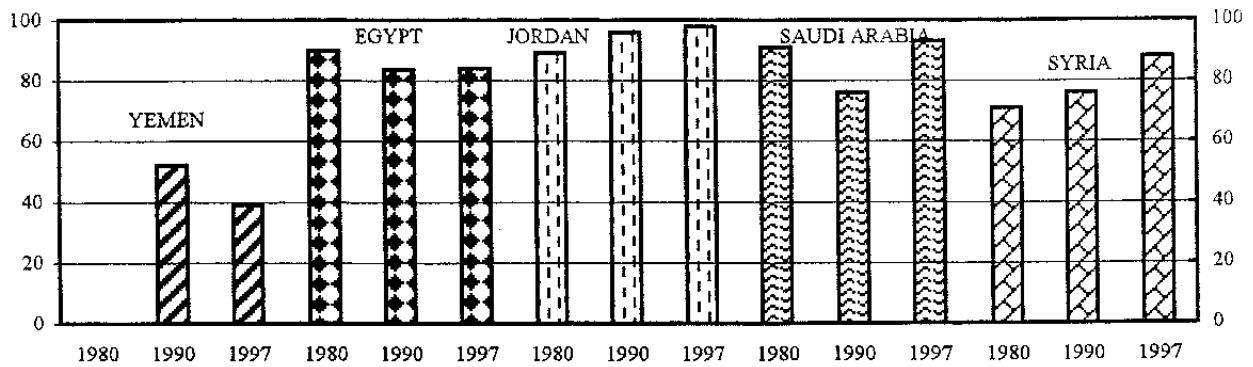
Chart 22: Republic of Yemen: Comparison with Selected Countries:  
Access to Safe Water

(In percent of population)

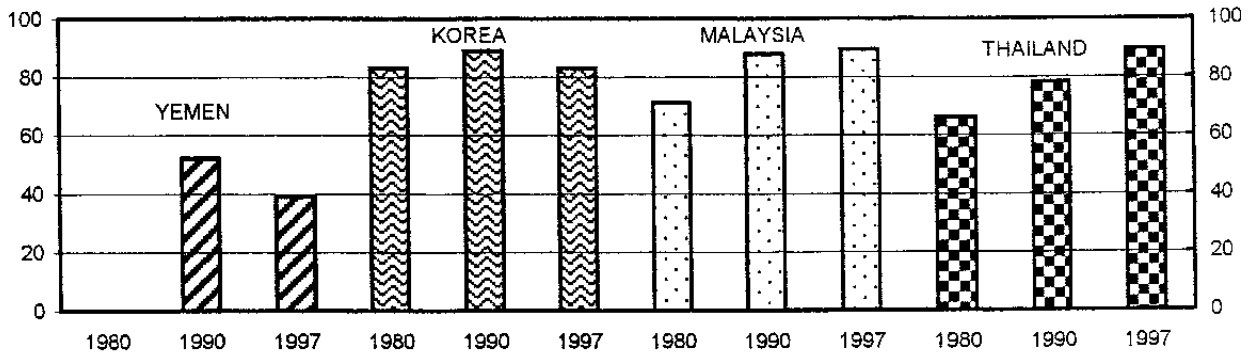
A. Yemen and Developing Countries



B. Yemen and Regional Countries



C. Yemen and Benchmark Countries



Source: World Development Indicators, World Bank.

227. Expenditure inequality in Yemen reflects poverty patterns. Spending by the poor was only about 6 percent of total private spending in 1992, while that of the richest quintile was nearly half of that total. The picture improved a little by 1998, as the results of the latest Household Budget Survey (HBS) indicated that spending by the 30 percent of Yemenis with the lowest level of expenditure (hence the absolute poor) was about 13 percent of total private spending.<sup>112</sup> However the richest quintile still captures a large share, about 41 percent of that total. Moreover, Yemen also suffers from growing income inequality: the Gini coefficient for income distribution increased from 0.39 in 1992 to 0.43 in 1998.

228. As in many poor countries, poverty in Yemen is more associated with low wages than with unemployment. Indeed, 80 percent of the poor are employed; given that the labor force is about 25 percent of the population this suggests that the percentage of employment of the nonpoor is lower. While the poor enter the labor force earlier than the nonpoor and remain employed at ages exceeding the ones for nonpoor individuals, both groups have the same labor participation rate, which indicates that poor people do not suffer from a larger incidence of unemployment than nonpoor individuals. The percentage of the poor employed in the private sector (about 80 percent) is somewhat higher than that of the nonpoor (about 73 percent).

229. Poverty in Yemen is mainly a rural phenomenon: in 1995, 3.8 percent of the urban population lived in poverty, compared with 16.7 percent in rural areas. This is not surprising as, based on anecdotal evidence, living conditions in terms of access to education, health services, and sanitation seem to be much worse in rural areas than in urban areas.<sup>113</sup> In particular, there seem to be more schools and health facilities per capita in larger agglomerations than there are in small villages. Access to safe water in rural areas is only available for 19 percent of the population, compared with 74 percent in urban areas. The corresponding rural/urban difference in access to safe water is far less significant for other developing countries (50 percent and 61 percent, respectively, in 1993) and for the MENA region (70 percent and 98 percent, respectively, in 1990).

230. Another striking characteristic of poverty in Yemen, emphasized by UNDP and World Bank assessments, is its unbalanced distribution across governorates. About 43 percent of the poor live in three governorates—Sana'a, Taiz, and Ibb—and an additional 28 percent live in Dhamar, Hodeidah, and Hadramout. Four population groups in particular are distinguished as suffering from high poverty levels: Somali refugees of Yemeni descent, foreign refugees living in United Nations High Commissioner for Refugees (UNHCR)

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<sup>112</sup> In 1998, the UNDP estimated the food poverty gap—the difference in spending on food between poor and nonpoor—at US\$160 million per annum, or 2 percent of GDP in 1998.

<sup>113</sup> The large migration of the population from rural to urban areas could be due not only to job hunting but also to a search for better living conditions. Hashem (1996) reports that 13 percent of the population moved from rural to urban areas between 1992 and 1994.

camps, dispossessed farmers in the south who were not compensated after the government decreed the return of the land to its original owners and the *Akhdam*, an ethnic group constituting the lowest social class in Yemen.<sup>114</sup>

### **Main causes of poverty in Yemen**

231. A number of country-specific characteristics contribute to poverty in Yemen's society. The rough desert-like climate in certain parts of the country and the general scarcity of water prevent the use of a large part of the land for agricultural production and severely limits productivity. On the demographic level, population growth exceeded 3 percent per annum for most of the 1990s, partly due to a high fertility rate, which contributes to large household sizes and high dependency ratios. Coupled with a low labor participation rate, this prohibits the achievement of satisfactory productivity levels and keeps income per capita depressed.

232. Two major shocks contributed to economic decline in the 1990s. First, the war in the Gulf led to the repatriation of about three-quarters of a million Yemenis without most of their possessions. For a society geared towards migration and dependent on workers located abroad for the provision of essential financial transfers to the benefit of the economy, there was a two-pronged negative effect. A substantial cut in national income resulted from the loss of remittances, and a significant increase in unemployment at home was brought about by the closure of regional labor markets to Yemeni workers; both factors reduced per capita income and led to deterioration in the dependency ratio. The costly civil war that broke out in 1994 was another cause for the decline in living standards, and the resulting economic losses accentuated the level of poverty.

233. However, as discussed before, inadequate economic policies also played an important role in maintaining high poverty levels. Many distortions in the Yemeni economy are being addressed only since the implementation of the adjustment program in 1995. High rates of inflation, a multiple exchange rate system, and extensive protectionist policies depressed real income, distorted rural-urban terms of trade by creating a bias against promotion of exports in agriculture, and led to inadequate access to credit in the early 1990s.

234. The inadequate design and composition of government expenditure accentuated the inefficiencies that contribute to the persistence of poverty in Yemen. Unification in 1990 resulted in a bloated and inefficient civil service, with wages and benefits absorbing a large share of public expenditure. Current expenses are large relative to spending on core activities such as infrastructure build-up and social programs. Moreover, as explained earlier, the government spends large amounts in generalized subsidies, intensifying economic

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<sup>114</sup> The 1996 World Bank Poverty Assessment Report (PAR) estimated the numbers for the first three groups as follows: 100,000 Somali refugees, 10,000 foreign refugees in UNHCF camps, and 100,000 dispossessed farmers in southern Yemen.

distortions, and not necessarily benefiting the most needy.<sup>115</sup> Even more direct transfer policies such as the provision of cash to the most deprived face difficulties because of problems in asserting the claims of the beneficiaries, which causes leaks to the nonpoor.

235. Poorly devised implementation of anti-poverty government programs adds to the negative effects created by inadequate budgeting. For example, the World Bank PAR highlights the mismatch between the population size or incidence of poverty and the share of education budget received across regions; some poor areas remotely located are virtually ignored by such programs, which end up being implemented in areas with relatively less needy people. A second important problem resides in the low quality of services offered by these programs, which translates into low rates of success. Indeed, regarding health for example, although the level of health expenditure per capita was comparable in Yemen and Egypt in the mid-1990s (US\$39 in 1994 in Yemen, compared to US\$38 in 1995 in Egypt), the latter reported much better statistics regarding life expectancy (seven years higher), infant mortality (47 percent lower), and immunization rates (about 65 percent to 80 percent higher). In the context of education programs, low quality takes the form of unsatisfactory facilities because of the lack of water, electricity, and sanitation, and because of the low level of education provided. This translates into high repetition rates in classes and double length of time for the completion of primary education compared to what is usually needed. Although the GNP share of public spending on education in the mid-1990s was higher in Yemen than the average for MENA (6.1 percent of GNP in Yemen compared with 5.2 percent in MENA), the adult illiteracy rate in Yemen is higher, at 47.3 percent compared with 37.8 percent. The high illiteracy rate in Yemen is in great part due to very low female literacy; the World Bank PAR states that female education is hampered in great part by the absence of adequate facilities in schools to host female students (such as special toilets, separate classrooms, or flexible hours to accommodate female child labor within families).

#### **D. Saving, Investment, and External Vulnerability**

236. Data on private investment are highly unreliable and involve mostly estimation rather than recorded data; savings are estimated as residual using GDP and external sector estimates. Accordingly, any analysis of savings and investments can at best hope to highlight broad trends. On this basis, over the period 1990–99 gross fixed capital formations picked up from 12.3 percent of GDP in 1990 to 18.6 percent in 1999 (Table 15). There was some shift in the composition of investment (Chart 23): as a share of GDP, private sector investment remained unchanged, on average, when compared across the two halves of the decade, while government investment rose. The latter reflected the improving fiscal situation, efforts at reconstruction after the 1994 civil war, and a growing focus on the state as provider of infrastructure and social services.

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<sup>115</sup> The World Bank PAR mentions that less than 17 percent of government subsidies benefited the poorest 20 percent of the population in 1995.

Table 15. Republic of Yemen: Phasing of Macroeconomic Adjustment, 1990-99 1/

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
	(Change in percent)									
Real GDP at market prices 1/	...	-2.1	4.8	0.4	-3.6	7.9	2.9	8.1	5.3	3.8
Real non-oil GDP 1/	...	-1.5	8.0	-0.1	-9.6	5.5	0.5	8.2	5.9	3.2
Inflation	...	44.9	50.6	54.8	71.3	62.5	40.0	4.6	11.5	8.0
	(In percent of GDP)									
Consumption	96.3	98.9	97.2	103.3	82.1	85.8	85.3	85.3	96.6	88.2
Public sector	19.5	21.1	21.3	20.7	21.2	16.0	15.0	15.8	17.2	16.9
Private sector	76.9	77.8	75.9	82.6	60.9	69.9	70.4	69.5	79.5	71.4
Gross investment	14.6	16.8	22.4	20.0	20.5	20.7	20.8	23.7	21.1	18.6
Change in stock	2.3	2.6	2.0	2.1	1.0	0.4	0.4	0.4	0.0	0.0
Gross fixed capital formation	12.3	14.2	20.4	17.9	19.4	20.3	20.4	23.3	21.1	18.6
Public sector	8.7	4.0	3.4	3.5	2.6	3.1	6.6	6.8	6.1	5.6
Private sector	3.6	10.2	17.0	14.4	16.9	17.2	13.8	16.5	15.0	13.0
Domestic absorption	110.9	115.7	119.5	123.4	102.6	106.5	106.1	109.0	117.8	106.8
Net exports of goods and nonfactor services 1/	-10.9	-15.7	-19.5	-23.4	-2.6	-6.5	-6.1	-9.0	-17.8	-6.8
Gross domestic product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Net factor income 1/	-4.8	-7.1	-6.2	-6.2	-8.9	-7.7	-10.6	-9.6	-5.7	-9.6
Net current transfers 1/	12.7	12.1	12.5	13.4	17.1	17.0	18.4	19.0	19.9	19.2
Gross national disposable income	107.8	105.0	106.3	107.3	108.2	109.3	107.8	109.5	114.2	109.7
Gross national savings	11.5	6.1	9.1	4.0	26.1	23.5	22.5	24.2	17.6	21.5
Public sector	-3.7	-3.0	-9.4	-11.1	-13.6	-3.0	2.7	4.9	-0.2	5.3
Private sector	15.2	9.1	18.5	15.1	39.7	26.5	19.8	19.3	17.7	16.1
Total fiscal revenue and grants	19.8	23.1	16.1	14.9	12.8	19.5	35.9	32.8	26.4	31.8
Fiscal revenue	18.7	22.0	15.8	14.7	12.6	19.2	35.6	32.2	26.0	30.9
Oil revenue and payment for past excess cost recovery	7.5	9.4	4.7	4.2	3.7	9.3	25.1	22.1	13.8	19.8
Non-oil revenue	11.2	12.6	11.1	10.5	8.9	9.8	10.5	10.1	12.2	11.1
Grants	1.1	1.0	0.3	0.1	0.3	0.3	0.3	0.6	0.4	0.9
	(In percent of GDP)									
Total fiscal expenditures	32.3	30.1	28.9	29.5	29.0	25.6	39.8	34.7	32.7	32.1

Table 15. Republic of Yemen: Phasing of Macroeconomic Adjustment, 1990-99 1/

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Current expenditure	23.6	26.1	25.5	26.0	26.4	22.5	33.2	27.9	26.6	26.5
Development expenditure	8.7	4.0	3.4	3.5	2.6	3.1	6.6	6.8	6.1	5.6
Overall fiscal balance (cash basis)	-11.7	-5.6	-11.7	-13.9	-15.7	-5.2	0.6	-1.8	-7.9	-0.4
Foreign financing (net)	2.7	1.6	0.2	0.2	0.1	-0.2	0.4	0.3	1.2	2.3
Domestic financing (net)	8.8	4.4	11.8	19.7	15.7	5.3	-1.1	1.5	6.7	-2.3
External trade balance	-3.6	-8.8	-9.7	-11.9	4.6	-0.2	-0.5	-2.0	-11.5	-0.4
Exports, f.o.b.	14.8	15.0	13.3	15.1	28.0	29.9	35.2	34.5	23.8	36.1
Oil and oil products	13.9	14.4	11.7	13.1	26.0	28.9	34.0	32.5	21.7	34.0
Non-oil	0.8	0.6	1.6	2.0	2.0	1.1	1.2	2.0	2.1	2.0
Imports	-18.4	-23.8	-22.9	-26.9	-23.4	-30.1	-35.7	-36.5	-35.4	-35.7
Total current account balance	-3.1	-10.7	-13.2	-16.1	5.6	2.8	1.7	0.3	-3.7	2.9
Memorandum items:										
Debt service										
(as share of exports of goods and services, obligation basis)	46.7	91.3	89.1	80.8	46.8	42.1	31.9	12.6	17.0	10.5
Gross official reserves (in months of imports)	2.8	4.2	2.2	0.9	2.9	3.1	4.6	5.3	4.2	6.0
Total subsidies (implicit and explicit in percent of GDP)	20.2	10.0	15.2	17.6	18.4	8.9	13.5	7.7	2.2	2.5
Real per-capita consumption (1996=100)	335.4	271.8	217.1	169.8	97.6	104.9	100.0	112.4	110.8	112.7
Real per-capita private consumption (1996=100)	438.7	350.6	278.0	222.5	87.9	103.6	100.0	111.1	110.6	110.6
Real per-capita GNDI (1996=100)	297.2	228.4	188.0	139.5	101.8	105.8	100.0	114.1	103.1	110.9
Incremental capital output ratio (ICOR)	...	-8.0	4.6	50.1	-5.6	2.6	7.1	2.9	4.0	4.9
Terms of trade	122.3	113.0	107.4	91.8	85.5	85.3	100.0	100.7	69.5	114.1
Real effective exchange rate	...	...	...	...	...	76.2	100.0	109.7	119.5	107.1

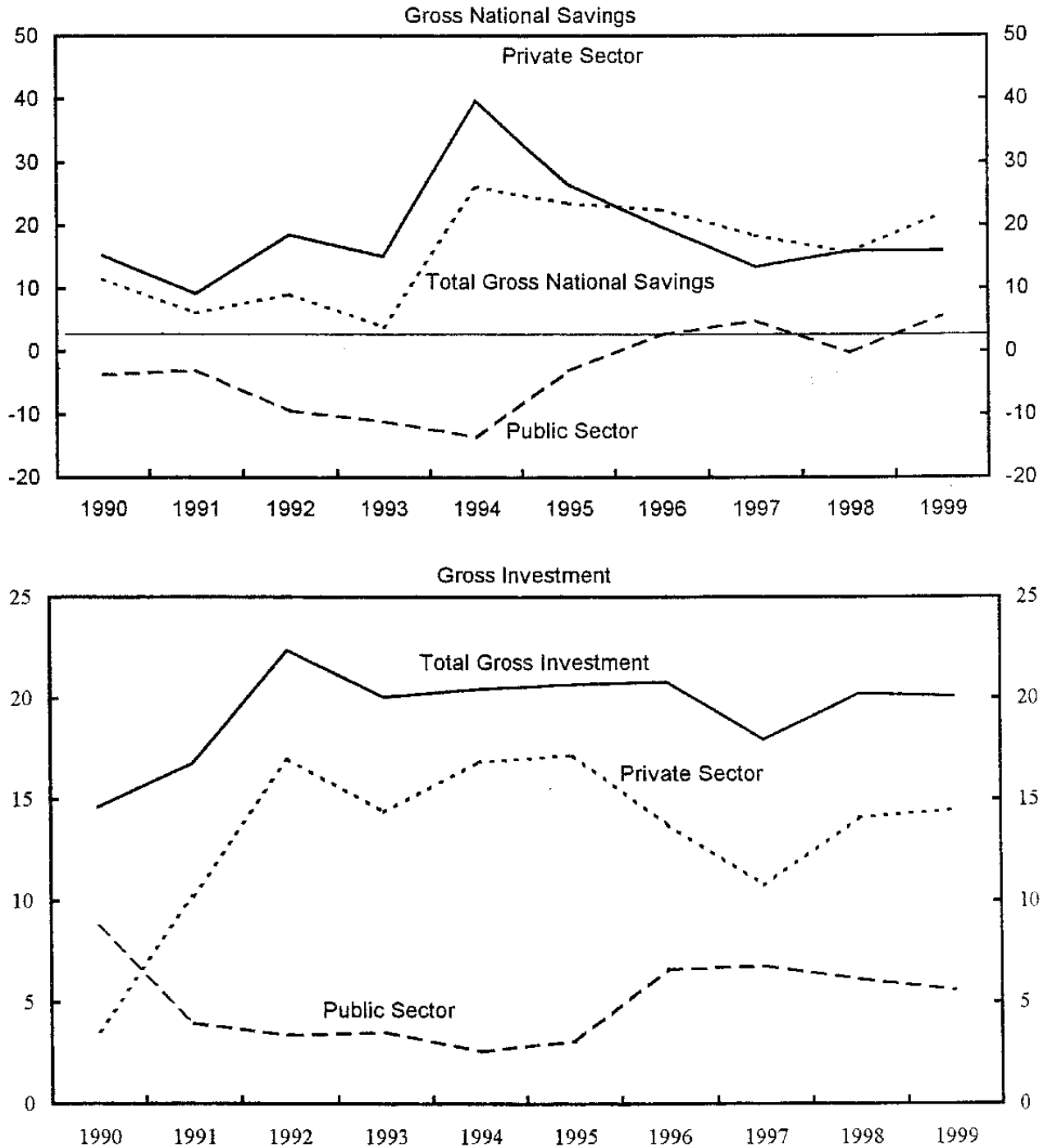
Sources: Yemeni authorities; and staff estimates.

1/ For 1990-96, a weighted exchange rate based on the official and parallel rates was used to convert external transactions into Yemeni rials, following the methodology set out in SNA 1993. This allows to adjust for the implicit taxes (subsidies) involved in export transactions undertaken at the more appreciated (depreciated) rate and in import transactions undertaken at the more depreciated (appreciated) rate.



Chart 23. Republic of Yemen: Saving and Investment, 1990-99

(In percent of GDP)



Sources: Yemen authorities; and IMF staff estimates.

237. During the period 1991–94, the relatively low level of private investment likely reflected the macroeconomic instability and uncertainty associated with very high rates of inflation, large fiscal deficits crowding out bank credit to the private sector, multiple exchange rates, external shocks, political instability, and deep-rooted weaknesses in the investment environment.<sup>116 117</sup> However, the stagnation in private investment, around the level of 15 percent of GDP on average in pre- and post- reform periods appears somewhat difficult to explain. Macroeconomic stabilization, price liberalization, removal of trade and exchange restrictions, and other structural reform efforts that aimed at facilitating and encouraging private investment should have significantly improved the investment climate after 1995 and should have led to a significant increase in the GDP share of private investment. Yet the more deep-rooted obstacles to investment were hardly addressed and high real interest rates stifled investment projects.

238. In addition, major investments in the oil sector were completed by the mid-1990s; while the data do not permit to separate out oil-related investments, it may well be that non-oil investment ratios rose in the reform period.

239. **Private savings** averaged 19.9 percent of GDP per annum during 1995–99 as against an annual average of 20.6 percent of GDP during 1991–94. While during the period 1991–94, high inflation was disruptive to saving via negative real interest rates and increased difficulty in anticipating real future returns and interest rates, it is striking that the relatively low and stable inflation during the period 1995–99 appears to have been insufficient to stimulate higher levels of private savings. Given the drastic improvement in public savings between the two periods (as detailed in the earlier sections on fiscal policies), in part this may reflect a measure of Ricardian equivalence; but also the presence of liquidity constraints forcing the population to reduce savings in order to meet consumption needs. Indeed, the path of consumption seems to confirm the strong effect of liquidity constraints: real per capita consumption declined dramatically during 1990–95 and improved only marginally during 1996–99; in 1999 real per capita consumption was still below the 1993 level. This decline mainly mirrored the per capita decline in real income in the first half of the 1990s, and the only small per capita growth in more recent years, consistent also with the observed rise in poverty. Finally, with oil revenue accruing largely to the government, private savings had to take place out of non-oil income (including remittances); and as a share of non-oil GDP private savings has been at a respectable 23.2 percent during 1997–99, considerably higher than during 1991–93 (15.4 percent).

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<sup>116</sup> Weaknesses in the investment environment include ineffective commercial courts, poor enforcement of contracts and land ownership rights, lack of understanding and familiarity with commercial law, poor infrastructure, lack of skilled labor, and governance problems in the public administration.

<sup>117</sup> The level of private investment in 1990 is particularly low, probably because of measurement problems associated with the first year of unification.

240. As a result mainly of the sharp improvement in government saving, the **external current account** improved dramatically in the second half of the 1990s, from an average deficit of 9.5 percent of GDP during 1991–94 to a near balance on average during 1995–99 (Table 9). Excluding the civil war period, the difference is even more striking (a narrowing of the deficit by 14 percent on average). As with the movements in fiscal balances, these developments reflect mostly the rise in oil revenues. The surging share of exports in GDP is virtually all due to oil, albeit (from extremely low levels) non-oil exports also doubled as a share of GDP from 1 percent in the early 1990s to 2 percent in recent years. While coffee and fish still account for most non-oil exports, exports of these items are stagnating or declining, and non-oil export growth was largely driven by fruits and vegetables for the regional market. The weak development of non-oil exports is consistent with the observed trend of a real appreciation of the Yemeni rial against partner countries in recent years—and pointing to symptoms of the “Dutch disease” in Yemen. In the same vein, imports grew strongly throughout the decade, doubling their share in GDP from 20 percent in 1990 to 36 percent in 1999. Other components of the current account have been rather stable over the decade—reflecting broad stability in workers’ remittances after the secular decline in the early 1990s, and a disappointing performance of the tourism sector marred by security problems and inadequate infrastructure that have hindered development of a sector with obvious potential to create jobs and foreign exchange earnings (see Annex I for a more detailed account).

241. While underlying the improvement in the external accounts is a growing dependency on oil, and thus vulnerability to oil price and production volatility, recent years have witnessed a reduction in **Yemen’s external financial vulnerability** (Table 16). In particular, through substantial debt relief and a prudent borrowing policy, external debt as share of GDP has declined dramatically; this decline masks an even larger decline of the net present value of debt as new borrowing was largely on concessional terms and debt rescheduling similarly stretched the maturities of existing debt (see Section II.C for details). Accordingly, debt service (on a commitment basis) as a ratio of goods and nonfactor services was brought down to 10 percent in 1999, from eight to nine times that level in the early 1990s. The elimination of the external debt overhang was not bought at the expense of **domestic indebtedness**: government domestic debt was cut, if less dramatically, from more than half of GDP in the early 1990s to a quarter in 1999, even though interest payments as a share of government income remained at about 10 percent—reflecting the phasing out of financial repression as the government increasingly paid market rates for its borrowing. At the same time, the maturity of public domestic debt increased steadily during the reform period. By any measure, the **reserve position** has also greatly strengthened. Since 1996, gross official reserves (net of reserves needed to cover foreign exchange deposits of commercial banks with the central bank) roughly covered reserve money, and by end-1999 more than half of broad money. Since 1995, reserves exceeded the equivalent of three months of imports, often taken as a benchmark for sufficient reserves.

Table 16. Republic of Yemen: Vulnerability Indicators

(In percent unless otherwise indicated)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
External solvency indicators										
Real effective exchange rate (average period, percent change)	...	39.2	42.0	67.7	62.3	-41.0	-42.6	-33.6	8.9	-10.4
Total external debt (in millions of US\$)	9,915.2	10,323.5	10,540.7	10,734.7	10,876.2	11,017.4	11,134.7	5,359.2	5,373.4	5,490.1
(In percent of GDP)	105.7	129.5	127.9	138.5	167.1	170.1	173.2	81.2	85.3	80.4
Short-term external debt (in millions of US\$) 1/	586.0	975.6	922.4	916.4	766.7	747.2	659.0	218.2	225.4	204.5
Debt service ratio										
(Obligations basis, in percent of GNFS exports)	46.7	91.3	89.1	80.8	46.8	42.1	31.9	12.6	17.0	10.5
External liquidity indicators										
Total official own gross foreign reserves (in millions of US\$)	424.0	679.6	322.6	147.4	357.0	525.5	937.4	1,152.2	853.2	1,350.7
In months of imports	2.8	4.2	2.2	0.9	2.9	3.1	4.6	5.3	4.2	6.0
In percent of short-term external debt	72.4	69.7	35.0	16.1	46.6	70.3	142.3	528.1	378.5	660.5
In percent of M0	18.6	44.7	24.8	12.6	32.5	51.7	98.8	118.4	86.5	129.3
In percent of M2	9.9	22.8	12.2	6.5	17.5	26.9	44.1	50.4	36.3	56.9
Public sector solvency indicators										
Government's net domestic debt/GDP	11.7	12.0	12.0	12.0	12.0	50.0	126.9	130.5	141.7	159.7
Government's external debt/GDP	60.7	55.1	54.5	63.4	67.9	46.2	30.9	25.3	32.3	24.2
Total debt service/total revenue 1/ 2/	105.7	129.5	127.9	138.5	167.1	170.1	173.2	81.2	85.3	80.4
Interest payments/total revenue 1/ 2/	40.3	47.6	49.0	50.2	47.1	39.4	39.2	17.3	27.5	22.1
Oil revenue/total revenue 3/	12.0	12.6	11.6	17.7	22.6	7.6	9.3	7.2	14.0	12.7
	37.8	40.8	29.1	28.1	28.7	47.9	69.9	67.4	52.1	62.7
Financial sector indicators										
Net domestic credit (percent change)	18.9	10.1	21.9	40.7	40.7	16.6	-11.7	-5.5	37.5	-13.8
Private sector credit (percent change)	33.1	14.9	15.3	26.0	39.2	35.4	-6.3	53.8	57.7	15.2
Net domestic credit/GDP	63.5	58.9	56.5	64.2	70.4	49.1	30.2	23.5	32.2	22.3
Of which										
Nongovernment credit/GDP	8.8	9.0	7.6	7.1	9.3	7.1	3.5	4.2	6.5	6.0
Nonperforming loans/GDP	...	...	...	...	...	...	21.0	10.2	15.2	17.0
Average maturity of public domestic debt (months)	...	...	...	...	...	1.0	4.7	6.0	7.9	7.2
Treasury bill spread (over U.S. T-bills)	...	...	...	...	...	18.1	19.7	7.8	7.1	7.2
Private credit/total assets of banks	14.7	13.5	12.1	11.3	11.1	13.4	12.5	18.0	25.6	25.8
Share of crude oil exports in total exports	80.7	77.2	65.2	62.0	81.9	82.0	80.7	78.4	71.3	80.8

Source: The Yemeni authorities.

1/ Defined as amortization obligations with maturity of less than one year.

2/ Domestic interest payments are recorded net of central bank profits until 1998.

3/ Includes domestic oil and gas revenue.

4/ Net domestic credit refers to the sum of net credit to government and nongovernment sectors, and excludes other items net.

242. The limited role of financial intermediation also limits the potential risks emanating from the financial sector. Credit as percent of GDP has been declining, reaching 22 percent of GDP in 1999 compared with over 50 percent in the mid-1990s. This decline, however, is mostly due to the strong fiscal situation, as private sector credit remains about 6–7 percent of GDP. However, as discussed earlier, recorded vulnerabilities in the banking sector have been rising in recent years (which likely reflects better reporting and enforcement of prudential regulations rather than a genuine deterioration of portfolios) and the size of nonperforming loans (17 percent of GDP in 1999), while still manageable, points to the importance of the planned reforms in the banking sector. While Yemen has no private credit ratings, and although in the absence of a secondary treasury bill market interest rates may not fully reflect market forces, the declining spread of Yemeni government paper over U.S. treasury bills indicates that in the view of investors inside (and outside) Yemen the progress in macroeconomic stabilization is appreciated and has improved substantially Yemen's creditworthiness.

## **Tourism Sector in Yemen: Problems and Prospects**

The tourism sector is widely seen as a potential source of growth in the non-oil sector. It is also widely recognized that a number of structural impediments—such as security concerns, first and foremost, and lack of infrastructure—constrain the attainment of this potential and would need to be fundamentally addressed before the tourism industry could start making a major contribution to future economic growth and employment.

### **I. SECTOR POTENTIAL**

Yemen has abundant tourism resources and potential for further growth and development. Yemen's ancient history, reflected in its rich and unique culture, has left a wealth of significant archaeological sites and a unique vernacular architecture. Yemen has a mixture of scenery, ranging from desert to verdant valleys to mountain ranges, some 2,000 kilometers of coastline, fringing the Red Sea and the Gulf of Aden, and more than hundred islands. Finally, after centuries of isolation from the rest of the world, Yemen remains one of the last unknown destinations.

In addition to the traditional tourism potential based on the existing historic heritage and scenic attractions, Yemen has significant opportunities for the development of other forms of tourism that are largely yet unknown in Yemen but, which possess increasing market potential. These include: trekking and mountain hiking, mountain biking, beach resort tourism, scuba diving, and eco-tourism, both terrestrial and marine.

### **II. SIZE AND TRENDS**

In general, since unification in 1990, international tourism in Yemen has been on an upward trend with visitor arrivals growing on average by about 5 percent a year (Table I.1 and Chart I.1). The tourism sector suffered major setbacks in 1991, after the Gulf crisis erupted; in 1994, the year of the civil war in Yemen; and in 1999, after the December 1998 kidnapping incident, which turned fatal.

By nationality, Yemen's principal tourism source market is Western Europe (Table I.2), in particular, Germany, France, Italy, and Britain, which to a large extent reflects the contacts established by the existing tour operators. The peak tourism season in Yemen is between October and March. International tourism is mainly concentrated in the governorates of Sana'a, Hadhramout, Al-Jouf, Al-Hodeidah, Marib, and Shabwa.

In 1998, the tourism sector provided jobs, either directly or indirectly, to an estimated 23,000 workers including the hotel industry and related sectors. As tourism activities extend to remote regions, they help provide employment opportunities and increase incomes among the local population. Total foreign exchange revenues from tourism are still relatively small—at about 3 percent of total exports of goods and services, or 18 percent of non-oil exports in recent years—but have been growing on average by 8 percent a year.

Table I.1: Visitor Arrivals and Tourism Revenues

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Visitor arrivals, thousand	51.8	27.3	72.2	69.8	39.9	61.4	74.5	80.5	87.6	57.8
Revenue, US\$ million	40.0	21.0	46.9	54.0	35.0	50.0	55.0	69.0	84.0	48.4

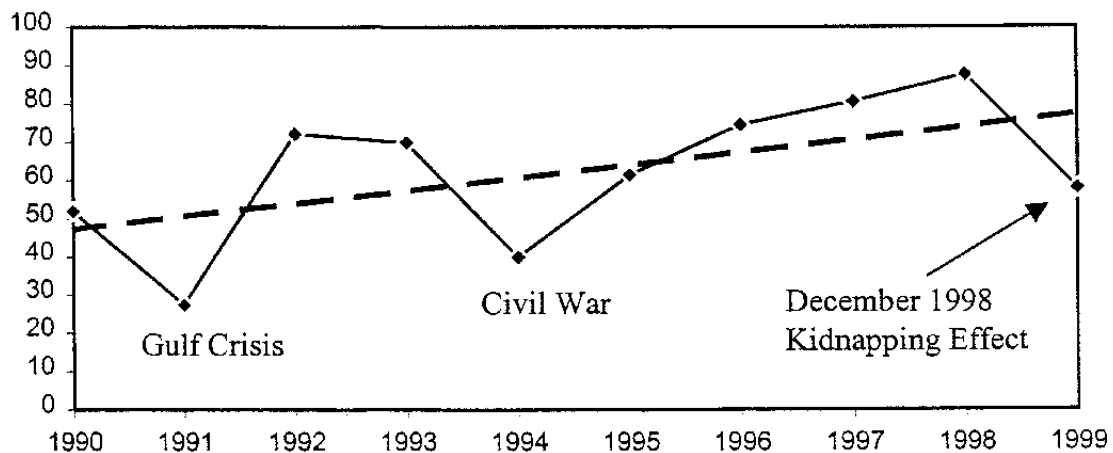
Source: General Tourism Authority

Table I.2: Average Tourism Statistics Since Unification

	Yearly Arrivals, Thousand	Duration of Stay, Nights	Revenue per Stay, US dollars
	63.9	5.4	805
<i>(Of which: By National Regions)</i>			
	Percent Share	Nights	
Europe	65.2	6.1	...
Middle East	17.4	5.4	...
Asia	7.2	5.6	...
The Americas	6.7	6.4	...
Africa	2.4	7.7	...
Australia	1.1	5.1	...

Source: General Tourism Authority.

Chart I.1. Yemen: Visitor Arrivals Since Unification (Thousands)



The Yemeni government believes that developing tourism will help to achieve the following two primary objectives: (a) to enhance long-term economic growth and to improve the living standards of the Yemeni people; and (b) to protect and preserve Yemen's cultural heritage and its natural environment.

### III. STRUCTURAL IMPEDIMENTS

Concerns over peace and security and inadequate infrastructure are the two largest immediate obstacles to the successful development of the tourism industry in Yemen, while the danger of losing the historic and cultural heritage and environmental degradation is a longer-term problem.

#### Security concerns

At present, the image of Yemen in the Western world is relatively poor and, prompted by continuous security-related incidents, the country is often characterized in the Western media as "kidnapping and bombing prone".<sup>1</sup>

Although Yemen was unified in 1990, civil unrest lasted and a 70 days civil war erupted in 1994. There are areas, especially in the North, which are still not under the full control of the central government. Reportedly, there are large numbers of firearms in the country, almost four per head.<sup>2</sup> Illicit weapons, including assault rifles, are openly carried in Yemen. Politically motivated violence persists and security violations occasionally occur in rural areas.<sup>3</sup> Tribal disputes, kidnappings, and shootouts between sheikhs' armed entourage and government security forces are frequent occurrences, including in major cities and in public places such as Sana'a International Airport.

More than 100 kidnappings have occurred throughout Yemen since 1991, mainly conducted by armed tribesmen with specific grievances against the Yemeni government.<sup>4</sup> These kidnappings are normally resolved peacefully, but tribesmen have held some foreigners for extended periods, and the December 1998 incident—which turned fatal when four tourists were executed by a group of Islamic militants—put Yemen on the front page of international news and dealt a severe blow to the nascent tourism industry.

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<sup>1</sup> See *The Economist*, April 10, 1999, page 61.

<sup>2</sup> See *Yemen – A Travel Survival Kit*, Lonely Planet Publications, January 1996, page 87.

<sup>3</sup> See *Business Middle East*, January 1, 2000, The Economist Intelligence Unit, page 11.

<sup>4</sup> See *Yemen - Consular Information Sheet*, September 14, 1999, U.S. Department of State website, <http://travel.state.gov/yemen.html>, and *Business Middle East*, February 1, 1999; The Economist Intelligence Unit, page 10.



Since then, many countries, including the U.S., the U.K., and Japan, have advised their nationals against traveling to Yemen;<sup>5</sup> Germany has reduced the number of accredited Yemeni tourist agencies to two; and the KLM Airlines has suspended its service to Yemen.<sup>6</sup>

### **Inadequate infrastructure**

Addressing security concerns is a necessary but not sufficient condition for the successful development of the tourism sector in Yemen. The lack of adequate infrastructure—such as hotels, roads, catering, and airport services—is another major factor constraining the growth of the tourism sector.

Only a third of roads in Yemen are paved. Poor quality of roads and lack of easy access to tourist attractions necessitate long and uncomfortable journeys by four-wheel drive vehicles, which means that visits to places of interest have to be of relatively short duration.

The existing hotel stock is heavily concentrated in the urban areas of Sana'a, Aden, Hadhramout, and Taiz, with more than 50 percent of first class rooms located in Sana'a. Despite a significant increase in hotel construction since unification, the number of hotel rooms that can be considered as being suited for international tourists who prefer to stay in high-grade properties has remained unchanged and is currently only about 1,100, or less than 15 percent of the total room stock.<sup>7</sup> Consequently, tour operators have already reported a problem of room availability of a suitable standard during the high season and often had to reject big tour group reservations because of accommodation and transportation constraints.<sup>8</sup>

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<sup>5</sup> See *Yemen - Travel Warning*, November 5, 1999, U.S. Department of State website, [http://travel.state.gov/yemen\\_warning.html](http://travel.state.gov/yemen_warning.html).

<sup>6</sup> Preliminary estimates suggest that, as a result, tourist arrivals in 1999 declined by about 35 percent relative to 1998 and tourism foreign exchange receipts stood at less than 60 percent of their 1998 level. The two largest hotels in Sana'a have seen a drop in their occupancy rates below 50 percent, and the Yemenia Airlines was reported to have lost more than US\$2 million in revenues.

<sup>7</sup> Currently, there are about 250 hotel establishments offering some 7,700 rooms.

<sup>8</sup> The potential absorptive capacity of the tourism sector in Yemen is rather limited. According to local businessmen, the existing historic and scenic attractions can potentially accommodate no more than 150 thousand visitors a year. This calls for the need for the tourism sector to be oriented towards low volumes and high yields—that is, to attract the more affluent category of international tourists who are mostly senior citizens in the middle and higher income groups, and require more comfortable accommodation than younger and more adventurous backpackers.

The development of tourism is also constrained by the absence of basic services—such as eating and toilet facilities—and a shortage of potable water supplies both at places of interest and at possible stopover points. Furthermore, there are no tourist information or interpretation centers outside Sana'a, while those available in Sana'a are not up to international standards with tour guides not appropriately trained or licensed to operate.

The situation is compounded by the shortage of trained and experienced personnel and the absence of facilities providing professional training in the services sector. As a result, expatriates often have to be hired, especially in the hotel industry, thus, further hindering the development of the tourism sector.

Finally, airport facilities have limited baggage and passenger handling capacity, partly reflecting Yemenia's monopoly in this area, and could become congested if more than one aircraft is being served.

#### **Threat to historic heritage and natural environment**

At present, regulations that could prevent the destruction of buildings of significant historic and cultural heritage or protect the natural environment are limited and poorly enforced. As a result, there is a real threat to the loss of the historic heritage of Yemen, the very feature that constitutes the principal tourist attraction. According to anecdotal evidence, some 30 percent of "physical" heritage in the countryside has been lost in the past 10 years to unregulated commercial development, and the coastline with significant beach resort potential is being lost to industrial development.<sup>9</sup> Furthermore, the potential for eco-tourism, especially in the coastal areas, is being destroyed as various species—such as sea turtles—are driven to extinction as a result of poor enforcement of the hunting and fishing seasons.

#### **IV. POLICY IMPLICATIONS**

Given the undoubted potential of tourism in Yemen, the foregoing discussion suggests that critical to the future successful development of the tourism sector in Yemen are:

- Guarantee of security and maintenance of a stable political and economic environment as necessary preconditions for investment, both domestic and foreign, in the tourism sector, given the long-term and hence high-risk nature of such investment;
- Investment in essential supporting infrastructure and tourism-related services and facilities;

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<sup>9</sup> The most recent examples of the latter include the proposed Burum Port construction 20 km southwest of Mukalla and a gas pipeline construction through a white sand beach of Bir Ali.

- Provision of training and licensing for both public and private sector personnel involved in tourism to ensure that tourists receive a standard of service consistent with internationally accepted norms;
- Protection and conservation of the historic and cultural heritage and natural environment of the country.

Critical to the attainment of policy objectives for the tourism sector in Yemen is the formation of a public sector institutional structure with well-defined functional responsibilities that would readily facilitate the planning, development, marketing, and regulation of the sector. This would require structural changes and training initiatives in order to make the public sector more effective in carrying out its statutory functions, including collaboration with the private sector.

#### V. GOVERNMENT EFFORTS TO DATE

After the kidnapping incident in December 1998, the government stepped up its effort to address the security problem and shore up the tourism industry. Special courts to try kidnappers were set up, and the death penalty for the offence was introduced.<sup>10</sup> A weapons ban in the capital was issued, and a Special Forces unit to combat terrorism was formed in November 1999.

A new Tourism Law was issued in August 1999, and three new government entities were established—the Tourism Promotion Board, the High Council on Tourism, and the Environmental Council—in addition to the existing government structures in charge of tourism affairs such as the Ministry of Tourism and Culture and the General Tourism Authority.<sup>11</sup>

The Tourism Promotion Board was set up under the umbrella of the Ministry of Tourism and Culture and consists of the representatives of the government, private sector, and media. It is charged with improving the image of Yemen in the Western media as well as increasing the general awareness abroad and at home about tourism in Yemen. It is chaired by the Minister of Tourism and holds weekly meetings to discuss the sector's promotion and development strategy but has no decision-making authority. In addition, the Board undertook to study the experience of Egypt in limiting the fall-out from terrorism on the tourism industry.

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<sup>10</sup> Three kidnappers in the December case, including the group leader, were sentenced to death by the court and have been executed.

<sup>11</sup> According to a local observer, there is currently a lot of duplication and a lack of coordination of responsibilities among the various government and public entities involved in the tourism sector, some of which also appear to be overstaffed and lack the technical capability to carry out their statutory obligations satisfactorily.

The High Council on Tourism is chaired by the Prime Minister and comprises seven other ministers, including the Ministers of Tourism, Information, Industry, Planning, Interior, and Defense. It meets to discuss key policy, investment, and security issues in the area of tourism and has decision-making powers.

The authorities, led in their efforts by the General Tourism Authority, have recently been actively seeking technical assistance and external financing for project implementation, including updating the Master Plan for Tourism Development in Yemen which was sponsored in 1991 by the European Community.

Republic of Yemen: Summary of the Tax System  
as of end-June 2000

Tax	Nature of Tax	Exemptions and Deductions	Rates
<b>1. Taxes on business income</b>			
1.1 Domestic corporations	Levied on net profits. Assessment base encompasses most forms of income, including interest, dividends, and foreign income.	<p><b>Deductions:</b> Operating costs; depreciation allowance; charitable contributions up to 5 percent of net income; and Zakat.</p> <p><b>Exemptions:</b> Income of cooperatives, and agricultural and humanitarian societies, provided trade is limited to members; and income from agriculture, livestock, poultry, fishing, and beekeeping, subject to regulations. Corporations may be granted an exemption if they qualify under the Investment Law (IL); this entails a five-year exemption, but Council of Ministers may grant an additional five years.</p>	<p>35 percent flat rate.</p> <p>Penalties are levied for late payment.</p>
1.2 Foreign corporations	Same as above.	Same as above	35 percent flat rate .
1.3 Proprietorships	Same as domestic corporations.	<p>Deductions: Same as above.</p> <p>Exemption: YRls 36,000.</p>	Personal tax rates, 10 percent – 35 percent.
<b>2. Taxes on personal income</b>			
2.1 Tax on wages and salaries	Levied on total wage income (wages, salaries, bonuses, etc.,) including gratuities in cash or kind.	Deductions: Pension contributions, and work-related costs.	Personal tax rates with a ceiling of 20 percent.
2.1 Tax on wages and salaries	Monthly withholding by the employer from wages of both residents and nonresidents and paid to tax	<p>Exemptions:</p> <p>Monthly exemption: YRls 3,000.</p> <p>exemption not granted for nonresidents.</p>	

Republic of Yemen: Summary of the Tax System  
as of end-June 2000

Tax	Nature of Tax	Exemptions and Deductions	Rates
	authorities during the first 10 days of the following month. Companies with eight or more workers must keep tax records for their employees.	Fully exempted: diplomats; UN experts; pension and severance payments; wages paid to Yemeni agricultural and fishing workers; domestic servants; and income of day laborers.	
2.2 Tax on professional income	Levied on noncommercial and nonindustrial income.	Deductions: Costs deducted according to specified list.	Personal tax rates, 10 percent – 35 percent.
<b>3. Social security and retirement contributions</b>			
3.1 Civil service and public enterprise employees	Paid to General Authority for Insurance and Pensions (GAIP).		12 percent with equal contributions from employees and Government; Government also pays 1 percent for accident insurance.
3.2 Police employees	Paid to separate pension fund.		12 percent with equal contributions from employees and Government.
3.3 Defense employees	Paid to separate pension fund.		12 percent with equal contributions from employees and Government.
3.4 Private sector employees	Paid to separate pension fund.		6 percent employee, 9 percent employer.
<b>4. Taxes on property</b>			
4.1 Real estate income tax	Levied on all net income from leased buildings and land.	Exemptions: Government; religious organizations; local councils; diplomatic housing; and hospitals.	One month's rent (8.33 percent).
4.2 Real estate sales tax	Levied on sales proceeds from land	Deductions: None allowed.	3 percent on sales value.

Republic of Yemen: Summary of the Tax System  
as of end-June 2000

Tax	Nature of Tax	Exemptions and Deductions	Rates
	and buildings.	Exemptions: Transfers through inheritance; donations to religious or charitable organizations; religious organizations; and agricultural land.	
<b>5. Taxes on goods and services</b>			
5.1 General excise taxes	Harmonized taxes are levied on certain domestic and imported goods. The tax applies to the import costs (before the tariff) or at the domestic manufacturer level. For mineral water and soft drinks, tax applies to retail price paid by consumer.		5, 7, 11, 15 percent; 25 percent applies to certain specified transportation vehicles and luxury items.
5.2 Selected excise taxes	Items taxable at manufacture level.		
5.2.2. Tobacco	Levied on domestically produced and domestically trademarked or foreign trademarked cigarettes; imported tobacco, and tobacco products.		For domestically produced cigarettes: 60 percent on domestically-trademarked and 65 percent on foreign-trademarked; 80 percent on imported cigarettes; 60 percent for cigars; 25 percent for imported tobacco.
5.2.3 Taxes on petroleum products	Levied on retail sales price.		Percent Gasoline: 2 Kerosene: 2 Turpentine: 2 Oils: 2 Diesel oil: 2 Liquid gas: 0.5 per cylinder Lubricants: 1

Republic of Yemen: Summary of the Tax System  
as of end-June 2000

Tax	Nature of Tax	Exemptions and Deductions	Rates
5.3 Qat tax	Levied on assessed market value.		25 percent.
<b>6. Customs tariff</b>	Applied to all imports not specifically exempted.	Exemptions may be provided to corporations that qualify under the IL.	Four-band structure with rates of 5, 10, 15, and 30 percent. A single exemption of 70 percent applied to cigarettes and other tobacco products.
<b>7. Other taxes</b>			
7.1 Motor vehicle taxes	Levied on all motorized vehicles operating in Yemen with gasoline or diesel powered engines; levied on purchases of fuel (domestic or imported)	Exemptions: Government vehicles, diplomatic and embassy cars, and emergency vehicles.	YRls 0.25 per litre of gasoline; YRls 0.15 per litre of diesel
7.3 Counselor fees	For Yemeni visas.		According to a specific schedule.
7.4 Passport fee			Fee varies with the type of passport.
7.5 Compulsory military service fee	Levied on Yemenis from exemption or postponement of compulsory national military service.		YRls 86,000 for exemption.



Table 1. Republic of Yemen: Social and Demographic Indicators.

	1995	1997	Selected MENA 1/ 2/
<b>Socio-demographic indicators</b>			
GNP per capita (in U.S. dollars)	260	270	2,070
GNP per capita (PPP, current international dollar)	730	720	4,630
Total population (in millions)	15.3	16.1	280
Population growth rate (in percent) 3/	3.2	3.5	2.1
Total fertility rate	6.7	6.4	3.6
Age dependency ratio (Dependents to working-age population)	1.2	1.1	0.7
Urban population (in percent)	33.6	34.4	58.4
Labor participation rate (In percent of population aged 14-64)	69.3	67.0	57.2
Female labor participation rate (In percent of total population)	27.8	27.9	26.5
<b>Health</b>			
Life expectancy at birth (in years) 3/	53	59	67
Infant mortality rate (per 1,000 live births) 3/	100	98	49
Under five mortality rate (per 1,000 live births)	145	137	63
Maternal mortality rate (per 100,000 live birth)	1,471	...	205
Immunized: DPT, under 12 months (In percent of age group)	53	57	90
Child malnutrition, under 5 years (In percent of age group)	30	29	14
Access to safe water (percent of population)	39	...	85
Access to sanitation (percent of population)	19	...	62
<b>Education</b>			
Adult literacy rate	40	42	62

Sources: Central Statistics Organization, Statistical Year Book; and IBRD, World Development Indicators database.

1/ Algeria, Bahrain, Djibouti, Egypt, Iran, Iraq, Jordan, Lebanon, Libya, Malta, Morocco, Oman, Saudi Arabia, Syria, and Tunisia.

2/ Data for the nearest year to 1997.

3/ Second column data is for 1998.

Table 2. Republic of Yemen: Selected Economic and Financial Indicators, 1994-99

	1994	1995	1996	1997	1998	1999
	(Change in percent)					
<b>Production and prices</b>						
Nominal GDP at market prices	28.4	67.1	43.7	21.5	0.4	24.3
Real GDP at market prices	-3.6	7.9	2.9	8.1	5.3	3.8
Real non-oil GDP	-9.6	5.5	0.5	8.2	5.9	3.2
Real oil GDP	43.7	20.0	13.5	7.5	2.7	6.2
Consumer price index (annual average)	71.3	62.5	40.0	4.6	11.5	8.0
Crude export oil price (weighted average, U.S. dollar per barrel)	15.4	16.9	20.3	18.5	11.6	18.7
	(In percent of GDP)					
<b>Government finance</b>						
Total revenue and grants	12.8	19.5	35.9	32.8	26.4	31.8
Oil revenue	3.7	9.3	25.1	22.1	13.8	19.8
Non-oil revenue	8.9	9.8	10.5	10.1	12.2	11.1
Grants	0.3	0.3	0.3	0.6	0.4	0.9
Total expenditure	29.0	25.6	39.8	34.7	32.7	32.1
Current	26.4	22.5	33.2	27.9	26.6	26.5
Development	2.6	3.1	6.6	6.8	6.1	5.6
Overall balance including grants (cash basis)	-15.7	-5.2	0.6	-1.8	-7.9	-0.4
Overall balance excluding grants (cash basis)	-16.4	-6.4	-4.2	-2.5	-6.7	-1.2
	(12-month change in percent of initial broad money)					
<b>Monetary data</b>						
Broad money	34.7	20.4	8.6	10.7	11.7	13.8
Credit to nongovernment sector	69.0	28.0	-29.4	46.6	54.2	15.0
Benchmark deposit interest rate (percent p.a.)	6.5	20.0	25.0	11.0	15.0	18.0
Velocity (Non-oil GDP/M2)	1.2	1.7	1.9	2.0	2.2	2.1
	(In millions of U.S. dollars)					
<b>External sector</b>						
Exports, f.o.b.	1,824	1,937	2,263	2,274	1,501	2,466
<i>Of which</i>	1,615	1,735	1,976	1,945	1,229	2,131
Crude oil						
Imports, f.o.b.	-1,522	-1,948	-2,294	-2,407	-2,228	-2,440
Services (net)	-475	-411	-370	-470	-398	-489
Private remittances and transfers (net)	1,117	1,104	1,188	1,256	1,254	1,314
Capital account (net)	-641	-876	-397	34	-154	11
Overall balance	-779	-38	-625	116	-463	320
Central bank own gross foreign reserves	357	525	937	1,152	853	1,351
In months of imports 1/	2.9	3.1	4.6	5.3	4.2	6.0
Current account, including grants						
(In percent of GDP)	5.6	2.8	1.7	0.3	-3.7	2.9
Debt service ratios 2/						
Obligation basis	46.8	42.1	31.9	12.6	17.0	10.5
Actual	3.3	6.6	8.7	10.3	14.0	8.3
Official external debt	10,876	11,017	11,135	5,359	5,373	5,490
(In percent of GDP)	167	170	173	81	85	80
Terms of trade (1996=100)	85.5	85.3	100.0	100.7	69.5	114.1
Exchange rate (free market, eop) (YRls/US\$)	101.0	127.1	126.9	130.5	141.7	159.7
Real effective exchange rate (1996=100) 3/	...	76.2	100.0	109.7	119.5	107.1

Sources: Yemeni authorities; and staff estimates.

1/ Gross reserves minus commercial bank foreign exchange deposits held with the central bank. Imports are for the current year and exclude oil and gas sector imports.

2/ Public and publicly guaranteed debt, including central bank foreign liabilities. In percent of exports of goods and services.

3/ INS, based on free market rate.

Table 3. Republic of Yemen: Sectoral Origin of Gross Domestic Product  
at Current Prices, 1994-99

	1994	1995	1996	1997	1998	1999
	(In millions of Yemeni rials)					
Agriculture and forestry	63,342	90,330	108,526	124,750	158,397	167,441
Fishing	5,814	8,832	10,700	13,256	16,110	18,610
Mining and quarrying	858	1,640	2,449	2,506	2,524	2,705
Oil and gas 1/	17,790	69,116	191,273	244,915	137,758	263,309
Manufacturing	39,300	64,287	57,065	65,605	77,191	83,829
Oil refining	2,438	8,645	23,207	26,600	27,769	30,433
Electricity, gas, and water	2,034	3,111	5,334	6,718	7,912	8,401
Construction	10,423	16,867	25,713	37,442	41,977	41,867
Wholesale and retail trade	30,077	49,634	58,918	72,877	87,910	99,807
Restaurants and hotels	2,065	3,375	4,047	5,101	6,152	6,983
Transportation, storage, and communications	44,625	64,618	83,056	104,337	113,219	127,814
Financial institutions	13,868	18,828	16,856	17,437	31,467	33,602
Real estate and business services	7,831	12,149	16,840	21,007	25,045	28,827
Community, social, and personal services	6,933	11,000	12,784	14,536	16,728	18,625
Government services	48,609	65,777	73,963	82,175	96,479	121,982
Private, nonprofit services	196	140	270	304	342	384
Import duties	7,440	16,804	25,997	29,034	29,653	30,994
Less: Imputed bank services charges	-11,364	-16,644	-14,886	-15,703	-20,688	-22,056
Total GDP	292,279	488,509	702,112	852,897	855,945	1,063,557
Of which						
Non-oil GDP	274,489	419,393	510,839	607,982	718,187	800,247
	(In percent of GDP)					
Agriculture and forestry	21.7	18.5	15.5	14.6	18.5	15.7
Fishing	2.0	1.8	1.5	1.6	1.9	1.7
Mining and quarrying	0.3	0.3	0.3	0.3	0.3	0.3
Oil and gas	6.1	14.1	27.2	28.7	16.1	24.8
Manufacturing	13.4	13.2	8.1	7.7	9.0	7.9
Oil refining	0.8	1.8	3.3	3.1	3.2	2.9
Electricity, gas, and water	0.7	0.6	0.8	0.8	0.9	0.8
Construction	3.6	3.5	3.7	4.4	4.9	3.9
Wholesale and retail trade	10.3	10.2	8.4	8.5	10.3	9.4
Restaurants and hotels	0.7	0.7	0.6	0.6	0.7	0.7
Transportation, storage, and communications	15.3	13.2	11.8	12.2	13.2	12.0
Financial institutions	4.7	3.9	2.4	2.0	3.7	3.2
Real estate and business services	2.7	2.5	2.4	2.5	2.9	2.7
Community, social, and personal services	2.4	2.3	1.8	1.7	2.0	1.8
Government services	16.6	13.5	10.5	9.6	11.3	11.5
Non-oil GDP	93.9	85.9	72.8	71.3	83.9	75.2

Source: Central Statistics Organization.

1/ The large increases in oil and gas GDP in 1995 and 1996 are in large part due to exchange rate effects. The official exchange rate increased from YRIs 12/US\$ in 1994 to YRIs 40.5/US\$ in 1995 and YRIs 114 /US\$ in 1996.

Table 4. Republic of Yemen: Use of Resources at Current Prices, 1994-99

(In million of Yemeni rials)

	1994	1995	1996	1997	1998	1999
Consumption	240,105	419,296	599,098	727,558	827,233	938,112
Public sector 1/	61,976	78,033	105,161	134,623	146,820	179,257
Private sector	178,129	341,263	493,937	592,935	680,413	758,855
Gross investment	59,785	101,057	146,155	202,029	180,976	197,758
Gross fixed capital formation	56,773	99,025	143,207	198,543	180,976	197,758
Public sector	7,498	15,048	46,529	57,815	52,584	59,496
Private sector	49,275	83,977	96,678	140,728	128,392	138,262
<i>Of which</i>						
Oil companies	14,678	15,307	18,598	20,106	16,850	23,246
Change in stocks	3,012	2,032	2,948	3,486	0	0
Domestic absorption	299,890	520,352	745,253	929,587	1,008,209	1,135,870
Net exports of goods and nonfactor services	-7,611	-31,843	-43,141	-76,690	-152,264	-72,318
GDP at market prices	292,279	488,509	702,112	852,897	855,945	1,063,557
Net factor income 2/	-25,994	-37,682	-74,414	-81,535	-48,813	-101,968
Gross national product (GNP)	266,285	450,827	627,698	771,362	807,132	961,589
Net current transfers 2/ 3/	50,019	83,278	129,212	162,350	170,340	204,675
Gross national disposable income (GNDI)	316,304	534,105	756,909	933,712	977,473	1,166,264
Gross domestic saving	52,174	69,213	103,014	125,339	28,712	125,445
Gross national savings from disposable income	76,199	114,810	157,812	206,154	150,239	228,152
Public sector national savings 5/	-39,706	-14,696	18,834	41,391	-1,537	56,877
Private sector national savings 5/	115,905	129,506	138,977	164,763	151,776	171,275
	(In percent of GDP)					
Consumption	82.1	85.8	85.3	85.3	96.6	88.2
Public sector	21.2	16.0	15.0	15.8	17.2	16.9
Private sector	60.9	69.9	70.4	69.5	79.5	71.4
Gross investment	20.5	20.7	20.8	23.7	21.1	18.6
Gross fixed capital formation	19.4	20.3	20.4	23.3	21.1	18.6
Public sector	2.6	3.1	6.6	6.8	6.1	5.6
Private sector	16.9	17.2	13.8	16.5	15.0	13.0
Change in stocks	1.0	0.4	0.4	0.4	0.0	0.0
Domestic absorption	102.6	106.5	106.1	109.0	117.8	106.8
Net exports of goods and nonfactor services	-2.6	-6.5	-6.1	-9.0	-17.8	-6.8
Net factor income	-8.9	-7.7	-10.6	-9.6	-5.7	-9.6
Gross national product	91.1	92.3	89.4	90.4	94.3	90.4
Net current transfers	17.1	17.0	18.4	19.0	19.9	19.2
Gross national disposable income	108.2	109.3	107.8	109.5	114.2	109.7
Gross domestic saving	17.9	14.2	14.7	14.7	3.4	11.8
Gross national savings from disposable income	26.1	23.5	22.5	24.2	17.6	21.5
Public sector national savings 5/	-13.6	-3.0	2.7	4.9	-0.2	5.3
Private sector national savings 5/	39.7	26.5	19.8	19.3	17.7	16.1

Sources: Yemeni authorities; and Fund staff estimates.

1/ Uses data from the fiscal accounts.

2/ Utilizes balance of payments data.

3/ Includes workers remittances.

4/ Equivalent to total budget revenue.

5/ The large increases in public sector savings and declines in private sector savings in 1995-96 are attributable largely to the effects of exchange rate depreciations and world prices increases.

Table 5. Republic of Yemen: Sectoral Origin of Gross Domestic Product  
at Constant Prices, 1994-99

	1994	1995	1996	1997	1998	1999
(In millions of 1990 Yemeni rials)						
Agriculture and forestry	33,365	35,688	36,158	39,075	44,497	44,375
Fishing	688	722	930	1,267	1,381	1,505
Mining and quarrying	312	345	396	403	364	368
Oil and gas	20,156	24,197	27,469	29,542	30,326	32,217
Manufacturing	10,449	13,334	13,524	13,682	14,438	14,518
Oil refining	2,322	2,470	2,376	2,385	2,233	2,266
Electricity, gas, and water	1,552	1,763	1,979	2,018	2,066	2,215
Construction	3,373	4,206	5,092	6,734	6,771	6,371
Wholesale and retail trade	8,452	9,764	10,563	11,263	12,185	12,929
Restaurants and hotels	408	467	506	563	609	646
Transportation, storage, and communications	14,379	13,973	12,016	13,998	13,623	14,373
Financial institutions	3,616	3,289	2,495	2,469	3,996	3,988
Real estate and business services	4,117	4,404	4,598	4,953	5,296	5,697
Community, social, and personal services	2,364	2,395	2,573	2,771	2,860	2,976
Government services	14,135	12,249	10,588	11,157	11,748	13,893
Private, nonprofit services	57	65	69	73	67	76
Import duties	4,831	4,681	5,450	5,387	4,378	4,237
Less: Imputed bank services charges	-3,303	-3,100	-2,028	-2,088	-3,496	-3,490
Total GDP at market prices,	121,273	130,912	134,754	145,652	153,342	159,160
Of which						
non-oil GDP	101,117	106,715	107,285	116,110	123,016	126,943
(Changes in percent)						
Agriculture and forestry	-3.3	7.0	1.3	8.1	13.9	-0.3
Fishing	-7.3	4.9	28.8	36.2	9.0	9.0
Mining and quarrying	-3.1	10.6	14.8	1.8	-9.7	1.1
Oil and gas	43.7	20.0	13.5	7.5	2.7	6.2
Manufacturing	-4.4	27.6	1.4	1.2	5.5	0.6
Oil refining	-9.5	6.4	-3.8	0.4	-6.4	1.5
Electricity, gas, and water	-10.3	13.6	12.3	2.0	2.4	7.2
Construction	-18.9	24.7	21.1	32.2	0.5	-5.9
Wholesale and retail trade	-13.2	15.5	8.2	6.6	8.2	6.1
Restaurants and hotels	-13.6	14.5	8.4	11.3	8.2	6.1
Transportation, storage, and communications	-19.2	-2.8	-14.0	16.5	-2.7	5.5
Financial institutions	8.6	-9.0	-24.1	-1.0	61.8	-0.2
Real estate and business services	6.2	7.0	4.4	7.7	6.9	7.6
Community, social, and personal services	4.5	1.3	7.4	7.7	3.2	4.1
Government services	-18.4	-13.3	-13.6	5.4	5.3	18.3
GDP	-3.6	7.9	2.9	8.1	5.3	3.8
Non-oil GDP	-9.6	5.5	0.5	8.2	5.9	3.2

Sources: Central Statistics Organization; and Central Bank of Yemen.

Table 6. Republic of Yemen: Distribution of Employment (Age 15 Years and Over) by Economic Activity 1/

Activity	1994		1998		1999	
	Thousand	Percent of Total Employed	Thousand	Percent of Total Employed	Thousand	Percent of Total Employed
Private sector						
Agriculture forestry and fishing	1,667	52.3	1,928	49.2	1,996	48.5
Mining and quarrying	10	0.3	13	0.3	13	0.3
Manufacturing	131	4.1	188	4.8	206	5.0
Electricity, gas, and water	14	0.4	21	0.5	21	0.5
Construction	217	6.8	341	8.7	382	9.3
Trade, restaurants, and hotels	332	10.4	415	10.6	440	10.7
Transport, storage, and communication	150	4.7	196	5.0	210	5.1
Finance, insurance, and real estate	35	1.1	47	1.2	49	1.2
Social and community services	224	7.0	365	9.3	412	10.0
Public administration	410	12.9	405	10.3	389	9.5
Total employment	3,188	100.0	3,919	100.0	4,119	100.0

Source: Ministry of Planning.

1/ Data for 1994 are based on the general population census of that year; 1998 and 1999 data based on Ministry of Planning estimates.

Table 7. Republic of Yemen: Distribution of Employment (Age 10 Years or Over)  
by Sectors in Urban and Rural Areas, 1998

(In percent; unless otherwise specified)

Sector	Urban			Rural			Total Employment		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Government	38.7	58.3	41.2	14.5	1.3	10.9	19.7	6.8	16.5
Administration	29.9	49.3	32.4	12.6	1.2	9.4	16.3	5.8	13.7
Other	8.8	9.0	8.8	2.0	0.2	1.5	3.5	1.0	2.9
Private sector	59.5	39.7	57.0	84.4	97.7	88.0	79.0	92.1	82.3
National	58.8	38.3	56.2	83.9	97.6	87.7	78.6	91.9	81.9
Foreign	0.7	1.4	0.8	0.4	0.1	0.3	0.5	0.2	0.4
Mixed	0.6	0.7	0.6	0.2	0.0	0.2	0.3	0.1	0.2
Cooperative	0.4	0.4	0.4	0.1	0.2	0.2	0.2	0.2	0.2
Other	0.9	1.0	0.9	0.8	0.7	0.8	0.8	0.8	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total (thousand)	669.4	99.3	768.7	2,453.7	931.0	3,384.7	3,123.1	1,030.3	4,153.4

Source: Central Statistics Organization, 1998 Household Expenditure Survey.

Table 8. Republic of Yemen: Household Income and Expenditure, 1998

(Yemeni Rials, unless otherwise specified)

	Urban	Rural	Total
Average household income	36,988	26,654	29,035
Average household member income	5,024	3,763	4,096
Average household expenditure on food	20,727	19,818	20,026
Average household expenditure on nonfood	17,624	9,562	11,421
Ratio of household income to expenditure (in percent)	96.4	90.7	92.3
Memorandum items:			
Average household size (persons)	7.11	7.08	7.09
Illiteracy rate (in percent)	27.47	56.57	49.47
Median age of population (in years)	15.9	14.2	14.6

Source: Central Statistics Organization, 1998 Household Expenditure Survey.



Table 9. Republic of Yemen: Distribution of Population (10 Years and Over) by Education Level, Region, and Sex

(In percent of total)

	1994					1998				
	Urban	Rural	Male	Female	Total	Urban	Rural	Male	Female	Total
Illiterate	34.2	63.5	36.7	76.3	56.0	27.5	56.6	28.2	70.9	49.5
Read and write	33.4	24.5	36.9	16.1	26.8	38.2	30.3	44.4	20.0	32.2
Primary	9.2	5.4	9.4	3.1	6.3	5.4	2.8	4.5	2.3	3.4
Combined level	2.5	0.8	1.6	0.8	1.2	1.5	0.9	1.2	0.9	1.0
Preparatory	8.2	3.5	7.4	1.8	4.7	10.9	5.2	10.2	3.0	6.6
Pre-secondary diploma	0.9	0.3	0.8	0.1	0.5	1.1	0.4	1.0	0.2	0.6
Secondary	7.7	1.6	4.9	1.3	3.2	10.3	2.8	7.2	2.0	4.6
Post-high school diploma	0.8	0.2	0.6	0.1	0.4	1.4	0.6	1.3	0.2	0.8
University and above	3.1	0.4	1.7	0.4	1.1	3.8	0.5	2.0	0.6	1.3
Total	100	100	100	100	100	100	100	100	100	100
Total (thousand)	2,417	7,040	4,853	4,604	9,457	2,581	8,009	5,303	5,287	10,590

Sources: Central Statistics Organization; General Population Census 1994; and Household Expenditure Survey 1998.

Table 10. Republic of Yemen: Crude Oil Summary, 1994-99

(In thousands of barrels per day)

	1994	1995	1996	1997	1998	1999
A. Total net output 1/	334	342	344	360	367	389
Marib	185	168	162	149	129	116
Masila	149	174	177	190	201	207
Jannah	...	...	4	20	19	48
East Shabwa	...	...	...	...	16	17
Ayad	...	...	...	1	1	1
B. Companies' exports	154	155	137	137	177	158
Marib	69	57	53	49	52	47
Masila	85	98	82	79	104	77
Jannah 2/	...	...	2	8	8	20
East Shabwa	...	...	...	...	13	13
Ayad	...	...	...	1	1	1
1. Companies' net output share	107	110	117	118	100	112
Marib	82	81	81	75	61	56
Masila	25	28	35	41	35	47
Jannah 2/	...	...	1	2	3	7
East Shabwa	...	...	...	...	1	2
Ayad	...	...	...	0	0	0
2. Cost recovery	88	85	60	56	107	75
Marib	28	16	12	12	21	18
Masila	60	69	47	38	69	31
Jannah	...	...	1	6	5	13
East Shabwa	...	...	...	...	11	12
Ayad	...	...	...	1	1	1
3. Income tax	41	41	40	37	30	28
Marib	41	41	40	37	30	28
Masila	0	0	0	0	0	0
Jannah	...	...	0	0	0	0
East Shabwa	...	...	...	...	0	0
Ayad	...	...	...	0	0	0
C. Government exports	135	123	129	150	112	146
D. Government sales to refineries	45	64	78	73	77	85
Average oil export price (\$US/bbl)	15	17	20	18	12	19
Export revenue (Million \$US)	1,615	1,735	1,976	1,945	1,229	2,131
Companies	862	957	1,018	933	758	1,138
Government	753	778	958	1,012	471	993

Source: Ministry of Oil and Mineral Resources.

1/ Net of miscellaneous oil field uses.

2/ Including YICOM share.

Table 11. Republic of Yemen: Oil Exploration Blocks Awarded in 1996-99

Block number	Company licensed	Year awarded	Selected terms of contract
13	Bakrie	1996	
R2	Bakrie	1996	
S1	Vintage/TransGlobe	1997	150 km <sup>2</sup> of 3-d seismic data to be acquired and three wells to be drilled over the first 2½-year phase, at estimated minimum cost US\$11 million.
S2	Preussag	1997	Block had just been relinquished by consortium of Oxy/Amerada Hess/Mol.
9	Cal Valley Petroleum	1997	US\$8 million to be spent during the initial three-year exploration period.
31	Oil and Gas Mine Co.	1997	US\$20 million to be spent on the two blocks (31 and 41) including the acquisition of 800 km of 2-d seismic data and the drilling of two exploration wells.
41	Oil and Gas Mine Co.	1997	
49	MOL	1997	Minimum expenditure of US\$8 million, including 300 km of seismic acquisition and two exploration wells over three years.
50	Kerr-McGee/CanadianOxy/ YGCOG	1997	Current stakes are 47.5 percent, 47.5 percent, and 5 percent, respectively.
51	Kerr-McGee/CanadianOxy/ YGCOG	1997	Current stakes are 47.5 percent, 47.5 percent, and 5 percent, respectively.
53	Dove/YGCOG	1997	Stakes: 75 percent and 25 percent respectively.
11	CanadianOxy	1998	At least US\$11.5 million to be spent over seven years.
12	CanadianOxy	1998	At least US\$11.5 million to be spent over seven years.
36	CanadianOxy	1998	At least US\$11.5 million to be spent over seven years.
43	First Calgary Petroleum/ Ocean Energy	1998	Expenditure set at US\$7.5 million for each of the two 2½-year periods
48	MOL	1998	A minimum of US\$15 million to be spent over three years; work program to include acquisition of 500 km of 2-d seismic data and the drilling of two exploration wells.
54	CanadianOxy	1998	At least US\$11.5 million to be spent over seven years.
15	Oil Search/Muhammad Al-Otaiba Group	1999	A minimum US\$10 million to be invested in the first phase, two exploration wells to be drilled, and geological studies to be conducted.
2	Agip/Sonatrach	1999	The Algerian Sonatrach has a 40 percent interest in the block.
20	Adair International Oil and Gas Inc./PIE	1999	Seismic operations to begin in 2000; two exploratory wells and a minimum of US\$16.8 million to be spent in two exploratory periods.

Sources: Arab Oil Directory, and Ministry of Oil and Mineral resources.

Table 12. Republic of Yemen: Domestic Consumption  
of Petroleum Products, 1994-99

	1994	1995	1996	1997	1998	1999
(Millions of liters)						
Total petroleum products	3,653	3,927	4,033	4,155	4,043	3,911
Gasoline	1,332	1,458	1,391	1,420	1,322	1,107
Diesel	1,023	1,083	1,175	1,273	1,215	1,302
Kerosene	147	172	169	163	150	140
Aviation fuel	93	102	93	93	99	111
Fuel oil	589	808	909	909	938	898
LPG	468	303	297	297	318	353
(Percent change)						
Total petroleum products	-7.6	7.5	2.7	3.0	-2.7	-3.3
Gasoline	0.2	9.5	-4.6	2.1	-6.9	-16.2
Diesel	-1.4	5.9	8.4	8.4	-4.6	7.1
Kerosene	-9.0	17.0	-1.7	-3.4	-8.0	-6.7
Aviation fuel	-11.0	8.7	-8.0	-0.5	6.2	12.6
Fuel oil	-27.6	37.2	12.4	0.0	3.2	-4.3
LPG	-28.5	-35.2	-2.2	0.0	7.2	10.8

Source: Ministry of Finance.

Table 13. Republic of Yemen: Output of Industrial Products, 1994-99 1/

	1994	1995	1996	1997	1998	1999
Electricity (million kwh)	2,159	2,369	2,457	2,482	2,557	2,633
<b>Extractive industries</b>						
Salt (thousand tons)	118	71	135	136	147	149
Quarried stone (thousand cubic meters)	...	2,823	2,397	2,437	2,497	2,547
Gypsum (thousand tons)	99	100	97	99	102	103
<b>Food, beverage, and tobacco industries</b>						
Bread (thousand tons)	7	178	159	162	170	179
Biscuits and confectioneries (thousand tons)	69	68	64	65	43	44
Ghee and edible oils (thousand tons)	99	97	106	108	108	109
Soft drinks (million liters)	67	51	34	35	45	46
Mineral water (thousand cubic meters)	114	81	76	77	56	57
Vimto drink (thousand of liters)	1,602	2,963	2,718	2,491	...	...
Ice (thousand tons)	36	54	58	59	61	61
Milk and products (million liters)	68	66	47	48	54	55
Ice cream (tons)	144	2,054	1,632	1,665	1,715	1,749
Cigarettes (million units)	5,423	6,540	6,740	6,800	6,040	5,859
<b>Textile industries</b>						
Underwear (thousand pieces)	360	278	287	293	...	...
Woollen pullover (thousand pieces)	...	0	28	0	...	...
Weaving (million meters)	7	5	5	5	5	...
Ginning (thousand tons)	1	1	2	2	...	...
<b>Metallic industries</b>						
Household utensils (tons)	747	604	2,434	1,740	1,775	1,793
Barrels (thousands)	4	3	3	...	723	730
Doors and windows (thousand square meters)	...	604	690	703	...	...
Metallic scrubbers (tons)	123	110	52	53	...	...
Stationary engines (thousands)	...	28	31	32	...	...
Metal suitcases (thousands)	50	...	10	...	...	...
Beds (thousands)	...	...	1	...	...	...
<b>Nonmetallic industries</b>						
Cement (thousand tons)	898	1,100	1,070	1,038	1,207	1,231
Red bricks (thousands)	...	14,033	14,319	14,605	14,897	15,120
Cement bricks (thousands)	...	81,118	85,315	87,021	89,000	90,780
Tiles (millions)	9	34	81	83	73	72
Marble (thousand square meters)	11	75	82	83	86	88

Table 13. Republic of Yemen: Output of Industrial Products, 1994-99 1/

	1994	1995	1996	1997	1998	1999
<b>Chemical industries</b>						
Plastic footwear (thousand pairs)	5	9	7	7	7	7
Foam rubber (tons)	1,642	1,918	1,556	1,572	...	...
Household utensils (tons)	985	4,730	3,830	3,873	...	...
Buckets (tons)	1,387	1,532	1,804	1,840	...	...
Water tubes (tons)	813	5,917	3,721	3,759	...	...
Plastic sheets (tons)	4,786	5,673	10,151	10,354	...	...
Plastic tubes (tons)	4,307	7,640	7,264	7,409	...	...
Paint (thousand liters)	7,752	9,882	8,331	8,247	7,137	...
Soap (thousand tons)	30	32	24	23	20	...
Perfume (thousand ounces)	1,049	900	901	919	...	...
Oxygen gas (thousand cubic meters)	110	117	0	...	...	...
Heat insulation (tons)	...	12	13	...	...	...
Fuel gas (thousand tons)	233	313	298	325	...	...
<b>Paper and printing</b>						
Paper tissues (tons)	455	1,082	1,917	1,936	1,948	1,967
School books (tons)	...	6,807	6,944	4,014	7,063	7,204
Cartons (thousand tons)	12	12	11	11	13	14

Source: Central Statistics Organization.

1/ Data for 1998-99 is provisional as compilation of the underlying data is not yet completed.

Table 14. Republic of Yemen: Production, Area, and Yield of Major Crops, 1994-99 1/

(Production in thousand metric tons; area in thousand hectares; and yield in tons per hectare)

	1994	1995	1996	1997	1998	1999
<b>Cereals (total)</b>						
Production	802.0	810.2	663.9	646.2	833.3	687.0
Area	734.7	733.2	704.2	720.2	770.4	770.4
<b>Sorghum and millet</b>						
Production	567.9	575.5	461.4	469.8	609.8	479.2
Area	585.5	582.2	552.6	567.8	609.7	609.7
Yield	1.0	1.0	0.8	0.8	1.0	0.8
<b>Wheat</b>						
Production	171.0	170.9	148.9	129.2	167.4	154.4
Area	100.4	101.6	102.8	103.6	111.3	111.3
Yield	1.7	1.7	1.4	1.2	1.5	1.4
<b>Barley</b>						
Production	63.1	63.8	53.6	47.2	56.2	53.4
Area	48.8	49.5	48.8	48.8	49.4	49.4
Yield	1.3	1.3	1.1	1.0	1.1	1.1
<b>Legumes</b>						
Production	68.3	70.4	67.3	66.1	78.0	73.1
Area	54.2	54.2	53.9	57.1	62.5	62.5
Yield	1.3	1.3	1.2	1.2	1.2	1.2
<b>Potatoes</b>						
Production	181.0	184.5	182.8	195.6	196.5	198.8
Area	13.2	13.6	14.2	15.4	15.6	15.6
Yield	13.7	13.6	12.9	12.7	12.6	12.7
<b>Vegetables</b>						
Production	464.8	484.3	520.4	522.0	550.7	567.0
Area	38.1	39.9	43.1	43.9	46.2	46.2
Yield	12.2	12.1	12.1	11.9	11.9	12.3
<b>Grapes, dates, and other fruits</b>						
Production	360.7	402.2	391.3	469.4	554.8	588.0
Area	70.4	74.9	78.9	80.9	84.1	84.1
<b>Grapes</b>						
Production	146.4	150.6	98.0	150.2	154.9	159.1
Area	20.7	21.1	21.2	21.2	22.1	22.1
Yield	7.1	7.1	4.6	7.1	7.0	7.2
<b>Dates</b>						
Production	20.6	23.2	24.2	26.2	26.9	29.1
Area	16.6	18.6	19.4	20.1	20.6	20.6
Yield	1.2	1.2	1.2	1.3	1.3	1.4

Table 14. Republic of Yemen: Production, Area, and Yield of Major Crops, 1994-99 1/

(Production in thousand metric tons; area in thousand hectares; and yield in tons per hectare)

	1994	1995	1996	1997	1998	1999
Cereals (total)						
Other fruits						
Production	193.7	228.4	269.1	293.0	373.0	399.8
Area	33.1	35.2	38.3	39.6	41.4	41.4
Yield	5.9	6.5	7.0	7.4	9.0	9.7
Coffee						
Production	8.5	9.0	10.6	10.3	11.3	11.3
Area	25.1	27.3	29.2	31.6	32.0	32.0
Yield	0.3	0.3	0.4	0.3	0.4	0.4
Tobacco						
Production	7.2	8.1	8.6	10.2	11.5	11.5
Area	3.6	4.0	4.2	5.0	5.4	5.4
Yield	2.0	2.0	2.0	2.0	2.1	2.1
Sesame						
Production	12.1	14.0	15.0	16.4	17.5	17.5
Area	20.4	23.1	26.0	29.5	30.3	30.3
Yield	0.6	0.6	0.6	0.6	0.6	0.6
Alfalfa						
Production	158.6	166.0	177.1	192.5	222.9	222.9
Area	20.4	21.4	22.5	23.7	24.5	24.5
Yield	7.8	7.8	7.9	8.1	9.1	9.1

Sources: Ministry of Agriculture; and Central Statistics Organization.

1/ Data for 1999 is preliminary.



Table 15. Republic of Yemen: Noncrop Primary Production, 1994-99

(In thousands of metric tons)

	1994	1995	1996	1997	1998	1999
Total meat and milk	220.4	241.3	253.0	261.1	274.9	280.4
Meat	39.8	40.6	41.6	43.1	45.3	46.2
Poultry	30.1	47.2	55.5	56.3	61.4	62.6
Milk	150.5	153.5	155.8	161.7	168.2	171.6
Eggs (millions)	351.0	358.0	367.0	495.0	600.0	612.0
Total fish catch	81.9	85.9	103.7	115.6	127.6	137.3
Surface water fish	80.3	84.3	94.3	93.5	104.9	111.2
Deep water fish	0.1	0.1	6.7	12.4	12.1	14.5
Other aquatic catch	1.5	1.5	2.7	9.7	10.6	11.6

Sources: Central Statistics Organization and Ministry of Agriculture.

Table 16. Republic of Yemen: Consumer Price Index  
for Urban Areas, 1994-99 1/

	December					
	1994	1995	1996	1997	1998	1999
	(December 1994 = 100)					
Overall index	100.0	157.2	200.0	214.1	239.6	264.0
Food stuffs	100.0	146.8	187.4	199.6	231.6	257.3
Housing	100.0	169.7	232.2	248.1	269.2	296.4
Clothing	100.0	207.8	250.4	280.3	248.7	258.2
Others	100.0	180.1	197.9	212.7	236.0	254.4
	(Changes in percent)					
Overall index	n.a.	57.2	27.2	7.1	11.9	10.2
Food stuffs	n.a.	46.8	27.7	6.5	16.1	11.1
Housing	n.a.	69.7	36.8	6.8	8.5	10.1
Clothing	n.a.	107.8	20.5	11.9	-11.3	3.8
Others	n.a.	80.1	9.9	7.5	11.0	7.8

Sources: Central Statistics Organization; and Fund staff estimates.

1/ The CPI is based on consumption shares from the 1992 Household Budget Survey and consists of a weighted average of the price indices for Sana'a and Aden. The numbers are end-of-period.

Table 17. Republic of Yemen: Domestic Retail Prices for Petroleum Products and Electricity, 1995-99

	<u>Jan.</u> 1995	<u>Aug.</u> 1995	<u>Apr.</u> 1996	<u>Jul.</u> 1997	<u>Sep.</u> 1997	<u>Jul.</u> 1998	<u>Jun.</u> 1999	<u>Apr.</u> 2000
(In Yemeni rials per liter; unless otherwise indicated)								
Gasoline	6.0	12.0	19.3	25.0	25.0	35.0	35.0	35.0
Diesel	3.0	3.0	6.0	6.0	10.0	10.0	10.0	10.0
Fuel oil 1/	1.7	3.0	7.0	7.0	11.0	11.0	13.0	13.0
Fuel oil 2/	2.5	5.0	7.0	7.0	11.0	11.0	13.0	13.0
Kerosene	3.0	3.0	8.5	13.0	13.0	15.0	16.0	16.0
Aviation fuel 3/	5.0	12.5	13.5	13.5	13.5	13.5	25.0	35.0
LPG (12.5 kg cylinder)	50.0	120.0	165.0	165.0	165.0	200.0	200.0	200.0
Electricity (per Kwh)	2.07	2.07	5.40	5.40	5.80	8.70	8.70	8.70
(In U.S. dollars per liter; unless otherwise indicated)								
Gasoline	0.05	0.16	0.15	0.19	0.19	0.26	0.22	0.22
Diesel	0.02	0.04	0.05	0.05	0.08	0.07	0.06	0.06
Fuel oil 1/	0.01	0.04	0.05	0.05	0.08	0.08	0.08	0.08
Fuel oil 2/	0.02	0.07	0.05	0.05	0.08	0.08	0.08	0.08
Kerosene	0.02	0.04	0.07	0.10	0.10	0.11	0.10	0.10
Aviation fuel	0.04	0.16	0.10	0.10	0.10	0.10	0.16	0.22
LPG (12.5 kg cylinder)	0.41	1.58	1.28	1.27	1.25	1.46	1.25	1.24
Electricity (per kwh)	0.02	0.03	0.04	0.04	0.04	0.06	0.05	0.05
Memorandum item:								
Exchange rate (YRIs/US\$) 4/	120.5	76.0	129.0	130.2	132.5	137.0	160.5	161.0

Sources: Ministry of Oil and Mineral Resources; and Fund staff estimates.

1/ For electricity plants.

2/ For cement plants.

3/ In May 1999, aviation fuel prices were increased above world market levels and were to be maintained at levels exceeding international prices, which explains the increase implemented in April 2000.

4/ End-period free market exchange rate for the relevant month.

Table 18. Republic of Yemen: Summary of Central Government Finance, 1994-99

	1994	1995	1996	1997	1998	1999
	(In millions of rials)					
Total revenue and grants	37,538	95,296	251,899	279,459	225,959	338,253
Total revenue	36,681	93,676	250,029	274,659	222,620	328,394
Oil and gas revenue	10,786	45,621	176,192	188,415	117,772	210,598
Crude oil exports	9,194	31,559	98,824	128,999	73,002	134,854
Domestic oil and gas	1,592	14,062	77,368	59,416	44,770	75,744
Nonoil revenue	25,895	48,055	73,837	86,243	104,848	117,796
Tax	20,267	39,006	58,834	69,570	78,852	85,419
Nontax	5,628	9,050	15,003	16,673	25,996	32,377
Grants (cash)	856	1,620	1,870	4,800	3,339	9,859
Total expenditure and net lending	84,741	125,040	279,594	295,882	280,080	340,872
Current expenditure	77,243	109,992	233,065	238,067	227,496	281,376
Civilian wages and salaries	28,435	35,754	47,664	52,390	64,287	78,341
Materials and services	5,278	7,507	16,241	24,872	25,632	32,527
Defense (wage and nonwage)	28,263	32,912	39,170	51,334	52,247	61,548
Interest obligations	8,471	7,287	23,510	20,018	31,562	43,570
Domestic (net)	6,584	1,459	9,615	7,882	22,459	32,260
External	1,887	5,828	13,895	12,136	9,103	11,310
Explicit subsidies	0	16,497	91,244	65,504	25,702	26,116
Wheat and flour	0	11,465	51,964	38,592	25,702	4,329
Petroleum products	0	5,032	37,300	24,751	0	21,787
Electricity: transfer to PEC	0	0	1,980	2,161	0	0
Current transfers	6,796	7,446	11,280	13,541	18,680	28,278
<i>Of which</i>						
Public enterprises	1,906	1,781	2,470	4,025	4,970	6,455
Civil service pension fund	0	0	300	2,230	2,736	...
Social welfare fund	0	0	500	1,700	4,388	5,946
Development O and M fund	0	0	0	2,000	2,000	2,300
Other I/	0	2,589	3,956	8,408	7,386	8,696
Development expenditure	7,498	15,048	46,529	57,815	52,584	59,496
Ministry of Planning	5,526	10,381	37,675	44,443	36,813	...
Capital transfers	1,972	4,667	8,854	11,872	15,135	...
Public works	0	0	0	1,500	636	...
Net lending	0	0	0	0	0	0
Overall balance (commitment)	-47,203	-29,744	-27,695	-16,424	-54,121	-2,619
Rescheduled and pending interest obligations	1,439	4,456	9,721	9,285	4,004	1,317
Domestic arrears	0	0	22,341	-8,573	-17,705	-3,000
Overall balance (cash)	-45,764	-25,288	4,367	-15,712	-67,822	-4,302
Financing	46,293	25,342	-4,837	15,647	67,865	441
External (net)	416	-735	2,851	2,740	10,089	24,668
Bilateral and multilateral loans (net)	-8,222	-28,111	-59,446	-8,597	-8,654	4,211
Disbursements	986	2,151	15,790	19,615	21,980	36,060
Amortization obligations	-9,208	-30,262	-75,236	-28,212	-30,634	-31,850
Amortization arrears	8,638	27,376	62,297	-698	-553	0
Rescheduled amortization	0	0	0	19,897	19,297	20,458
Payment of late interest and short-term arrears (Paris Club and other)	0	0	0	-2,237	0	0
Domestic (net)	45,878	26,078	-7,688	12,907	57,776	-24,228
Bank	45,878	24,914	-10,747	-1,158	28,280	-46,888
Central bank	46,949	22,412	-17,371	-28,764	26,464	-50,616
Commercial banks	-1,071	2,502	6,624	27,606	1,816	3,727
Nonbank	0	1,164	3,060	14,065	29,496	22,660
Discrepancy	529	55	-470	-65	43	-3,861

Table 18. Republic of Yemen: Summary of Central Government Finance, 1994-9

	1993	1994	1995	1996	1997	1998
	(In percent of GDP)					
Overall balance (commitment)	-15.1	-17.4	-6.6	-3.9	-1.9	-6.3
Overall balance (cash)	-14.3	-16.9	-5.6	0.6	-1.8	-7.9
Primary cash balance 2/	-12.4	-14.3	-5.0	2.6	-0.6	-4.7
Public sector savings	-11.6	-15.0	-3.6	2.4	4.3	-0.6
Total revenue and grants	15.3	13.9	21.1	35.9	32.8	26.4
Total revenue	15.2	13.5	20.7	35.6	32.2	26.0
Oil and gas revenue	4.3	4.0	10.1	25.1	22.1	13.8
Crude oil exports	1.5	3.4	7.0	14.1	15.1	8.5
Domestic oil and gas	2.8	0.6	3.1	11.0	7.0	5.2
Nonoil revenue	10.9	9.6	10.6	10.5	10.1	12.2
Tax revenue	8.8	7.5	8.6	8.4	8.2	9.2
Nontax revenue	2.1	2.1	2.0	2.1	2.0	3.0
Grants	0.1	0.3	0.4	0.3	0.6	0.4
Total expenditure and net lending	30.4	31.3	27.7	39.8	34.7	32.7
Current expenditure	26.8	28.5	24.4	33.2	27.9	26.6
Civilian wages and salaries	11.1	10.5	7.9	6.8	6.1	7.5
Materials and services	1.8	1.9	1.7	2.3	2.9	3.0
Defense	8.5	10.4	7.3	5.6	6.0	6.1
<i>Of which</i>						
Wages and salaries	7.5	8.5	5.1	3.8	3.5	3.8
Interest obligations	2.7	3.1	1.6	3.3	2.3	3.7
Domestic (net)	1.8	2.4	0.3	1.4	0.9	2.6
External	0.9	0.7	1.3	2.0	1.4	1.1
Explicit subsidies	0.0	0.0	3.7	13.0	7.7	3.0
Wheat and flour	0.0	0.0	2.5	7.4	4.5	3.0
Petroleum	0.0	0.0	1.1	5.3	2.9	0.0
Electricity	0.0	0.0	0.0	0.3	0.3	0.0
Current transfers	2.8	2.5	1.6	1.6	1.6	2.2
<i>Of which</i>						
Public enterprises	0.7	0.7	0.4	0.4	0.5	0.6
Civil service pension fund	...	0.0	0.0	0.0	0.3	0.3
Social welfare fund	...	0.0	0.0	0.1	0.2	0.5
Development expenditure	3.6	2.8	3.3	6.6	6.8	6.1
Ministry of Planning	2.0	2.0	2.3	5.4	5.2	4.3
Capital transfers	1.7	0.7	1.0	1.3	1.4	1.8
Public works	...	0.0	0.0	0.0	0.2	0.1
Net lending	...	0.0	0.0	0.0	0.0	0.0
Financing	14.5	17.1	5.6	-0.7	1.8	7.9
External (net)	0.2	0.2	-0.2	0.4	0.3	1.2
Domestic (net)	14.3	16.9	5.8	-1.1	1.5	6.7
Bank	14.3	16.9	5.5	-1.5	-0.1	3.3
Central bank	14.4	17.3	5.0	-2.5	-3.4	3.1
Commercial banks	-0.2	-0.4	0.6	0.9	3.2	0.2
Nonbank	0.0	0.0	0.3	0.4	1.6	3.4
Discrepancy	0.2	0.2	0.0	-0.1	0.0	0.0

Sources: Ministry of Finance; Central Bank of Yemen; and Fund staff estimates.

1/ Allocations to the Agriculture and Roads Maintenance Funds, Development O and M, and other items.

2/ Overall balance, excluding interest obligations.

Table 19. Republic of Yemen: Composition of Central Government Revenues, 1994-99

	1994	1995	1996	1997	1998	1999
	(In millions of Yemeni rials)					
Total revenue	36,681	93,676	250,029	274,659	222,620	328,394
Oil revenue	10,786	45,621	176,192	188,415	117,772	210,598
Crude oil export receipts	9,194	31,559	98,824	128,999	73,002	134,854
Domestic oil and gas revenues	1,592	14,062	77,368	59,416	44,770	75,744
<i>Of which</i>						
Payment for past excess cost recovery	0	0	16,290	0	0	0
Non-oil revenue	25,895	48,055	73,837	86,243	104,848	117,796
Tax revenue	20,267	39,006	58,834	69,570	78,852	85,419
Customs duties	7,440	16,804	26,294	25,814	24,121	25,703
Taxes on goods and services	4,394	9,996	15,180	21,226	24,974	24,419
Taxes on income	3,786	5,553	8,765	10,685	13,093	16,389
Corporate profits tax	3,128	4,262	5,804	8,318	13,156	14,498
Stamp taxes 1/	1,101	1,858	973	1,177	797	...
Zakat	0	0	1,316	1,489	1,906	2,255
Zakat-equivalent on foreign companies	0	0	42	85	48	...
Real estate transfer tax	418	533	460	776	757	943
Nontax revenue	5,628	9,050	15,003	16,673	25,996	32,377
Profit transfers	2,514	5,471	6,772	8,712	16,677	19,376
CBY	...	...	...	...	13,000	13,750
Commercial banks	109	103	138	227	12	53
Aden refinery	200	651	1,180	255	200	10
YPC	1,402	388	140	386	753	1,499
Non-oil nonfinancial public enterprises	803	4,329	5,314	7,844	2,712	4,064
Cement	...	2,964	3,471	5,397	1,079	1,329
Post and telecommunications	...	200	300	789	574	700
Ports	...	370	685	875	635	946
Airlines	...	50	0	5	3	0
Other	...	746	858	778	422	1,089
Fees and charges	1,248	2,978	4,481	4,349	6,695	...
Construction	268	690	277	282	357	...
Security	263	188	1,316	678	2,019	...
Educational	207	414	233	129	228	...
Foreign oil company exploration fees	0	0	252	130	169	...
Vehicle fees	0	0	427	443	530	596
Consular fees	0	0	778	382	187	210
Delayed military service fee	0	0	230	305	453	510
Other 2/	510	1,686	968	2,000	2,752	...
Other nontax revenue	1,866	600	3,750	3,612	2,624	...
Fines and forfeitures	231	236	350	...	...	...

Table 19. Republic of Yemen: Composition of Central Government Revenues, 1994-99

	1994	1995	1996	1997	1998	1999
Asset sales	115	43	2,580	...	814	...
Foreign oil company signature bonuses	36	0	500	1,211	882	...
Other	1,484	321	320	...	928	...
	(In percent of GDP)					
Total revenue	13.5	20.7	35.6	32.2	26.0	30.9
Oil revenue	4.0	10.1	25.1	22.1	13.8	19.8
Crude oil exports	3.4	7.0	14.1	15.1	8.5	12.7
Domestic oil and gas revenues	0.6	3.1	11.0	7.0	5.2	7.1
Payment for past excess cost recovery	0.0	0.0	2.3	0.0	0.0	0.0
Non-oil revenue	9.6	10.6	10.5	10.1	12.2	11.1
Tax revenue	7.5	8.6	8.4	8.2	9.2	8.0
Customs duties	2.7	3.7	3.7	3.0	2.8	2.4
Taxes on goods and services	1.6	2.2	2.2	2.5	2.9	2.3
Taxes on income	1.4	1.2	1.2	1.3	1.5	1.5
Corporate profits tax	1.2	0.9	0.8	1.0	1.5	1.4
Nontax revenue	2.1	2.0	2.1	2.0	3.0	3.0
Profit transfers	0.9	1.2	1.0	1.0	1.9	1.8
Non-oil public enterprises	0.3	1.0	0.8	0.9	0.3	0.4
Fees and charges	0.5	0.7	0.6	0.5	0.8	...
Other nontax revenue	0.7	0.1	0.5	0.4	0.3	...
Memorandum item						
GDP at market prices (in millions YRIs)	270,900	451,530	702,112	852,897	855,945	1,063,557

Sources: Ministry of Finance; Central Bank of Yemen; and Fund staff estimates.

1/ Includes Zakat for 1993-95.

2/ For 1994-96, includes fees not attributed to entries specified above.

Table 20. Republic of Yemen: Composition of Central Government Expenditure, 1994-99

	1994	1995	1996	1997	1998	Prel. 1999
(In millions of Yemeni rials)						
Total expenditure and net lending	84,741	125,040	279,594	295,882	280,080	340,872
Current expenditures	77,243	109,992	233,065	238,067	227,496	281,376
Civilian wages and salaries	28,435	35,754	47,664	52,390	64,287	78,341
Materials and services	5,278	7,507	16,241	24,872	25,632	32,527
Agricultural and road maintenance funds	0	729	1,870	2,381	2,732	1,856
Defense	28,263	32,912	39,170	51,334	52,247	61,548
Salaries	23,000	23,123	26,419	29,803	32,464	38,659
Nonsalary	5,263	9,790	12,751	21,531	19,783	22,889
Interest obligations	8,471	7,287	23,510	20,018	31,562	43,570
Domestic (net)	6,584	1,459	9,615	7,882	22,459	32,260
External	1,887	5,828	13,895	12,136	9,103	11,310
<i>Of which</i>						
Parliamentary and judiciary expenses	0	1,860	2,086	2,968	4,023	5,945
Accounting and audit authority	0	0	0	474	538	746
Election committee	0	0	0	2,585	93	150
Explicit subsidies	0	16,497	91,244	65,504	25,702	26,116
Wheat and flour	0	11,465	51,964	38,592	25,702	4,329
Petroleum products	0	5,032	37,300	24,751	0	21,787
Consumer subsidy	0	530	32,295	19,067	0	21,787
Unsettled claims	0	4,502	5,005	5,684	0	0
Electricity; transfer to PEC	0	0	1,980	2,161	0	0
Current transfers	6,796	7,446	11,280	13,541	18,680	28,278
Public enterprises	1,906	1,781	2,470	4,025	4,970	6,455
Social welfare	1,954	2,780	2,821	4,021	6,709	...
<i>Of which</i>						
Social welfare fund	0	0	500	1,700	4,388	5,946
Regular pension contributions	527	737	0	2,230	2,736	...
Pension supplements	0	0	0	0	0	...
Transfers to civil service pension fund	0	0	300	0	0	...
Medical grants	133	320	302	650	604	...
Social and sports activities	1,026	1,270	1,300	1,078	...	...
Other	1,250	559	4,087	1,536	...	...
Development O and M fund	0	0	0	2,000	2,000	2,300
Development expenditure	7,498	15,048	46,529	57,815	52,584	59,496
Ministry of Planning	5,526	10,381	37,675	44,443	36,813	...
Capital transfers	1,972	4,667	8,854	11,872	15,135	...
Public works 1/	0	0	0	1,500	636	...
Net lending	0	0	0	0	0	0



Table 20. Republic of Yemen: Composition of Central Government Expenditure, 1994-99

	1994	1995	1996	1997	1998	<u>Prel.</u> 1999
Memorandum item:						
GDP	292,279	488,509	702,112	852,897	855,945	1,063,557
	(In percent of GDP)					
Total expenditure and net lending	29.0	25.6	39.8	34.7	32.7	32.1
Current expenditure	26.4	22.5	33.2	27.9	26.6	26.5
Civilian wages and salaries	9.7	7.3	6.8	6.1	7.5	7.4
Materials and services	1.8	1.5	2.3	2.9	3.0	3.1
Defense	9.7	6.7	5.6	6.0	6.1	5.8
<i>Of which</i>						
Salaries	7.9	4.7	3.8	3.5	3.8	3.6
Interest obligations	2.9	1.5	3.3	2.3	3.7	4.1
Domestic	2.3	0.3	1.4	0.9	2.6	3.0
External	0.6	1.2	2.0	1.4	1.1	1.1
Explicit subsidies	0.0	3.4	13.0	7.7	3.0	2.5
Wheat and flour	0.0	2.3	7.4	4.5	3.0	0.4
Petroleum products	0.0	1.0	5.3	2.9	0.0	2.0
Electricity	0.0	0.0	0.3	0.3	0.0	0.0
Current transfers	2.3	1.5	1.6	1.6	2.2	2.7
Development expenditure	2.6	3.1	6.6	6.8	6.1	5.6
Ministry of Planning	1.9	2.1	5.4	5.2	4.3	...

Sources: Ministry of Finance; Central Bank of Yemen; and Fund staff estimates.

1/ Related to the IDA public works project.

Table 21. Republic of Yemen: Current and Capital Transfers to Public Enterprises, 1994-98

(In millions of Yemeni rials)

	1994	1995	1996 1/	1997	1998
<b>Current transfers</b>	1,906	1,780	2,900	3,984	4,967
Broadcasting and Television Corporation	313	372	1,017	1,260	1,599
Mineral Exploration Organization	79	78	153	163	191
Oil Exploration Corporation	96	107	145	237	253
Organization for Agricultural Research	140	148	202	233	318
Rural Development Organization	52	51	72	102	140
Al-Thawra Hospital	237	331	430	883	781
Touhama Development Organization	90	96	157	157	198
Yemen News Agency	52	57	68	107	145
Other agricultural and industrial enterprises	162	180	109	155	333
Others	685	360	547	280	697
Financial support for troubled enterprises	0	0	0	407	312
<b>Capital transfers</b>	1,972	5,084	...	11,950	15,135
Broadcasting and Television Corporation	28	936	...	486	338
Civil Aviation and Meteorology Authority	60	84	...	323	622
National Water and Sewerage Corporation	198	0	...	1,406	3,009
Postal Service Organization	75	26	...	64	60
Public Authority for Rural Electricity and Water	369	0	...	3,130	2,587
Public Electricity Corporation	256	3,935	...	5,521	7,201
Rural Areas Development Organization	93	0	...	150	115
Al-Thawra Hospital	26	103	...	80	139
Yemen Company for Oil Investment in Jannah	0	0	...	400	400
Aden Free Zone Authority	0	0	...	91	107
Other	867	0	...	299	557
<b>Total</b>	<b>3,878</b>	<b>6,864</b>	<b>2,900</b>	<b>15,934</b>	<b>20,102</b>

Source: Ministry of Finance.

1/ The data for 1996 pre-date the data presented in Tables 13 and 15. No detailed data are available for the updated aggregate figures in Tables 13 and 15.

Table 22. Republic of Yemen: Monetary Survey, 1994-99

(In millions of Yemeni rials; end of period)

	1994	1995	1996	1997	1998	1999
Broad money	206,190	248,265	269,551	298,388	333,350	379,294
Money	139,709	164,135	156,698	166,384	179,927	207,197
Currency	111,006	129,114	120,477	126,904	139,668	166,924
Demand deposits	28,703	35,021	36,221	39,480	40,259	40,273
Quasi-money	20,847	28,530	48,979	55,594	57,431	60,430
Foreign currency deposits	45,635	55,599	63,875	76,410	95,992	111,668
Foreign assets (net)	22,953	38,899	103,344	145,177	112,532	200,029
Central bank (net)	1,624	19,784	87,514	93,637	54,789	136,286
Assets	4,288	31,107	131,445	160,249	138,927	237,687
Liabilities	2,664	11,323	43,931	66,613	84,138	101,401
Commercial banks (net)	21,329	19,115	15,830	51,540	57,743	63,743
Assets	49,151	43,088	42,453	59,472	64,857	70,991
Liabilities	27,822	23,973	26,624	7,932	7,114	7,248
Domestic assets (net)	183,237	209,366	166,208	153,212	220,818	179,266
Claims on government (net)	178,447	205,003	187,310	164,156	219,768	173,468
Central bank (net)	195,274	222,309	204,901	158,304	185,160	135,181
Claims	199,074	231,842	221,520	175,864	201,724	159,621
Budget financing	181,197	209,342	199,057	171,234	196,702	153,962
Counterpart to YBRD claims on CBY	17,877	22,500	22,463	4,630	5,022	5,659
Deposits	3,800	9,533	16,620	17,560	16,564	24,440
Commercial banks (net)	-2,333	169	6,793	34,398	36,215	39,942
Claims	390	1,295	6,963	34,873	36,267	39,972
Deposits	2,723	1,127	171	474	52	30
Total budget financing (net) excluding YBRD	175,064	199,977	189,230	188,072	216,352	169,464
Pension fund term deposits at CBY	14,494	17,475	24,383	28,546	1,607	1,655
Claims on nongovernment sector	27,246	34,875	24,605	36,071	55,630	63,970
Private sector	17,619	23,865	22,358	34,380	54,205	62,426
Rials	13,684	18,840	17,212	24,631	40,212	42,948
Foreign currency	3,935	5,025	5,146	9,749	13,993	19,478
Public enterprises	9,433	10,826	2,066	1,503	1,120	895
Rials	2,449	2,052	1,921	1,308	1,120	895
Foreign currency	6,984	8,774	145	196	0	0
Mixed enterprises	194	185	181	188	305	649
Valuation adjustment	-25,374	-17,207	-11,856	-14,900	-14,399	-10,430
Other items (net)	2,917	-13,305	-33,851	-32,116	-40,181	-47,742

Table 22. Republic of Yemen: Monetary Survey, 1994-99

(In millions of Yemeni rials; end of period)

	1994	1995	1996	1997	1998	1999
Capital and reserves	-3,429	-5,201	-7,269	-11,362	-23,729	-28,762
Other (net)	6,346	-8,104	-26,582	-20,754	-16,452	-18,980
Memorandum items:						
Rial broad money (millions of YRIs)	160,555	192,666	205,676	221,978	237,358	267,627
Total net foreign currency position	197.4	388.8	578.1	663.3	356.6	832.6
Central Bank	-28.2	244.9	535.2	585.0	269.6	740.0
<i>Of which</i>						
Net foreign assets	135.2	395.4	689.6	717.7	386.7	853.3
Foreign currency deposits	-153.2	-252.9	-263.6	-223.9	-266.5	-303.1
Commercial banks	225.7	143.9	43.0	78.3	87.0	92.6
<i>Of which</i>						
Net foreign assets	211.2	150.4	124.7	395.1	407.5	399.1
Foreign currency deposits	-437.3	-395.0	-390.1	-491.8	-600.7	-625.3
YBRD claims on Central Bank of Yemen	177.0	177.0	177.0	35.5	35.4	35.4
Official exchange rate (end-period)	12.0	50.0	126.9	130.5	141.7	159.7
Free market exchange rate (end-period)	101.0	127.1	126.9	130.5	141.7	159.7

Source: Central Bank of Yemen.

Table 23. Republic of Yemen: Factors Affecting Domestic Liquidity, 1994-99

	1994	1995	1996	1997	1998	1999
(Changes in end-year stocks, in millions of Yemeni rials)						
Broad money	53,068	42,075	21,286	28,837	34,962	45,944
Money	36,354	24,427	-7,437	9,686	13,543	27,269
Currency	31,987	18,109	-8,638	6,427	12,765	27,255
Demand deposits	4,368	6,318	1,200	3,259	779	14
Quasi-money	3,439	7,683	20,448	6,616	1,836	3,000
Foreign currency deposits	13,274	9,965	8,275	12,535	19,582	15,676
Net foreign assets	11,212	15,946	64,445	41,833	-32,645	87,496
Central bank (net)	1,785	18,160	67,730	6,123	-38,848	81,497
Commercial banks (net)	9,427	-2,214	-3,285	35,711	6,203	6,000
Net domestic assets	41,856	26,129	-43,158	-12,996	67,606	-41,552
Claims on government (net)	48,361	26,555	-17,693	-23,154	55,611	-46,300
<i>Of which</i>						
Central bank (net)	52,835	27,035	-17,408	-46,597	26,856	-49,979
Total budget financing (net)	46,949	22,412	-17,371	-28,764	26,464	-50,616
Counterpart to YBRD claims on CBY	5,886	4,623	-37	-17,833	393	637
Commercial banks (net)	-1,071	2,502	6,624	27,606	1,816	3,727
Claims on nongovernment sector	11,121	7,629	-10,271	11,467	19,559	8,340
Private sector	4,966	6,246	-1,507	12,022	19,825	8,221
Public enterprises	6,107	1,393	-8,760	-563	-383	-225
Mixed enterprises	48	-9	-5	8	117	344
Valuation adjustments	-19,521	8,167	5,351	-3,045	501	3,969
Other items (net)	1,896	-16,222	-20,547	1,736	-8,065	-7,561
Capital and reserves	-832	-1,772	-2,068	-4,093	-12,367	-5,033
Other	2,728	-14,450	-18,479	5,828	4,302	-2,528
(Changes in percent of broad money)						
Broad money	34.7	20.4	8.6	10.7	11.7	13.8
Money	23.7	11.8	-3.0	3.6	4.5	8.2
Currency	20.9	8.8	-3.5	2.4	4.3	8.2
Demand deposits	2.9	3.1	0.5	1.2	0.3	0.0
Quasi-money	2.2	3.7	8.2	2.5	0.6	0.9
Foreign currency deposits	8.7	4.8	3.3	4.7	6.6	4.7
Net foreign assets	7.3	7.7	26.0	15.5	-10.9	26.2
Central bank (net)	1.2	8.8	27.3	2.3	-13.0	24.4
Commercial banks (net)	6.2	-1.1	-1.3	13.2	2.1	1.8
Net domestic assets	27.3	12.7	-17.4	-4.8	22.7	-12.5
Claims on government (net)	31.6	12.9	-7.1	-8.6	18.6	-13.9
<i>Of which</i>						
Total budget financing (net)	30.7	10.9	-7.0	-10.7	8.9	-15.2
Claims on nongovernment sector	7.3	3.7	-4.1	4.3	6.6	2.5
Private sector	3.2	3.0	-0.6	4.5	6.6	2.5
Public enterprises	4.0	0.7	-3.5	-0.2	-0.1	-0.1
Mixed enterprises	0.0	0.0	0.0	0.0	0.0	0.1
Valuation adjustments	-12.7	4.0	2.2	-1.1	0.2	1.2
Other items (net)	1.2	-7.9	-8.3	0.6	-2.7	-2.3
Capital and reserves	-0.5	-0.9	-0.8	-1.5	-4.1	-1.5
Other	1.8	-7.0	-7.4	2.2	1.4	-0.8
Memorandum items						
Rial broad money	33.0	20.0	6.8	7.9	6.9	12.8
Currency	40.5	16.3	-6.7	5.3	10.1	19.5
Rial demand deposits	17.9	22.0	3.4	9.0	2.0	0.0
Rial quasi-money	19.8	36.9	71.7	13.5	3.3	5.2
Claims on private sector	39.2	35.4	-6.3	53.8	57.7	15.2
Rials	...	37.7	-8.6	43.1	63.3	6.8
Foreign currency	...	27.7	2.4	89.5	43.5	39.2
U.S. dollar equivalent	...	1.5	2.6	84.3	32.1	23.5
(Ratios to rial broad money)						
Currency	0.69	0.67	0.59	0.57	0.59	0.62
Rial demand deposits	0.18	0.18	0.18	0.18	0.17	0.15
Rial quasi-money	0.13	0.15	0.24	0.25	0.24	0.23

Source: Central Bank of Yemen.

Table 24. Republic of Yemen: Balance Sheet of the Central Bank, 1994-99

	1994	1995	1996	1997	1998	1999
	(In millions of Yemeni rials; end of period)					
Public sector	13,081	15,757	22,008	26,298	...	...
Private sector	1,412	1,718	2,376	2,248	...	...
Other liabilities	33,370	50,004	68,886	47,153	53,813	61,181
SDR allocation	500	2,138	5,235	5,073	5,723	6,300
Claims of YBRD 1/	17,877	22,500	22,463	4,630	5,022	5,659
Exchange valuation account	2,737	4,254	11,814	12,272	13,231	9,194
Capital and reserves	600	600	600	600	600	600
Other liabilities	11,657	20,512	28,774	24,522	29,236	39,428
	(In millions of U.S. dollars)					
Memorandum items:						
Net foreign assets	135	395	690	718	387	853
Foreign currency deposits	153	253	264	224	267	303
Net foreign currency position	-28	245	535	585	270	740
Central bank gross foreign assets	357	622	1,036	1,228	980	1,488
Central bank own gross foreign assets	355	584	937	1,154	853	1,351

Source: Central Bank of Yemen.

1/ Foreign currency claims originally equivalent to US\$177 million valued at the free market exchange rate, reduced to US\$35 in 1997.

Table 25. Republic of Yemen: Balance Sheet of the Commercial Banks, 1994-99 1/

	1994	1995	1996	1997	1998	1999
	(In millions of Yemeni rials)					
Foreign assets	49,151	43,088	42,453	59,472	64,857	70,991
Foreign currency	5,220	5,316	2,577	3,914	3,877	4,206
Balances with banks abroad	43,387	36,863	38,554	54,320	60,342	66,726
Claims on nonresidents	127	0	0	...	0	0
Foreign investments	417	910	1,322	1,238	638	59
Reserves	32,899	44,055	59,903	28,052	35,714	43,630
Currency	1,940	1,884	1,908	2,652	2,663	2,160
Deposits with central bank	30,959	42,171	57,995	25,400	33,051	41,470
Rials	30,937	29,984	45,459	15,592	15,283	19,912
Foreign currency	22	12,187	12,536	9,808	17,768	21,558
(in millions of U.S. dollars)	0	96	99	75	125	135
Claims on government	390	1,295	6,963	34,873	36,267	39,972
Treasury bills	...	873	6,622	34,549	36,267	39,972
Credit to government	390	422	342	324	0	0
Claims on nongovernment sector	27,189	34,875	24,595	36,021	54,521	63,075
Credit to public enterprises	9,376	10,826	2,056	1,453	12	0
Rials	2,392	2,052	1,911	1,257	12	0
Foreign currency	6,984	8,774	145	196	0	0
Credit to private sector	17,619	23,865	22,358	34,380	54,205	62,426
Rials	13,684	18,840	17,212	24,631	40,212	42,948
Foreign currency	3,935	5,025	5,146	9,749	13,993	19,478
Credit to mixed enterprises	194	185	181	188	305	649
Other assets	49,244	54,831	45,338	33,070	20,700	24,477
Interbranch accounts (net)	149	0	0	151	0	2
YBRD claims on CBY 2/	17,877	22,500	22,463	4,630	5,022	5,659
Other assets 3/	31,218	32,331	22,875	28,289	15,677	18,815
Rials	8,239	11,064	20,731	24,310	10,774	9,408
Foreign currency	20,391	21,317	2,143	3,979	7,637	9,407
Assets = Liabilities	158,873	178,145	179,252	191,487	212,059	242,145
<i>Of which</i>						
in foreign currency	98,422	112,966	84,886	87,834	109,278	127,094
Foreign liabilities	27,822	23,973	26,624	7,932	7,114	7,248
Deposits of foreign banks	1,268	568	1,069	440	1,265	772
<i>Of which</i>						
in local currency	20	18	6	6	4	2
Nonresidents deposits	2,463	2,421	2,766	2,041	950	947
<i>Of which</i>						
in local currency	1,250	1,111	1,692	1,131	318	250
Borrowing from foreign banks	24,091	20,984	22,788	5,451	4,900	5,529
Demand deposits	25,390	22,985	27,353	28,875	31,490	29,649

Table 25. Republic of Yemen: Balance Sheet of the Commercial Banks, 1994-99 1/

	1994	1995	1996	1997	1998	1999
(In millions of Yemeni rials)						
Quasi-money deposits	17,639	23,724	42,789	45,647	49,313	60,293
Time deposits	8,775	12,415	24,380	23,985	24,924	30,427
Savings deposits	7,653	9,333	14,747	18,122	20,705	25,681
Earmarked deposits	1,210	1,977	3,661	3,540	3,684	4,185
Foreign currency deposits	44,171	50,209	49,512	64,165	85,124	99,873
(in millions of U.S. dollars)	437	395	390	491	601	625
Government deposits	2,723	1,127	171	474	52	30
Rials	1,750	729	115	296	47	27
Foreign currency	973	397	56	178	5	4
Other liabilities	41,129	56,127	32,804	44,395	38,966	45,052
Credit from central bank	42	4	5	26	23	32
Rials	9	4	5	21	23	0
Foreign currency	33	0	0	4	0	32
Capital and reserves	2,829	4,601	6,669	10,762	23,129	28,162
Interbranch accounts (net)	0	1,381	1,026	0	82	0
Other liabilities	15,621	37,189	25,062	30,979	14,565	15,623
Rials	10,615	15,964	20,121	24,504	9,534	10,221
Foreign currency	3,901	21,225	4,941	6,476	5,031	5,403
Exchange valuation	22,637	12,953	42	2,628	1,168	1,236
Total liabilities	158,873	178,145	179,252	191,487	212,059	242,146
Of which						
in foreign currency	75,630	94,675	79,435	77,617	96,952	112,307
(In millions of U.S. dollars)						
Memorandum items:						
Net foreign currency position	226	144	43	78	87	93
Net foreign assets	388	327	302	431	443	435
Foreign currency deposits (net)	163	183	259	352	356	342
(In percent of total assets)						
Foreign assets	31.0	24.0	24.0	31.0	31.0	29.0
Treasury bills	0.0	0.0	4.0	18.0	17.0	17.0
Loans	17.0	20.0	14.0	19.0	26.0	26.0
Reserves	21.0	25.0	33.0	15.0	17.0	18.0
Other assets	31.0	31.0	25.0	17.0	10.0	10.0

Source: Central Bank of Yemen.

1/ Foreign asset, liability, and currency components are evaluated at the free market exchange rate for all periods.

2/ Foreign currency claims equivalent to US\$177 million over 1993-96 and reduced to US\$35 million in 1997.

3/ Also includes nonperforming loans.



Table 26. Republic of Yemen: Interest Rates, 1994-99 1/

(In percent, end-period rates)

	1994	1995	1996	1997	1998	1999
Central bank lending rates						
Government	9.0	24.1	24.0	16.0	17.1	20.0
Public enterprises	17.0	24.1	26.0	20.0	20.0	23.0
Commercial banks	16.0	24.1	23.5	16.5	20.0	23.0
Commercial bank lending rates						
Maximum rate	17.0	...	...	...	...	...
Rate range	...	25-32	25-32	15-21	17-24	23-28
Commercial bank (minimum/benchmark)						
Deposit rates 2/						
Savings deposits	10.5	20.0	20.0	11.0	15.0	18.0
Three-month time deposits	12.0	20.0	20.0	...	...	...
Six-month time deposits	13.0	21.0	21.0	...	...	...
Nine-month time deposits	14.0	21.5	21.5	...	...	...
One-year time deposits	15.0	22.0	22.0	...	...	...
Specialized banks lending rates 3/						
Short term	7.0	7.0	7.0	7.0	...	...
Medium and long term	9-11	10-12	7-11	7-11	...	...
Treasury bill average interest rate on successful bids						
One-month	n.a.	23.1	n.a.	n.a.	n.a.	n.a.
Three-month	n.a.	n.a.	24.8	12.9	17.5	18.1
Six-month	n.a.	n.a.	25.5	12.5	17.7	17.4
Twelve-month	n.a.	n.a.	n.a.	13.3	17.8	16.2

Source: Central Bank of Yemen.

1/ Prior to July 1995, a fixed interest rate structure applied to all loans and deposit rates. The mandated minimum deposit rates were not enforced and effective deposit rates were 3-5 percent. Interest rate reform in July 1995 freed interest rates, eliminated concessional loan rates, and enforced benchmark minimum commercial bank deposit rates.

2/ In May 1997, the benchmark system was narrowed to one minimum rate for savings accounts.

3/ As of June 1998, all specialized banks have adopted the interest rate structure applying to commercial banks.

Table 27. Republic of Yemen: Distribution of Commercial Bank Credit  
to the Nongovernment Sector 1/

(In millions of Yemeni rials; end of period)

	1994	1995	1996	1997	1998	1999
Short-term loans and advances	16,264	31,242	22,676	33,058	31,417.9	33,647.4
Agriculture and fisheries	351	371	351	130	38.6	121.2
Industry	842	3,602	3,102	8,758	3,271.0	2,628.6
Construction	...	...	...	...	655.7	1,881.4
Export financing	161	72	...	43	267.8	167.2
Import financing	4,405	4,996	4,634	6,535	9,105.3	9,390.6
Trade in manufactured goods	1,861	2,881	7,038	7,636	8,767.4	4,711.1
Other	8,643	19,322	7,550	9,955	9,312.1	14,747.3
Medium- and long-term loans	1,085	3,448	1,738	2,774	4,844.1	4,724.8
Investments 2/	...	...	...	...	9,706.3	13,443.6
Total	17,349	34,690	24,414	35,832	45,968.3	51,815.8
	(In percent of total)					
Short-term loans and advances	94	90	93	92	68	65
Agriculture and fisheries	2	1	1	0	0	0
Industry	5	10	13	24	7	5
Construction	...	...	...	...	1	4
Export financing	1	0	...	0	1	0
Import financing	25	14	19	18	20	18
Trade in manufactured goods	11	8	29	21	19	9
Other	50	56	31	28	20	28
Medium- and long-term loans	6	10	7	8	11	9
Investments 2/	...	...	...	...	21	26

Source: Central Bank of Yemen.

1/ Prior to 1998, a different classification was adopted, which explains gaps in the data for the period 1994-97.

2/ Investments refer to lending by Islamic banks on Islamic principles.

Table 28. Republic of Yemen: Commercial and Specialized Banks as of December 31, 1999

	Date of Establishment	Head Office Location	Capital (Millions of Yemeni Rials)	Shareholders	Shareholding (Percent)	Total Branches 1/
<b>Commercial banks:</b>						
Yemen Bank for Reconstruction and Development (YBRD)	1962	Sana'a	1,000.0	Government Yemeni private	51 49	37
National Bank of Yemen	1969	Aden	1,915.0	Government	100	31
United Bank Ltd.	1972	Sana'a	1,000.0	Branch of United Bank (Pakistan)	100	2
Arab Bank PLC.	1972	Sana'a	1,043.0	Branch of Arab Bank (Jordan)	100	6
Banque Indosuez	1975	Sana'a	1,304.5	Branch of Banque Indo Suez (France)	100	5
Yemen Commercial Bank	1993	Sana'a	1,145.0	Yemeni Private	100	8
Yemen-Kuwait Bank for Trade and Investment	1979	Sana'a	774.5	Yemeni private	100	4
International Bank of Yemen	1980	Sana'a	906.0	Yemeni private Saudi Arabian Banks	75 25	5
Rafidain Bank	1982	Sana'a	60.0	Branch of Rafidain Bank (Iraq)	100	1
<b>Islamic banks:</b>						
Islamic Bank for Finance and Investment	1995	Sana'a	925.0	Yemeni private 2/	100	2
Altadamon Islamic Bank	1996	Sana'a	1,500.0	Yemeni private 2/	100	8
Saba Islamic Bank	1997	Sana'a	1,159.0	Yemeni private 2/	100	3
Al Watani	1998	Sana'a	750.0	Yemeni private	100	4
<b>Specialized banks:</b>						
Industrial Bank of Yemen	1976	Sana'a	96.5	Government Yemeni private	70 30	
Housing Credit Bank	1977	Sana'a	200.0	Government Yemeni private	70 30	
Cooperative and Agricultural Credit	1982	Sana'a	293.0	Government Yemeni cooperatives	87 13	34

Source: Central Bank of Yemen.

1/ Including head office.

2/ With some foreign minority shareholders.

Table 29. Republic of Yemen: Indicators of Banking System Financial Soundness,  
1997-99 1/

(In percent)

	1997	1998	1999
<b>Portfolio quality:</b>			
Problem loans/total loans	55.2	46.1	58.5
Problem loans/total assets	11.5	10.2	13.0
Provisions against prob. Loans/prob. loans	21.7	27.8	31.0
Total capital and reserves/problem loans	46.2	83.0	62.0
<b>Portfolio performance:</b>			
Average return on assets	1.0	0.9	1.0
Average return on equity	13.0	15.0	14.0
<b>Capital adequacy</b>			
Total capital and reserves/total assets	5.3	8.5	8.1
Risk-weighted capital adequacy ratio	0.6	2.5	5.2
<b>Exposure to exchange rate risk</b>			
Total foreign currency assets (In billions of rials)	88.4	109.3	127.4
Total foreign currency liabilities (In billions of rials)	78.2	97.8	112.8
Net exposure/total capital and reserves	100	65.3	77.7
Forex credits/forex deposits	15.2	16.0	19.0
<b>Estimated exposure to real estate market</b>			
Total real estate loans/total loans	0.3	2.0	5.2
Total construction loans/total loans	0.3	1.9	3.3

Source: Central Bank of Yemen.

1/ Data refer to the commercial banking system in aggregates, and exclude specialized banks.

Table 30. Republic of Yemen: Balance of Payments, 1994-99  
(In millions of U.S. dollars)

	1994	1995	1996	1997	1998	Prel. 1999
Trade balance	302.1	-11.0	-30.8	-132.6	-726.8	24.5
Exports, f.o.b.	1,824.0	1,937.2	2,262.8	2,274.0	1,501.1	2,464.4
Crude oil	1,615.4	1,735.0	1,976.2	1,944.9	1,228.7	2,131.2
Government share	753.1	777.5	958.4	1,012.2	470.7	993.0
Oil companies' share	862.3	957.5	1,017.7	932.7	758.0	1,138.2
Oil products 1/	77.8	133.4	209.8	199.2	140.8	193.7
Non-oil exports	130.8	68.8	76.8	129.9	131.5	139.5
Imports	-1,521.9	-1,948.2	-2,293.5	-2,406.5	-2,227.8	-2,439.9
Oil products, f.o.b.	-207.9	-172.0	-176.5	-165.3	-116.9	-174.3
Oil sector capital goods, c.i.f.	-172.8	-113.7	-95.9	-84.5	-66.0	-70.8
Other imports, f.o.b.	-1,141.2	-1,662.5	-2,021.1	-2,156.7	-2,044.9	-2,194.8
Food	-427.4	-687.2	-915.5	-915.9	-787.2	-806.7
Nonfood	-713.8	-975.3	-1,105.6	-1,240.8	-1,257.7	-1,388.1
Services, net	-474.6	-411.1	-369.7	-469.9	-397.5	-488.8
Transportation, net	-52.5	-46.9	-50.0	-93.4	-96.7	-92.6
Freight and insurance, net	-120.3	-206.5	-233.4	-305.2	-284.2	-311.4
Tourism, net	18.5	49.9	54.9	69.7	79.0	41.6
Oil processing fees, receipts	5.0	6.0	6.2	8.0	8.0	8.0
Other services, net	13.0	-3.5	-3.0	-3.7	-5.0	-31.8
Oil companies' foreign expenditures, payments	-326.9	-202.9	-130.6	-118.5	-80.0	-80.0
Government services, net	-11.4	-7.2	-13.8	-26.7	-18.6	-22.6
Income	-578.6	-499.1	-681.6	-630.6	-359.2	-654.7
Compensation of employees	-53.4	-47.9	-47.7	-29.7	-31.0	-27.0
Investment income	-525.2	-451.2	-633.9	-600.9	-328.2	-627.7
Current transfers	1,117.0	1,103.9	1,188.4	1,255.6	1,253.5	1,314.1
General government transfers, net	71.3	40.0	60.2	89.4	59.1	90.9
Cash grants	0.0	0.0	27.5	37.1	20.2	39.0
Grants-in-kind	72.9	43.3	40.0	54.0	43.9	55.6
Payments	-1.6	-3.3	-7.3	-1.7	-5.0	-3.7
Workers' remittances, net	1,042.7	1,063.9	1,122.6	1,156.9	1,190.7	1,223.2
Other transfers (oil signature bonus)	3.0	0.0	5.6	9.3	3.8	0.0
Current account balance	365.9	182.7	106.3	22.6	-230.0	195.1
Capital account	-641.0	-876.3	-397.1	34.4	-206.6	-74.1
Medium- and long-term loans, net	-684.6	-694.1	-520.7	-66.5	-63.7	27.0
Pipeline, net	-684.6	-694.1	-520.7	-66.5	-63.7	27.0
Disbursements	82.1	53.1	138.3	151.7	161.8	231.5
Bilateral	8.9	2.2	1.3	4.1	27.1	5.0
Multilateral	73.2	50.9	137.0	147.6	134.7	226.6
Suppliers' credits	0.0	0.0	0.0	0.0	0.0	0.0
Amortization obligations	-766.7	-747.2	-659.0	-218.2	-225.4	-204.5
Bilateral	-656.1	-641.6	-550.4	-151.5	-162.5	-150.0
Multilateral	-46.2	-49.2	-64.6	-66.7	-62.9	-54.5
Short-term oil trade credits, net	1.3	-32.5	-63.7	63.5	70.7	-119.4

Table 30. Republic of Yemen: Balance of Payments, 1994-99

(In millions of U.S. dollars)

	1994	1995	1996	1997	1998	Prel. 1999
Oil sector direct investment, net	15.8	-217.7	-60.1	-138.5	-266.7	-318.8
Oil sector loans	-1.5	0.0	0.0	0.0	0.0	0.0
Wheat import financing, net	28.0	68.0	167.4	-79.3	-187.2	0.0
Private capital, net	0.0	0.0	80.0	255.1	240.2	337.1
Errors and omissions	-503.7	655.3	-334.0	59.6	-26.6	198.8
Overall balance	-778.8	-38.3	-624.9	116.5	-463.1	319.9
Financing	778.8	38.3	624.9	-116.5	463.1	-319.9
Net reserves changes (increase -)	-79.4	-713.0	-36.9	-296.7	317.1	-458.5
Official	-148.6	-260.1	-294.2	-26.9	330.0	-466.8
Commercial banks	69.2	-452.9	257.3	-269.7	-12.9	8.3
Debt relief	0.0	0.0	93.4	6,048.1	113.6	82.5
Change in overdue obligations (increase +)1/	858.2	751.3	568.4	-5,867.9	32.4	56.2
	(In percent of GDP)					
Current account	5.6	2.8	1.7	0.3	-3.7	2.9
Exports	28.0	29.9	35.2	34.5	23.8	36.1
Crude oil	24.8	26.8	30.7	29.5	19.5	31.2
Imports	-23.4	-30.1	-35.7	-36.5	-35.4	-35.7
Capital account	-9.8	-13.5	-6.2	0.5	-3.3	-1.1
Overall balance	-12.0	-0.6	-9.7	1.8	-7.4	4.7
	(In millions of U.S. dollars, unless otherwise indicated)					
Current account incl. grants (percent of GDP)	5.6	2.8	1.7	0.3	-3.7	2.9
<i>Of which</i>						
Official grants (percent of GDP)	1.1	0.6	0.9	1.4	0.9	1.3
Central bank own gross foreign reserves 2/	357	525	937	1,152	853	1,351
(Months of imports) 3/	2.9	3.1	4.6	5.3	4.2	6.0
Official external debt 4/	10,876	11,017	11,135	5,359	5,373	5,490
(In percent of GDP)	167	170	173	81	85	80
Debt service						
(percent of exports of goods and services) 4/						
Obligations basis	47	42	32	13	17	10
Actual	3	7	9	10	14	8
Change in outstanding Fund credit						
(US\$ millions, increase +)	0	0	121	130	85	74

Source: Central Bank of Yemen.

1/ Includes debt to non-Paris Club creditors under discussion to ensure comparable treatment.

2/ Includes central bank SDR holdings, foreign exchange held abroad, foreign securities, gold, silver, and foreign currencies, excludes commercial bank required foreign exchange reserves with the central bank against their foreign currency deposits.

3/ Imports are c.i.f for current year and exclude imports of oil sector capital goods.

4/ Public- and publicly-guaranteed debt including central bank foreign liabilities. Debt and debt service reflect the 1996 and 1997 Paris Club reschedulings, including the 80 percent upfront discount provided by Russian Federation.

Table 31. Republic of Yemen: Composition of Exports and Re-Exports, 1994-99 1/

	1994	1995	1996	1997	1998	Prel. 1999
(In millions of Yemeni rials)						
Crude oil 2/	19,401	71,271	224,140	251,436	166,953	331,993
Petroleum products 2/	934	3,637	23,804	25,748	19,134	30,428
Other exports and re-exports	1,237	4,522	9,659	16,798	17,869	17,014
Coffee	453	1,096	1,985	1,760	2,658	1,953
Fish	103	471	1,392	4,852	2,401	1,912
Hides and skins	113	163	602	1,202	1,137	841
Fruits and vegetables	22	128	334	674	664	709
Honey	31	67	80	223	192	148
Metal ore	27	306	317	578	430	245
Perfumes and cosmetics	60	83	198	378	750	225
Other	429	2,209	4,753	7,132	9,638	10,981
Total, f.o.b.	21,573	79,431	257,603	293,982	203,956	379,435
(In millions of U.S. dollars) 3/						
Crude oil 2/	1,615.4	1,735.0	1,976.2	1,944.9	1,228.7	2,131.2
Petroleum products 2/	77.8	133.4	209.8	199.2	140.8	195.4
Other exports and re-exports	103.0	111.7	85.1	130.3	131.6	109.2
Coffee	37.7	27.1	17.5	14.0	19.6	12.5
Fish	8.5	11.6	12.3	37.5	17.7	12.3
Hides and skins	9.4	4.0	5.3	9.3	8.4	5.4
Fruits and vegetables	1.9	3.2	2.9	5.2	4.9	4.5
Honey	2.6	1.6	0.7	1.7	1.4	1.0
Metal ore	2.3	7.5	2.8	4.5	3.2	1.6
Perfumes and cosmetics	5.0	2.1	1.7	2.9	5.5	1.4
Other	35.7	54.5	41.9	55.2	70.9	70.5
Total, f.o.b.	1,796.2	1,980.1	2,271.1	2,274.4	1,501.1	2,435.8

Sources: Central Statistics Organization; Ministry of Oil and Mineral Resources.

1/ Customs data except for crude oil. Includes oil companies' share of crude oil exports.

2/ Data provided by Ministry of Oil and Mineral Resources and Aden Refinery. Excludes re-exports from Aden Refinery under processing arrangements, and includes oil companies' share of crude oil exports.

3/ Converted from Yemeni rials at the average customs exchange rate.

Table 32. Republic of Yemen: Direction of Exports and Re-Exports, 1994-99 1/ 2/

	1994	1995	1996	1997	1998	Prel. 1999
	(In percent of total)					
Arab countries	19.4	11.9	7.3	3.7	11.0	3.9
Djibouti	0.1	0.1	0.1	0.3	0.7	0.2
Egypt	6.9	6.5	1.4	0.0	2.0	0.3
Kuwait	0.9	0.3	0.1	1.3	4.0	0.8
Saudi Arabia	4.0	1.7	1.9	1.2	2.2	0.4
United Arab Emirates	1.5	1.0	0.4	0.5	0.8	0.3
Other	6.1	2.3	3.4	0.4	1.3	1.9
Africa	1.0	3.2	3.1	1.9	2.7	0.2
Ethiopia	0.7	0.1	0.1	0.2	0.0	0.1
South Africa	0.0	3.0	2.2	1.6	2.4	0.0
Other	0.3	0.2	0.8	0.1	0.3	0.1
Asia	42.7	61.8	55.8	75.9	67.0	89.0
China, People's Republic of	2.5	23.3	20.6	30.6	24.9	28.8
Singapore	14.3	10.1	3.6	2.7	5.9	8.6
South Korea	20.8	1.9	17.8	19.1	11.3	14.5
Thailand	0.0	6.8	13.0	16.9	22.1	25.5
Other	5.1	19.7	0.8	6.6	2.8	11.6
Industrial countries	33.3	13.7	22.3	13.1	18.3	5.5
France	3.1	0.5	2.4	2.8	1.5	0.2
Germany	0.0	0.0	0.0	0.1	2.1	0.1
Italy	2.4	0.3	3.6	3.2	0.8	0.2
Japan	13.3	12.3	12.5	5.3	3.7	1.1
Netherlands	1.1	0.2	0.0	0.0	0.4	0.0
United Kingdom	0.1	0.1	0.2	0.3	2.7	0.1
United States	12.3	0.2	0.4	0.2	5.6	0.5
Other	1.0	0.1	3.2	1.2	1.5	3.3
Other countries	3.0	8.6	11.4	5.4	1.0	0.0
<i>Of which</i>						
Brazil	1.8	8.6	11.4	5.4	0.0	0.0
Bulgaria	1.2	0.0	0.0	0.0	0.0	0.0
Bunkering (ships)	0.0	0.0	0.0	0.0	0.0	0.0
Bunkering (aircraft)	0.3	0.0	0.0	0.0	0.0	0.0
Not classified	0.3	0.7	0.0	0.0	0.0	1.4
Total, f.o.b.	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Central Statistics Organization; Ministry of Oil and Mineral Resources; and staff estimates.

1/ Customs data except for crude oil. Includes oil companies' share of crude oil exports.

2/ Excludes re-exports from Aden Refinery under processing arrangements.



Table 33. Republic of Yemen: Composition of Imports, 1994-99 1/ 2/

(In millions of U.S. dollars)

	1994	1995	1996	1997	1998	Prel. 1999
Food and live animals	450.3	542.8	941.3	802.0	776.2	555.5
Meat and live animals	70.9	48.8	39.5	48.8	80.0	69.1
Live animals	31.4	24.2	13.4	17.7	37.5	33.9
Meat and meat products	39.5	24.6	26.1	31.1	42.5	35.2
Dairy products and eggs	50.3	36.2	61.3	75.3	83.9	53.2
Cereals and their products 3/	198.5	315.2	648.7	445.9	414.5	263.3
Vegetables and fruits	29.4	26.8	40.0	41.0	50.5	31.1
Sugar and its products, and honey	59.1	80.1	111.9	137.4	98.6	105.7
Coffee, tea, and spices	20.7	20.5	19.1	18.3	18.2	13
Other	21.3	15.2	20.8	35.3	30.5	20.2
Beverages and tobacco	32.7	32.4	33.2	35.8	43.6	36.4
Beverages	0.7	0.9	1.7	4.8	9.8	5.1
Tobacco	32.0	31.5	31.5	31.0	33.8	31.3
Raw materials	41.4	43.8	45.5	51.7	48.6	33.6
Oilseeds	7.1	4.3	7.1	15.5	11.4	7.7
Wood and cork	26.7	30.4	26.0	24.7	26.7	18.9
Other	7.6	9.2	12.3	11.5	10.5	7
Minerals, fuels, and lubricants 3/	236.3	121.3	165.8	223.4	139.4	113.6
Animal and vegetable oils	26.4	66.7	50.8	73.1	83	55.2
Chemicals	107.8	126.3	136.2	166.5	211.1	130.4
Manufactured goods, classified by materials	296.3	353.3	298.8	353.1	374.9	234.0
Rubber manufactures	28.9	32.9	32.5	38.3	33.5	21.6
Wood and cork	14.0	11.4	10.5	16.4	18.6	6.5
Paper manufactures	27.6	42.3	34.6	34.5	48.6	32.1
Textiles	33.6	37.2	33.8	37.2	38.1	25.8
Nonmetallic mineral manufactures	39.0	39.7	45.7	44.4	44.1	28.6
Iron and steel	96.7	117.1	83.0	107.0	115.8	73.7
Metal manufactures	34.0	52.4	40.8	48.9	48.4	27.9
Other	22.5	20.3	17.8	26.4	27.8	17.8
Machinery and transport equipment	285.5	355.2	373.1	424.9	525.1	312.8
Machinery	192.9	245.3	244.1	316.7	396.6	235.6
Road vehicles	87.1	101.8	120.7	103.0	106.5	71.1
Other transport equipment	5.5	8.1	8.3	5.3	22	6.1
Other	0.0	0.0	0.0	0	0	0
Miscellaneous manufactured articles	80.0	96.7	83.8	96.9	114.4	61.5
Furniture	3.7	7.4	8.5	6.8	8.6	5.8
Clothing	27.1	22.4	15.7	20.0	25.9	11.5
Footwear	9.1	9.8	7.6	10.6	11.2	4.7
Professional and scientific instruments	9.4	8.2	9.4	12.8	24.1	13
Other	30.7	48.9	42.6	46.7	44.6	26.5
Other commodities	0.1	0.4	1.0	4.4	11.3	2.9
Total imports, c.i.f.	1,556.9	1,739.0	2,129.5	2,231.8	2,327.6	1,535.9

Source: Central Statistics Organization.

1/ Customs data. Excludes oil company investment goods imports. The sharp fall recorded for total imports in 1999 reflects preliminary and incomplete data reports for the year.

2/ Converted from Yemeni rial data at the average customs exchange rate, except for mineral fuels and lubricants which are converted at the official rate.

3/ Data for 1994-96 are Central Bank of Yemen estimates.

Table 34. Republic of Yemen: Sources of Imports, 1994-99 1/

	1994	1995	1996	1997	1998	Prel. 1999
	(In percent of total)					
Arab countries	27.2	24.9	27.6	27.2	28.8	34.5
Djibouti	2.2	0.4	0.8	1.3	1.4	1.8
Egypt	1.2	1.0	1.9	1.0	1.2	1.2
Jordan	0.6	1.0	1.2	0.9	0.7	0.6
Kuwait	0.3	2.8	4.2	4.0	2.3	4.6
Saudi Arabia	9.8	7.4	9.1	9.4	11.7	10.2
Somalia	1.3	1.1	1.0	0.9	1.7	2.1
United Arab Emirates	9.9	10.8	7.7	8.5	9	11.7
Other	1.9	0.4	1.7	1.2	0.8	2.3
Asia	20.3	18.4	24.8	24.1	18.3	20.1
China, People's Republic of	2.0	2.7	3.5	3.4	3.1	2.8
Hong Kong	0.5	0.6	0.5	0.4	0.4	0.2
India	1.4	1.2	3.8	2.6	2.2	2.5
Malaysia	4.5	4.9	5.6	3.5	0.4	3.6
Singapore	3.4	2.7	2.0	1.7	3.2	3.7
South Korea	1.3	1.1	1.8	1.6	1.9	1.5
Thailand	0.8	0.5	3.1	1.4	1.3	2
Other	6.4	4.7	4.5	9.5	5.8	3.8
Industrial countries	44.5	28.0	45.1	46.9	47.1	43.1
Australia	2.3	0.3	0.9	2.0	2.4	4.8
Austria	0.3	0.2	0.4	0.3	0.2	0.3
Belgium	4.2	1.6	1.5	1.6	2.1	1.2
Canada	0.4	0.2	0.6	0.6	0.6	0.4
Denmark	0.5	0.5	0.9	0.9	0.6	0.6
France	5.6	3.2	6.3	6.0	5.6	4.1
Germany	2.8	2.5	3.3	3.1	3.6	2.9
Greece	1.2	0.7	0.5	0.5	0.3	0.1
Italy	3.9	2.6	3.6	3.4	4.3	4.1
Japan	4.2	3.0	5.1	3.0	3.5	2.7
Netherlands	3.9	1.5	1.8	1.8	2.2	1.3
Spain	0.1	0.3	0.6	0.5	0.5	0.3
Sweden	0.4	0.6	0.5	0.7	0.5	0.7
Switzerland	0.2	0.2	1.5	4.7	2.8	2.5
United Kingdom	5.3	3.7	4.7	4.9	5.1	4.7
United States	8.5	5.8	6.9	6.8	5.8	5.5
Other	0.6	0.9	6.0	6.1	7	6.9
Other countries	1.3	1.0	1.1	1.7	0.9	0.4
Bulgaria	0.0	0.2	0.1	0.1	0.1	0
Former Czechoslovakia	0.0	0.0	0.1	0.1	0.1	0
Hungary	0.2	0.2	0.3	0.2	0.2	0
Poland	0.0	0.0	0.1	0.2	0.1	0.2
Romania	0.8	0.3	0.2	0.2	0.1	0
Former Soviet Union/Russian Federatio	0.3	0.3	0.3	0.5	0.2	0.1
Former Yugoslavia	0.0	0.0	0.0	0.4	0.1	0.1
Unidentified	6.7	27.6	1.4	0.1	4.9	1.9
Total imports, c.i.f.	100.0	100.0	100.0	100.0	100.0	100.0

Sources: Central Statistics Organization.

1/ Excludes oil company investment goods imports.

Table 35. Republic of Yemen: Enterprises Privatized/Liquidated Since 1997

Name	Privatization Method	Timing	Remarks
<b>Industrial Sector</b>			
1. Al-Thawra Metal Products	30-year lease.	Implemented in 1997	Lessee hires 35 of original staff and MOF continues to pay salaries/benefits of remaining workers.
2. Agriculture and Metal Products	30-year lease.	Implemented in 1997, effective 1/1/1998.	Lessee hires all of the 96 original staff.
3. Leather Shoe Factory	Land and building restituted to original owners. Equipment sold and new land rented to purchaser for 30 years.	Implemented in 1997, effective 1/1/1998.	Purchaser hires 15 of original staff and MOF continues to pay salaries/benefits of remaining 78 employees.
4. Leather Products Cooperative	Same as (3).	Implemented in 1997.	Purchaser keeps five staff and MOF continues to pay salaries/benefits of remaining 73 employees.
5. Martyrs' Garment Factory	Same as (3).	Implemented in 1997, effective 1/1/1998.	Purchaser keeps 10 staff and MOF continues to pay salaries/benefits of remaining 98.
6. Vegetable Oil Factory	Equipment sold and land leased for 30 years.	Implemented in 1998.	The three employees were retained by purchaser of equipment.
7. Soap Factory	Equipment sold but no deal was concluded on leasing the site.	Sale of equipment done in 1997.	TPO will take over in handling the fate of the site.
8. The Public Bakery	Equipment was sold and the building and land were rented for other purposes.	Sale of equipment finished in 1998, and land leased in 1999.	Owner keeps 12 staff and MOF continues to pay salaries/benefits of remaining 75 employees.
9. Women's Sewing Cooperative	Liquidation.	Completed in 1999.	
<b>Agricultural Sector</b>			
10. Hammam Ali State Farm (Dhamar government)	Privatized by rent.	Implemented in 1999.	
11. Dar Sa'ad Poultry (Aden gov.)	Privatized by rent.	Implemented in 1999.	
12. Old Fowah Poultry Hadramout)	Privatized by rent.	Implemented in 1999.	
13. New Fowah Poultry (Hadramout)	Privatized by rent.	Implemented in 1999.	
14. Agricultural Machinery Rental Station-Saiyoum Hadramout Government)	Privatized by management buyout under new name, Saiyoum Company for Agricultural and Industrial Machinery.	Implemented in 1999.	This is the only enterprise that has been privatized through TPO.
15. Al-Mashhad Farm (Hadramout)	Not available.	Implemented in 1999.	

Table 35. Republic of Yemen: Enterprises Privatized/Liquidated Since 1997

Name	Privatization Method	Timing	Remarks
<b>Transport Sector</b>			
16. National Shipping Agency (Natship)	Not available.	Implemented in 1999.	Directly privatized by ministry. It was one of the two major activities (shipping) undertaken by the National Shipping Company.
17. Stevedoring Operations	Not available.	Implemented in 1999	Directly privatized by ministry. It was the second major activity (loading/unloading cargoes) of the National Shipping Co.
<b>Supply and Trade Sector</b>			
18. Consumption Society for State, Public, and Mixed Sectors Employees	Liquidation.	Implementation was still ongoing in 1999.	Process might not have been completed by year-end.

Source: The Yemeni authorities.

Table 36. Republic of Yemen: Enterprises to be Privatized/Liquidated

Name	Status in Process	Remarks
<b>Large Enterprises:</b>		
1. Aden refinery	Short-listed consultant started evaluation in mid-January 2000, completion of study expected in July 2000.	Oil Sector
2. Airport groundhandling services	Short-lists of consultants approved; invitation letter to them in preparation.	Transport Sector
3. General corporation for land transport	Same as above.	Transport Sector
4. General corporation for cement production and marketing (Sana'a)	Same as above.	Industrial Sector
5. Yemen drug company (Sana'a)	Same as above.	Industrial Sector
<b>Small and medium enterprises:</b>		
<b>Industrial Sector</b>		
6. The biscuit and candies factory (Aden)	Short-list of consultants ready for HC approval.	As of February 1998, had been tendered three times, very low bids each time.
7. Automatic bakery (Aden)	Same as above.	Same as above.
8. Dairy factory (Aden)	Same as above.	Same as above.
9. Canada dry factory (Aden)	Same as above.	
10. National tanning factory (Aden)	Same as above.	
11. Tomato paste factory (Lahaj)	Same as above.	Labor force estimate in 1997: 118.
12. Textile and spinning factory (Aden)	Same as above.	
13. Textile and spinning factory (Sana'a)	Negotiation with the Chinese government ongoing for capital share.	
14. The National Company for Aluminum Manufacturing	Cabinet decree just issued for privatization.	
15. The National Company for Sponge and Metal Furniture Manufacturing Ltd.	Same as above.	
<b>Agricultural Sector</b>		
16. Agricultural machinery rental station in Al-Dale (Lahaj government)	Short-list ready for HC approval.	Labor force estimate in 1997: 51.
17. Agricultural machinery rental station in Jear (Abyan government)	Same as above.	Labor force estimate in 1997: 111.
18. Agricultural machinery rental station in Behan (Shabwah Government)	Same as above.	Labor force estimate in 1997: 56.
19. Agricultural machinery rental station in Laboos (Lahaj Government)	Same as above.	Labor force estimate in 1997: 34.
20. Agricultural machinery rental station in Saber (Lahaj government)	Same as above.	Labor force estimate in 1997: 91.

Table 36. Republic of Yemen: Enterprises to be Privatized/Liquidated

Name	Status in Process	Remarks
21. Agricultural machinery rental station in Loder (Abyan government)	Same as above.	
22. Agricultural machinery rental station in Mefah (Shabwah government)	Same as above.	
23. Agricultural machinery rental station in Nisab (Shabwah government)	Same as above.	
24. General corporation for fruit and vegetables marketing (Aden government)	Same as above.	
25. Dates packing unit (Hadramout government)	Same as above.	
26. Agricultural machinery rental station (Al Habilin, Lahaj gov)	Same as above.	
27. General corporation for agricultural services (Sana'a)	Same as above.	
28. General corporation for poultries (Aden)	Same as above.	
Fisheries Sector		
29. Central unit for maintenance and services –subsidiary of the general corporation for fish services and marketing (Aden government)	Short-list ready for HC approval.	
30. Shograh fish canning factory (Abyan government)	Same as above.	Labor force estimate in 1997: 147.
31. Ice factory in Midi (Hajjah government)	Same as above.	
32. Ice factory in Ahwar (Abyan government)	Same as above.	
33. Ice factory in Bear Ali (Shabwah government)	Same as above.	
34. Ice factory in Kosia'ar (Hadramout government)	Same as above.	
Transport Sector		
35. Yemen navigation lines	Short-list ready for HC approval.	
36. Aden dockyards company	Same as above.	Labor force estimate in 1997: 366
37. Port of nashtoun	Consultant's report was submitted.	One of the 3 semi-large enterprises whose pre-privatization strategy is covered by the IDA Project.
Supply and Trade Sector		
38. Public corporation for building Material Trade (Aden)	HC approved sale of assets in June 2000.	Labor force estimate in 1997: 612. Evaluation was finished prior to 10/98.

Table 36. Republic of Yemen: Enterprises to be Privatized/Liquidated

Name	Status in Process	Remarks
39. Public corporation for textiles and electric supplies	Same as above.	Labor force estimate in 1997: 793.
40. Yemen company for free trade -Al-Nasr, Aden	Same as above.	Labor force estimate in 1997: 331. Evaluation was finished by 3/99.
41. Caltex silos complex - subsidiary of the Yemen trade corporation (Aden)	HC approved privatization in June 2000.	Labor force estimate in 1997: 60.
42. Central refrigeration plant - subsidiary of the Yemen trade corporation (Aden)	Short-list ready for HC approval.	Labor force estimate in 1997: 192.
43. Central bakery and mills in Taiz -subsidiary of the public trade corporation for foreign trade and grains.	Same as above.	Labor force estimate in 1997: 86.
44. Central bakery and mills in Sana'a -subsidiary of the public trade corporation for foreign trade and grains.	A contract was signed with a local consultant company for performing the evaluation.	Labor force estimate in 1997: 73.
45. Central refrigeration plants in Lahaj, Abyan, Shabwah and Al-Mahrah -subsidiaries of the Yemen trade corporation	Short-list ready for HC approval.	
46. Public corporation for building material trade in Lahaj, Abyan, Shabwah and Hadramout.	HC approved sale of assets in June 2000.	Evaluation completed by 3/99.
Telecommunications Sector		
47. Mobile services company (GSM)	The High Tendering Committee is evaluating bidding offers to choose the most successful two bids.	
48. Telephone cabins	Work in progress.	
Financial Sector		
49. National Bank of Yemen	Sale procedures to be decided in June HC meeting.	
50. Yemen bank for reconstruction and development	Restructuring projected to be completed by end 2000, at which time sales procedures could start.	
51. Housing bank	Strategy still under preparation.	Recently turned over to TPO to carry out process
52. Industrial bank	Committee to liquidate the bank appointed in October 1999.	
53. Agriculture bank	Restructuring plan approved by cabinet. Bids are being taken (until mid-February) from companies recommended by the World Bank to conduct the restructuring.	

Source: Technical Privatization Office.

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Source: Technical Privatization Office.



Table 37. Republic of Yemen: Social Fund for Development Total Investment and Disbursement up to September 30, 1999

According to Governorates

Governorate	No. of Projects	Committed (\$)	Disbursed (\$)	Percentage of Disbursement
Sana'a	54	3,291,222	890,231	27
Sana'a	121	5,431,381	2,513,345	46
Aden	32	3,671,454	712,367	19
Taiz	102	5,293,416	3,275,606	62
Hodiedah	52	4,442,188	2,092,508	47
Lahj	30	1,954,712	775,143	40
Ibb	58	3,539,637	1,667,917	47
Abian	16	1,083,369	513,663	47
Dhamar	62	3,994,849	1,204,412	30
Shabwah	26	1,168,441	341,743	29
Hajjah	58	3,139,445	1,109,249	35
Baidhaa	24	1,476,077	532,932	36
Hadhramout	44	2,347,406	1,802,782	77
Saadah	16	1,034,072	396,874	38
Mahweet	29	2,229,693	692,781	31
Maharah	17	1,045,587	589,106	56
Maareb	16	875,422	527,438	60
Al-Jawf	9	524,656	171,040	33
More Governorates	19	495,886	189,997	38
Total	785	47,038,913	19,999,135	43

Source: Social Fund for Development Newsletter—Issue No. 8 (October–December, 1999).

## List of References

- Alier, Max, and Martin Kaufman, "Nonrenewable Resources: A Case for Persistent Fiscal Surpluses," IMF Working Paper 99/44 (Washington: International Monetary Fund).  
*Arab Oil and Gas Directory*, 1999 (Beirut : Arab Petroleum Research Center).
- Backus and Crucini, 2000, "Oil Prices and the Terms of Trade," *Journal of International Economics*, Vol. 50, pp. 185–213.
- Bassett, Sheila, Alejandro Garcia, and Claire Liuksila, "Fiscal-Policy Sustainability in Oil-Producing Countries," IMF Working Paper 94/137 (Washington: International Monetary Fund).
- Burrowes, Robert D., 1989, "Oil Strike and Leadership Struggle in South Yemen: 1986 and Beyond," *Middle East Journal*, Vol. 43, No. 3, pp. 437–454.
- Cashin, Paul, Hong Liang, and C. John McDermott, "How Persistent are Shocks to World Commodity Prices?" IMF Working Paper 99/80 (Washington: International Monetary Fund).
- Chalk, Nigel, "Fiscal Sustainability with Non-Renewable Resources," IMF Working Paper 98/26 (Washington: International Monetary Fund).
- Colton, Nora Ann, 1993, "Homeward Bound: Yemeni Return Migration," *International Migration Review*, Vol. 27 (Winter).
- Conge, Patrick, and Guem Okruhlik, 1997, "National Autonomy, Labor Migration and Political Crisis: Yemen and Saudi Arabia," *Middle East Journal*, Vol. 51, No. 4, pp. 554–565.
- Dunbar, Charles, 1992, "The Unification of Yemen," *Middle East Journal*, Vol. 46, No. 3, pp. 456–476.
- Easterly, William, and Stanley Fischer, 1990, "The Economics of the Government Budget Constraint," *The World Bank Research Observer*, Vol. 5, (July) No. 2, pp. 127–142.
- Engel, Eduardo, and Rodrigo Valdes, 2000, "Optimal Fiscal Strategy for Oil Exporting Countries: A User's Manual," Paper prepared for the MED Seminar Series (unpublished; Washington: Middle Eastern Department, International Monetary Fund).
- Hashem, Mouna, 1996, *Goals for Social Integration and Realities of Social Exclusion in the Republic of Yemen*, (Geneva: International Institute for Labour Studies).  
*Household Budget Survey 1998, 1999*, (Sana'a, Yemen: Central Statistical Office).  
International Bank for Reconstruction and Development, 1996, *Poverty Assessment Report*, March, (Washington).
- Kostiner, Joseph, 1996, "Yemen—The Tortuous Quest for Unity, 1990–94," *Royal Institute for International Affairs*.
- Pindyck, Robert, 1999, "The Long-Run Evolution of Energy Prices," *Energy Journal*, Vol. 20, No. 2, pp. 1–27.
- Tersman, Gunnar, "Oil, National Wealth, and Current and Future Consumption Possibilities," IMF Working Paper 91/69 (Washington: International Monetary Fund).
- United Nations, Development Program, 1999, *Poverty Policy Framework for Yemen*, Strategic paper prepared by Mohammed Al-Saqour, April (Sana'a).
- United Nations, Development Program, 1999, *Human Development Report* (New York: Oxford University Press).