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Luxembourg: 2002 Article IV Consultation—Staff Report; Staff Supplement; and Public Information Notice on the Executive Board Discussion

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2002 Article IV consultation with Luxembourg, the following documents have been released and are included in this package:

- the staff report for the 2002 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on **March 11, 2002,** with the officials of Luxembourg on economic developments and policies. **Based on information available at the time of these discussions, the staff report was completed on April 19, 2002.** The views expressed in the staff report are those of the staff team and do not necessarily reflect the views of the Executive Board of the IMF;

- a staff supplement updating information on recent economic developments;

- a Public Information Notice (PIN) summarizing the **views of the Executive Board as expressed during its June 5, 2002 discussion** of the staff report that concluded the Article IV consultation.

The document(s) listed below have been or will be separately released.

Selected Issues Paper
Financial System Stability Assessment

The policy of publication of staff reports and other documents allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to Publicationpolicy@imf.org.

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LUXEMBOURG

Staff Report for the 2002 Article IV Consultation

Prepared by the Staff Representatives for the 2002 Consultation with Luxembourg

Approved by Hans Flickenschild and Liam P. Ebrill

April 19, 2002

The 2002 Article IV consultation discussions were held in Luxembourg during March 1-11, 2002. The team—Messrs. Everaert (Head), Nadal De Simone, Weisfeld (all EU1) and Ugolini (MAE)—met with the Ministers of the Treasury and Budget and of the Economy; the Central Bank President; officials of the Ministries of Cooperation and Development, Economy, Finance, Labor and Employment; the Social Security Administration; members of the supervisory commissions; other senior public sector officials; and representatives of the financial sector, labor unions and the industrial employers association. Mr. Kiekens (Executive Director) and Mr. Marques (Advisor) attended the meetings.

Luxembourg is an Article VIII member and maintains an exchange system free of restrictions, except for some related to security (Appendix I). Luxembourg does not subscribe to the SDDS. Economic statistics have improved over the past two years, but further progress is needed (Appendix II). Elections are scheduled for 2004.

In concluding the last consultation on May 8, 2000 (Luxembourg is on a 24-month cycle), Executive Directors commended Luxembourg's impressive macroeconomic performance and sound fiscal policies. Though there were no short-term concerns, they felt that assuring long-term prospects required a proactive policy approach to strengthen the robustness of the economy and maintain sound public finances. Directors encouraged the authorities to continue tax reform, resist pressures to expand the social security system, introduce a funded component in the pension system, and raise labor market flexibility. They stressed that effective supervision of the financial sector should remain a policy priority.

A Financial System Stability Assessment (FSSA) accompanies this report.

Contents

I. Overview and Issues

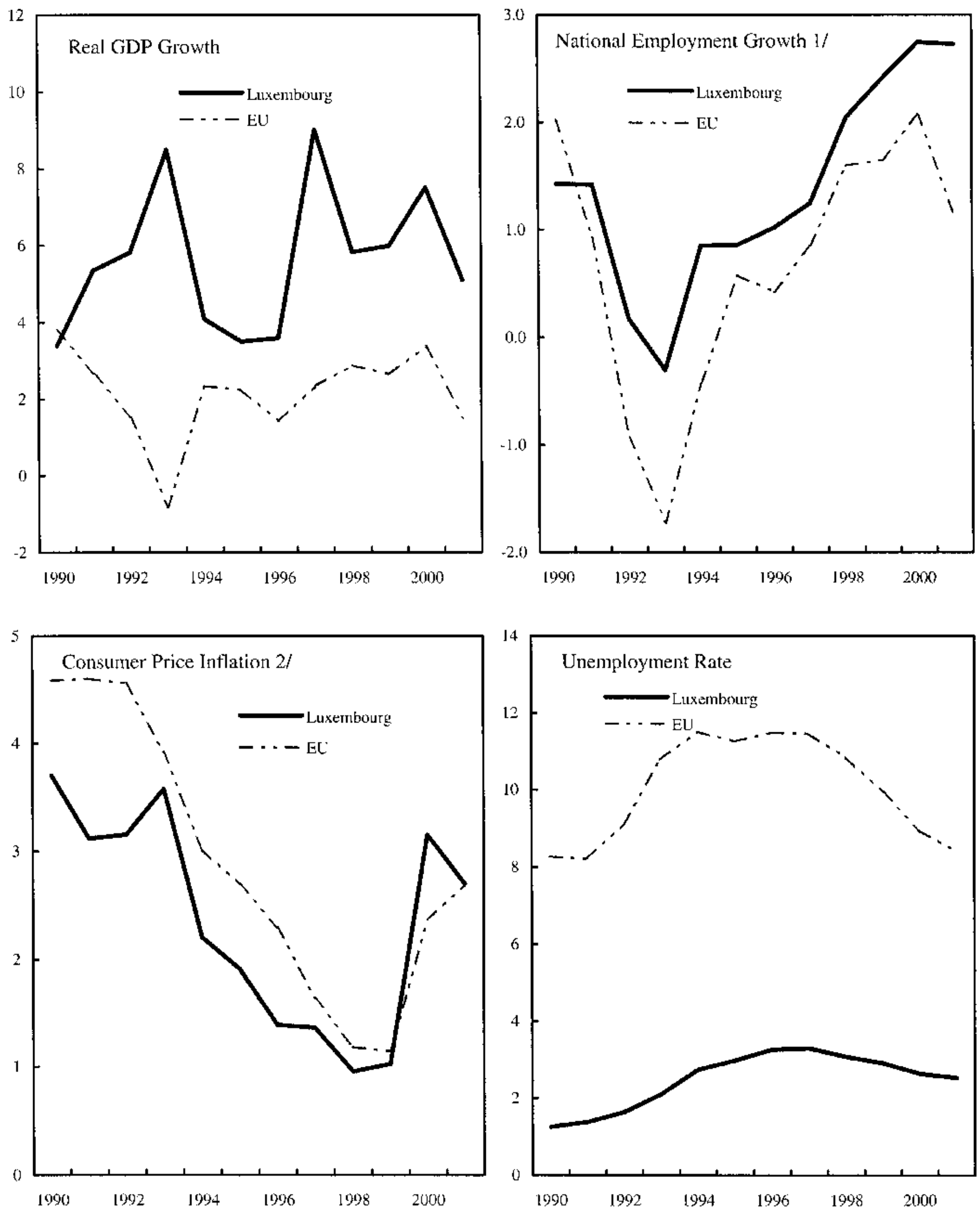
1. **Luxembourg has experienced a decade of extraordinary economic growth.** Real GDP expanded by almost 6 percent per year while employment rose by nearly 3½ percent annually, with the proportion of incoming cross-border workers rising to about one third of the work force (Figure 1 and Table 1). Domestic factors—fiscal stimulus, maturing investments in telecommunications and transportation, and a financial sector poised to benefit from falling short-term interest rates—shielded the economy from the global slowdown in 2001. Over the past decade, the unemployment rate averaged less than 3 percent, the best performance in the EU. Inflation remained subdued, though it has accelerated somewhat since 1999, largely as a result of energy price and wage increases (Figure 2). Unit labor cost growth has exceeded the regional average, but wage moderation appears to be in prospect. Competitiveness has remained sound, with the current account continuing to post large surpluses. Analysis of economic developments continues, however, to be subject to some uncertainty owing to weaknesses of data quality and coverage in a number of areas.

2. **Excellent economic performance has been underpinned by several specific features of the economy—though some of them also shape the economy's vulnerabilities—and by sound policies.** Location and small size have induced a high degree of specialization, *inter alia* leading to a dominant role for financial services, and thus raising the exposure of the economy to shocks. Regional labor mobility and social partnership have allowed fast-paced growth, but strong social cohesion has found its counterpart in a generous social welfare system that requires continuous high growth and worker inflows to be sustainable. Recognizing that the scope for discretionary responses to shocks is limited, policies have been medium-term oriented and conducted in a prudent manner. Fiscal policy has been successfully guided by the principles of balancing the central government budget, keeping spending growth in line with trend-GDP growth, and running a general government surplus, partly to build and maintain a reserve in the social security system (Figure 3). Consequently, the public sector holds net assets equivalent to about 50 percent of GDP. Enabling sector-specific policies have promoted the development of a cluster of service industries, and effective supervision has supported the efficiency of the financial sector.

3. **During the 1998-2000 upswing some evidence of constraints on growth emerged.** Labor shortages were observed in some skill categories, even as the region from which labor is drawn widened. Infrastructure bottlenecks surfaced (as evidenced in rising commuting times) and total factor productivity growth seems to have decelerated, mainly in the non-financial sector.

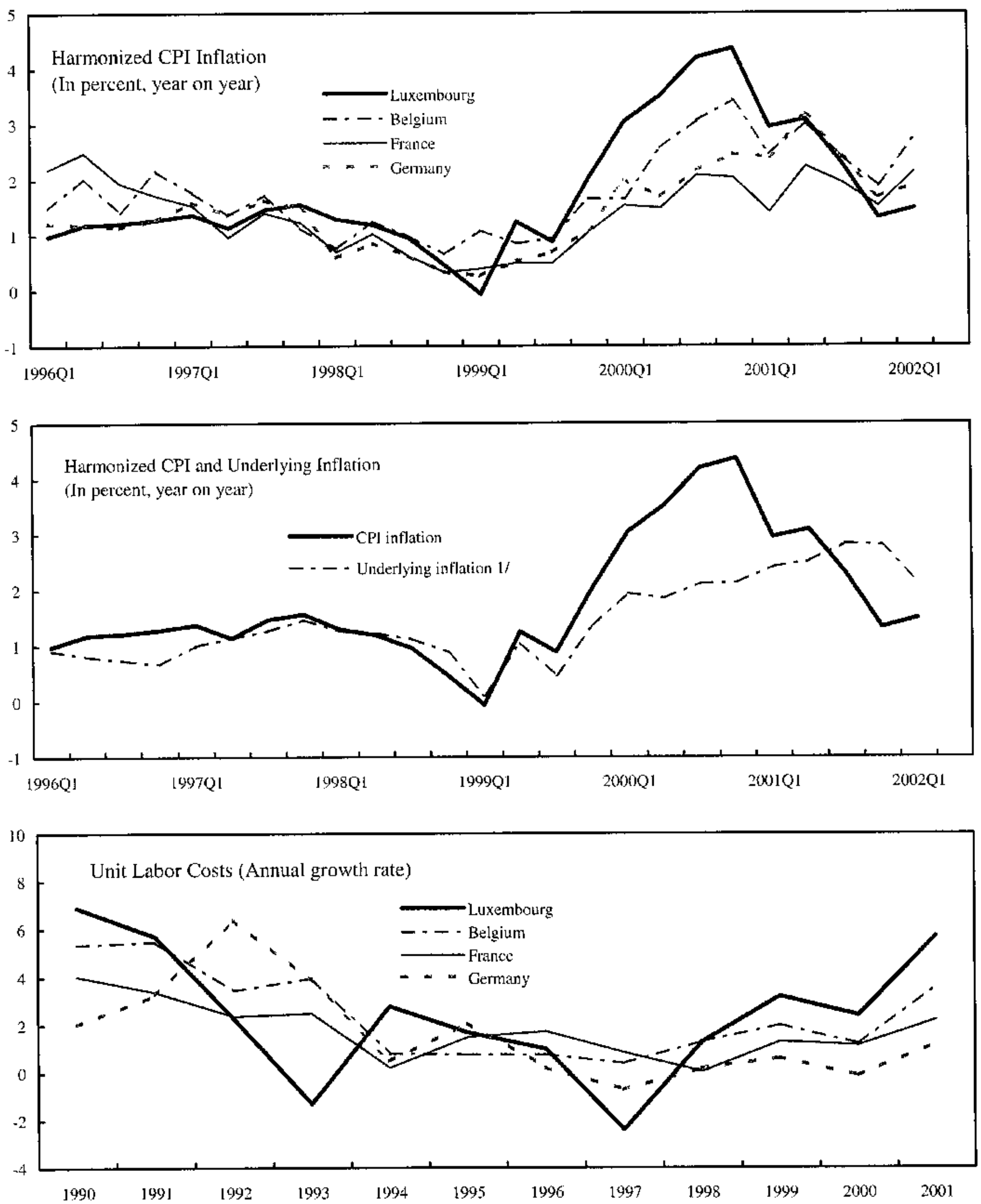
4. **Against this background, discussions recognized that there were no pressing short-term policy issues and focused on the economic outlook and the following three policy questions.** Should fiscal policy take a more prudent course and focus on securing the sustainability and improving the robustness of the social welfare system? How can policies best continue to support the key financial sector? And, should structural reforms outside the fiscal and financial areas be broadened and accelerated to alleviate strains on growth?

Figure 1. Luxembourg: Macroeconomic Performance Indicators
(In Percent)



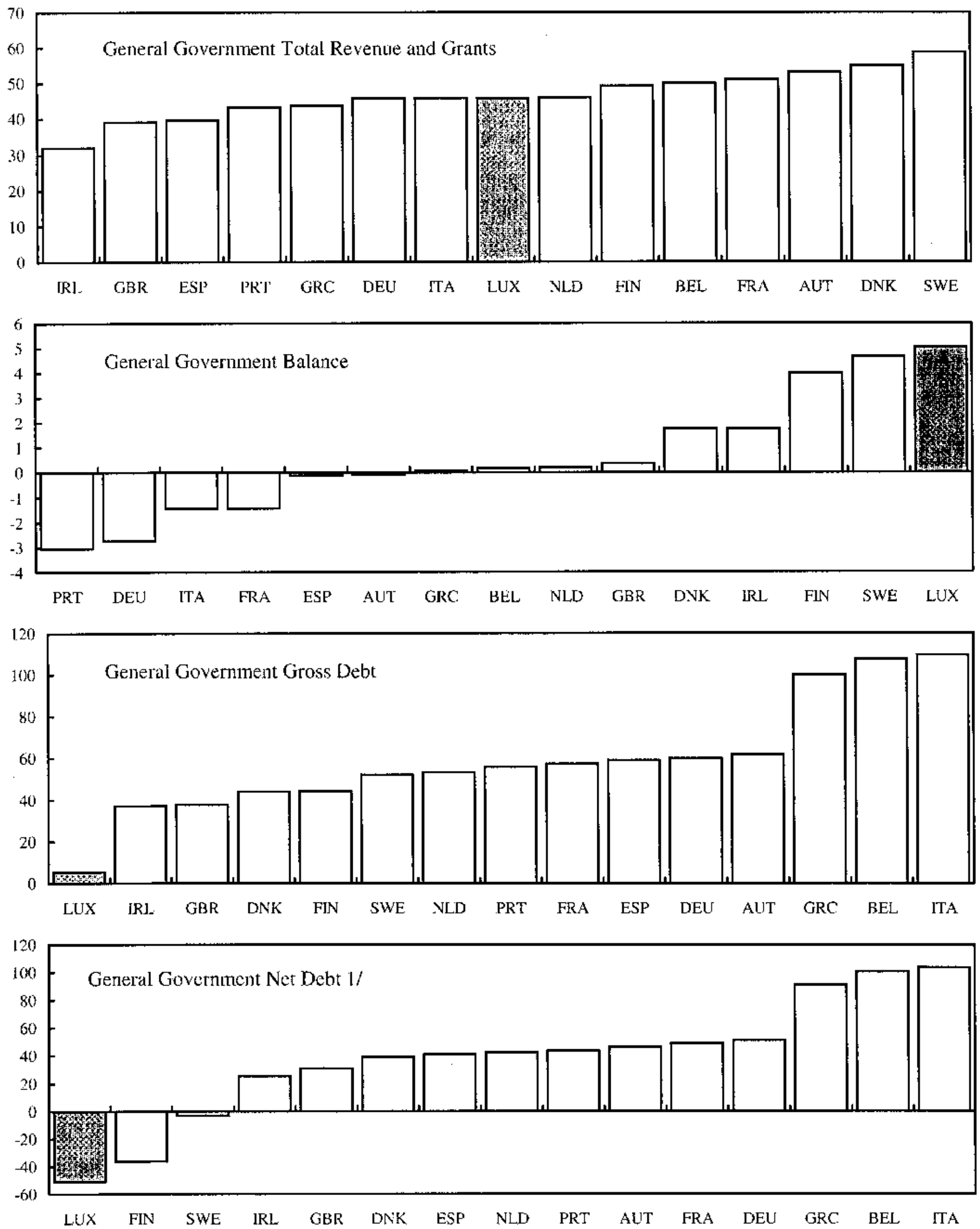
Source: IMF, World Economic Outlook.
1/ Excluding cross-border workers.
2/ Harmonized consumer price index.

Figure 2. Luxembourg: Prices and Labor Costs



Sources: Statec; and IMF, IFS and WEO.
1/ CPI inflation excluding energy and selected food items.

Figure 3. Luxembourg: General Government Finances in the EU
(In Percent of GDP, 2001)



Source: IMF, WEO.

1/ For Portugal, general government gross debt.

II. Report on the Discussions

A. Economic Outlook

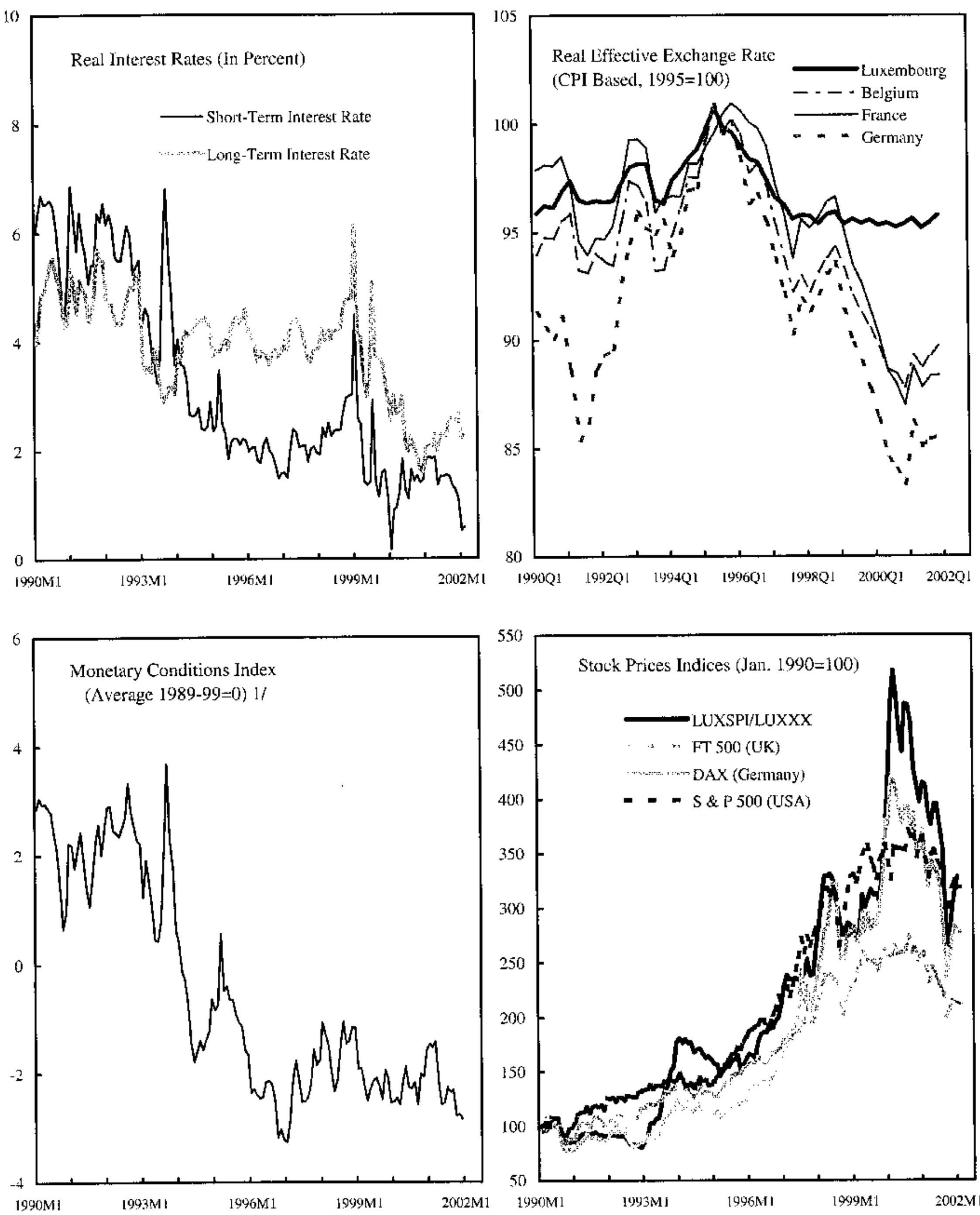
5. **Reflecting the global slowdown, the authorities and the staff agreed that average growth would post a low in 2002, though the authorities were somewhat more optimistic than the staff.** Noting that the financial sector had held up better than expected, they anticipated growth to average at least 3½ percent in 2002. Taking into account the observed weakness in domestic activity around end-2001, an expected regional recovery by mid-year, and supportive policy conditions, the staff projected real GDP growth of about 3 percent in 2002. Planned tax cuts and the acceleration in public spending would help, but the authorities agreed that much of this fiscal stimulus would leak abroad. Monetary conditions were also seen to be supportive from the perspective of Luxembourg (Figure 4), though their direct relevance for the domestic economy appeared limited, given its very open nature.

6. **Price and wage pressures that had emerged since 1999 as a result of energy price increases and tight labor market conditions were expected to dissipate in the course of 2002.** Headline inflation had already fallen significantly by early 2002, but underlying inflation had remained high, reflecting the rise in domestic wages and regional price developments. The introduction of the euro was provisionally estimated by the authorities to have added about 0.1 to 0.15 percentage point to inflation. With slack having returned to regional labor markets and barring further oil price shocks, staff concurred that headline inflation was likely to fall to below 2 percent in 2002, while underlying inflation would decline more gradually to about 2 percent by 2003. The social partners acknowledged the need for wage moderation. Energy prices constituted a key risk for inflation in 2002—which seems to have been heightened since the mission, in light of recent trends—as they might contribute to advancing the wage indexation expected for the third quarter.

7. **The staff and the authorities saw medium-term prospects as bright, but acknowledged that the past decade was likely to remain an exceptional one in terms of growth, in part because of the extraordinary performance of the financial sector.** There were signs that this key sector had begun to mature. Following a period of extraordinary growth, bank assets still increased strongly during 1995–2000, marginally faster than in the United States but somewhat slower than in the United Kingdom. Value added growth in the sector appeared to have been decelerating.[1] There was also some evidence that the sources of growth were shifting away from financial intermediation services. Staff analysis further suggested that the cyclical and exceptional components of GDP growth had been very large

[1] Financial sector value added is inherently difficult to estimate. In Luxembourg it consists of the sum of commission income and indirectly measured financial intermediation services (FISIM).

Figure 4. Luxembourg: Monetary Conditions and Asset Market Developments



Sources: WEFA; IMF, IFS; and staff calculations.

1/ Average 1989-99=0. Calculated using as weights 2.5 for the short-term real interest rate and 1 for the real effective exchange rate.

in the late 1990s and 2000, with underlying trend growth estimated at about 4¾ percent. In this context, the assumed 5½ percent annual growth in the latest Stability Plan update appeared to be optimistic and would be very difficult to achieve given the expected slower growth in 2002. The authorities observed that the credibility of their traditional caution about expecting too high a rate of growth had waned as the past decade progressed and growth accelerated, thus forcing their baseline projection upward.

Luxembourg: Value Added by Sector

	Share of total 2001	Annual increase (In percent) 1990-1995[1]	1995-2000[2]	2001[3]	Contribution to growth 2001
Total	100.0	4.8	5.5	5.5	5.5
Of which:					
Manufacturing	11.7	2.1	4.7	4.1	0.5
Trade and repair	10.3	3.0	7.0	3.2	0.3
Transports and communications	10.4	9.6	9.7	9.6	1.0
Financial intermediation and insurance	21.7	9.4	7.0	4.4	1.0
Business and real estate services	18.9	5.8	4.6	10.3	1.8

Source: Data provided by the Luxembourg authorities.
[1]ESA 79.
[2]ESA 95.
[3] Estimations based on first three quarters.

8. **The recent expansion was accompanied by an apparent slowdown in total factor productivity growth and a rise in unit labor costs**. The staff and the authorities concurred that better data and more analytical work were needed to gauge the extent and causes of the deceleration in productivity growth, which seemed to have affected mostly the non-financial sector.[2] The acceleration in unit labor cost growth was seen to be further caused jointly by wage indexation and regional labor market tightness (which had eased since mid-2001). The shift in the sources of growth to sectors more in tune with the regional business cycle could be a contributing factor, but evidence so far was inconclusive. Indeed, the financial sector—which, as staff analysis indicates, is driven mostly by global equity valuations and otherwise fairly insensitive to the regional business cycle—expanded strongly during 1998–2000.

9. **There was agreement that Luxembourg's statistical information base needed to be improved further.** Commitments to Eurostat and the ECB and the recent sharp increase

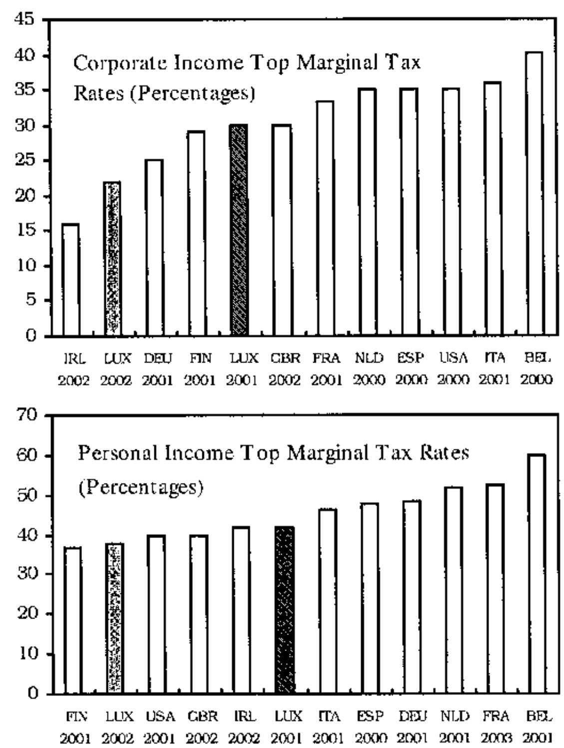
[2] See Luxembourg's Statistics Office (Statec), Note de Conjoncture, 3, 2001. Staff analysis suggests that total factor productivity growth in the financial sector remained strong (see Selected Issues paper).

in budgetary resources had led to appreciable progress over the past two years. Quarterly GDP, central government, and balance of payments data are expected to become available later in the year. Noting difficulties in recruiting and retaining staff with the requisite skills, the authorities conceded that coverage of data remained incomplete, and that quality and timeliness should be improved appreciably. They expressed some doubt as to whether they would be able to subscribe to the Fund's Special Data Dissemination Standard later in 2002, as initially envisaged.

B. Fiscal Policy

10. **In response to the large and persistent general government surpluses of the late 1990s and 2000, the authorities had proceeded with multi-year tax cuts and accelerated expenditure.** The tax cuts, equivalent to about 3.4 percentage points of GDP, were aimed to distribute the growth dividend widely, maintain an internationally attractive corporate tax system, and address inactivity traps by raising tax thresholds (Figure 5). Except for the promotion of individual pension savings, no new tax preferences or exemptions were introduced—existing ones were implicitly reduced by not adjusting nominal amounts for inflation. On the expenditure side, infrastructure, research and development and education received a boost to help alleviate constraints on growth. Surpluses in the pay-as-you-go (PAYG) social security system led to a socially and politically motivated increase in pension benefits.

Figure 5. Luxembourg: Income Tax Rates



Sources: Corporate Taxes Worldwide Summaries 2001-2002; and Personal Income Taxes Worldwide Summaries 2001-2002. Price Waterhouse Coopers, J. Wiley and Sons, 2001.

11. **With growth expected to be lower than the 5¼ percent budgeted, the staff—while strongly supporting the tax cuts and those spending increases aimed at removing bottlenecks—observed that the central government budget was likely to post a deficit, starting in 2002.** As they had also scaled down their growth expectations, the authorities conceded that it would be difficult to achieve central government budget balance as planned in 2002, further pointing to uncertainties regarding the estimated impact of the tax cuts, which could be larger than

budgeted. They were nonetheless committed to return to central government balance in 2003 by moderating the pace of capital spending, if necessary.

Luxembourg: General Government Finances, 2000–05
(In percent of GDP)

	2000	2001 Est.	2002 Proj.	2003 Proj.	2004 Proj.	2005 Proj.
Official fiscal targets[1]						
Revenue	46.1	44.4	43.2	42.7	41.8	...
Expenditure	40.3	40.3	40.4	39.6	38.4	...
Balance	5.8	4.1	2.8	3.1	3.4	...
Central government	2.8	2.3	0.0	0.3	0.4	...
Real expenditure growth (in percent)[2]	3.5	4.4	5.1	3.7	2.4	...
Real GDP growth (in percent)	7.5	3.9	5.3	5.7	5.6	...
Staff projections						
Revenue	46.1	45.8	43.2	42.7	41.8	41.8
Expenditure	40.3	40.8	42.2	41.6	40.9	40.3
Balance	5.8	5.0	1.0	1.1	0.9	1.5
Real expenditure growth (in percent)[2]	3.5	6.5	6.6	4.5	3.1	3.1
Real GDP growth (in percent)	7.5	5.1	3.0	6.0	4.7	4.7

[1]Data for 2001and later reflect the government's updated Stability Program (SP) of November 2001 (third update).
[2]Using the GDP deflator.

12. **The staff encouraged the authorities to focus their long-term fiscal strategy on securing the sustainability and improving the robustness of the social security system.** Such a strategy would consist of keeping the pace of spending growth below that of trend-GDP growth, using resources thus freed to convert part of the existing PAYG system into a funded pillar, and investing part of the funded component in foreign assets. Four observations motivated this advice: First, under prudent assumptions about long-term growth, contribution rates will need to rise significantly by the end of this decade for the current PAYG system to remain financially sound (Box 1). Second, a funded component with assets partly invested abroad would diversify risk compared to the current PAYG system whose return depends exclusively on the performance of the domestic economy. Third, keeping spending below trend-GDP growth seems justified because of the rapidly growing contingent of cross-border workers: such workers fully contribute to GDP and social security revenues but do not claim the same amount of public services as residents and are not entitled to most benefits other than pensions. Finally, converting part of the PAYG system in a funded component would reduce resources available to the social security system, thus shielding it from pressures to spend surpluses on higher benefits or invest its assets in the pursuit of social objectives.

13. **The authorities noted that the staff's position would be considered in the public debate on how to keep the social security system financially sound, but felt that the pressures on the PAYG pension system would stay manageable.** They observed that population growth remained relatively healthy, and saw a possible safety valve in higher immigration that would naturally follow from EU enlargement. They also pointed to the appreciable assets of the social security system, which they agreed would need to be better

Box 1. Pension System Sustainability

From April 2002, private sector pension benefits will be increased at an estimated annual fiscal cost of about 0.7 percentage point of GDP. Key measures include: a 3.9 percent across-the-board pension raise; a 11.6 percent increase in the lump-sum benefit; an additional amount of €12.66 per month for each year of service; an increase of 4.8 percent in the minimum pension; and the elimination of the reduction of the survival pension when it is below the minimum pension, together with the relaxation of restrictions on cumulating benefits.

As documented in the 2000 Article IV consultation report, the sustainability of the social insurance system depends crucially on assumptions of growth and cross-border worker flows. To illustrate the impact of the 2002 reforms in a broader context, two of the three scenarios presented at that time were rerun and compared with the pre-reform baseline. In addition, a different scenario was added in which the growth assumption coincides with the baseline of the 2001 ILO study on the Luxembourg pension system.

The main conclusions are that the 2002 reforms exhaust the available margin under the current contribution rate of 24 percent, thus advancing the time at which contribution rates need to be raised or benefits lowered to keep the current pay-as-you-go system in balance, in all but the status-quo growth scenario; and, that the PAYG system is unlikely to be sustainable under plausible growth assumptions (Box 1. Figure 1).

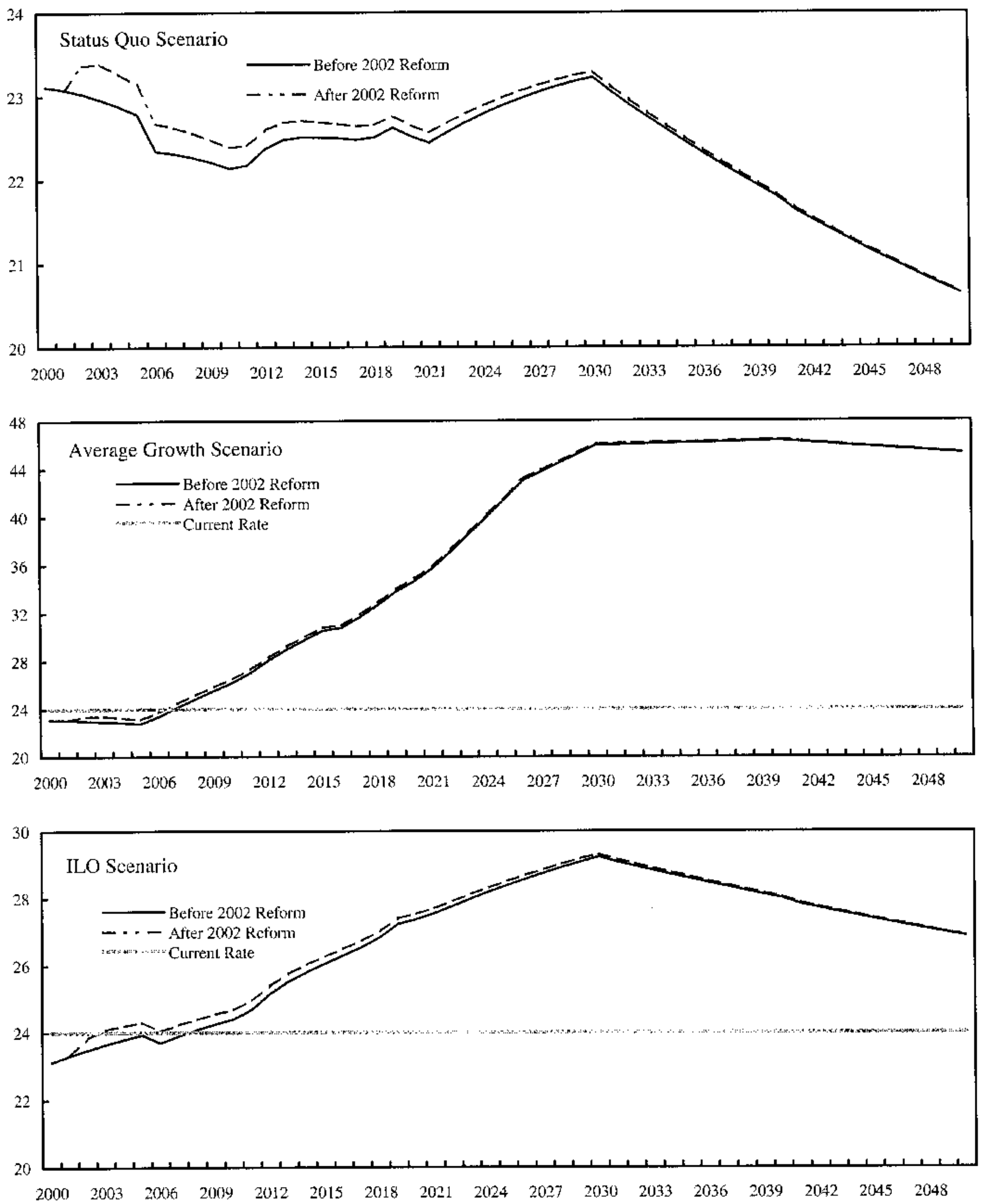
- Under the status quo scenario—which assumes 5 percent annual real GDP growth, 3 percent employment growth, and an increase in the ratio of cross-border workers to resident workers to 6 by 2050—the equilibrium contribution rate rises in the year the reforms are implemented to 23.4 per-cent (mostly due to the first two measures) and hovers around that level until the year 2030. Thereafter the contribution rate declines as the financing pressures on the system due to aging are offset by the rapid rise in the contributor coverage ratio, owing to the massive inflow of cross-border workers.

- Under the average growth scenario—which assumes the status quo until 2005 and no further cross-border inflows thereafter, implying average GDP growth of 2.1 percent per year—the path of the equilibrium contribution rate is much higher and the rate increases to 46.4 percent by 2040 as growth slows and financing pressures due to population aging dominate.

- Under the ILO scenario—which is similar to the status-quo scenario but with 4 percent annual real GDP growth and 2 percent employment growth—the equilibrium contribution rate increases to 29.3 percent in 2030, before declining steadily to 26.9 percent in 2050.

Reasonably, growth is likely to lie between the status-quo and the ILO scenarios on the one hand and the average growth scenario on the other. Growth of 4-5 percent per year as assumed in the former is quite possible in the near term, but improbable over a 50-year horizon, while—barring reversals—the average growth scenario could be interpreted as a lower bound. However, the risk of a growth reversal due to an adverse shock to one of the dominant sectors in the economy cannot be entirely discarded.

Box 1 - Figure 1. Luxembourg - Equilibrium Contribution Rate
(In Percent of Labor Income)



Source: STATEC and IMF staff calculations.

managed, an issue on which progress was underway—e.g., preparations had begun to raise the share of the portfolio held in fixed-income securities and lower the share of short-term money-market instruments. The authorities felt that under reasonable assumptions, the required rise in the contribution rate would be modest and they were publicly committed to scaling back the recent increase in benefits, if necessary.

C. Financial Sector

14. **The financial sector has continued to thrive, asserting its dominant position for the domestic economy as well as its international importance.** The sector has become increasingly diversified and niche-oriented, with asset and liquidity management taking over from private banking as the main source of continued strong growth of the sector. As a result, the sector appears to be influenced mostly by global equity valuations and well hedged against typical business cycle fluctuations, with commissions and interest margins alternating as key sources of profitability.[3] Being the fourth largest interbank market in the EU for international activities and the second largest investment fund center in the world, Luxembourg's financial sector is of systemic importance. However, its high degree of diversification and the fact that the bulk of its activity consists of non-risk bearing asset management suggest that it poses little potential risk to regional and international financial stability.

Luxembourg: Financial Services Sector - Selected Indicators

	1980	1990	2001
Banks			
Number	111	177	189
Of which: Foreign[1]	99	155	165
Total assets[2] (in billions of euro)	97.1	309.4	721.0
Of which: Claims on banks (in percent)	52	60	50
Gross income (in billions of euro)	0.9	3.6	8.1
Of which: Commissions (in percent)	7	11	35
Investment funds			
Number	n.a.	805	1,908
Net assets (in billions of euro)	2.9	72.2	928.4
Memorandum item:			
GDP (in billions of euro)	3.9	8.9	21.8

Sources: Statec, BCL, CSSF, ABBL.
[1]Banks headquartered outside Belgium or Luxembourg.
[2]In mid-2001, foreign-owned banks accounted for about 94 percent of assets.

15. **Despite the prospective disappearance of tax and regulatory advantages, the authorities and sector participants were guardedly optimistic about the outlook for the financial sector.** Sector participants concurred with the staff that financial sector growth was likely to be slower than in the past decade but would remain healthy. They noted that

[3] See Selected Issues Paper.

shortages of skilled labor would require them to develop higher value added products and welcomed the authorities' initiative in starting a school of finance in Luxembourg. They favored swift completion of the EU's Financial Services Action Plan and saw opportunities for the sector in increased international financial market integration. The sector stood also ready to take advantage of the development of pension funds in the EU, which would, regrettably, still take considerable time. Sector participants and authorities were cautiously optimistic about the implications for the sector of the introduction of a withholding tax on savings, as proposed in the current draft EU directive. Under this proposal, Luxembourg would phase in a tax-withholding requirement at a low rate for non-residents between 2003 and 2005, and by 2010 share information with other EU members on interest and other investment income of non-Luxembourg residents, provided that the non-EU members listed in the Feira European Council conclusions and the dependent and associated territories of EU member states take similar action. Since this would level the playing field, sector participants thought that the sector would weather the introduction of a withholding tax well. The tax was likely to be modest and would not apply to all types of investment, and the sector was comparatively very efficient owing to its high level of specialization, agglomeration economies, and close working relations with the government, which allowed a flexible and swift response to changing circumstances.

16. **The authorities expressed appreciation for the Financial Sector Assessment Program exercise, which had indicated that the financial sector was solid, efficient, and well supervised, and concurred fully with its recommendations, noting that maintaining an efficient and reputable financial sector was a key priority** (Box 2). No major weaknesses were found that could cause systemic risks. The strength and resilience of the financial sector were documented by the performance of the financial soundness indicators and validated by stress tests, conducted under extreme assumptions. Through interbank exposure, significant vulnerabilities appeared only in the presence of contagion effects from shocks occurring abroad. In the area of supervision, the authorities intended to address the FSSA recommendations without delay and underscored that the policy of ongoing upgrading of their supervisory capabilities would continue. They expressed satisfaction about the current arrangements for cross-border supervision.

17. **The authorities emphasized the high priority they attached to stepping up efforts to combat money laundering and terrorist financing.** In late 2001, the financial sector supervisor clarified and publicized the existing anti-money laundering framework and established new procedures for banks. Verification of compliance with these procedures and a program of dedicated on-site audits had begun. The authorities conducted a complete review of their anti-money laundering policies, leading to the adoption of a comprehensive Action Plan and the launch of a heightened awareness campaign. They valued the staff's contribution to the elaboration of the action plan, whose implementation is being guided by a committee including representatives of all professions covered by the new EU directive on

Box 2. Summary of FSSA Findings and Recommendations

Luxembourg's financial sector is solid, efficient, and well supervised. Supervision and regulation conform with the standards approved by the Basel Supervisory Committee (banking), IAIS (insurance), IOSCO (securities), and CPSS (payment systems) standards and codes. In all areas, a high degree of observance with the transparency practices was found. Stress tests indicate that—owing to a high degree of diversification and a strong capital position—banks are resilient to potential severe shocks stemming from: (a) sectors in distressed conditions (telecommunications); (b) sectors adversely affected by the September 11 events (airline and aerospace, insurance, and tourism); (c) emerging markets; and (d) foreign financial groups. The insurance sector was found to be capitalized in excess of common practice, but vulnerable to large drops in equity valuations. In addition, the linkages between the banking and investment funds sectors do not pose systemic threats. Banks mainly provide administrative and marketing services, but have only a limited role as investment fund promoters. Since they do not bear market and credit risk, losses on managed funds would not affect their profitability and capital position. Nonetheless, a banking center that operates mostly with accounts of nonresidents is very susceptible to reputation risks.

Against this background, the FSSA makes the following recommendations:

- To pursue vigorously the implementation of the **anti-money money laundering Action Plan**. The recent measures taken by the authorities are a step in the right direction, but all envisaged actions must be completed and an aggressive anti-money laundering policy needs to continue to be undertaken in all areas of the financial sector.

- To intensify the policy of increasing the number of **on-site inspections** conducted by the banking supervisor (CSSF); and to continue the ongoing policy of **exchanging information** and holding discussions with foreign country supervisors and signing Memoranda of Understanding.

- To continue monitoring very closely banks' **overall interbank exposures**, since there is no overall exposure limit but only a bank-to-bank ceiling. The EU directive on large exposures requires that limits be also applied on a consolidated basis.

- To continue **using stress tests in the banking and insurance sectors** to assess the sectors' resilience and intervene to stem potential problems.

- To improve the **insurance** supervisory authority (CAA) in some areas. Specifically, the authorities should: (a) consider increasing the size of the CAA staff to supervise the life and reinsurance sectors in particular; (b) use the asset liability management stress tests on a regular basis; and (c) establish a regular process of exchange of information between the prosecutor and the CAA once a suspicious activity is reported and the prosecutor is taking action to address the report.

- To complete the ongoing work to develop and introduce an internal **Code of Conduct for CSSF** staff regarding trading and holding of securities.

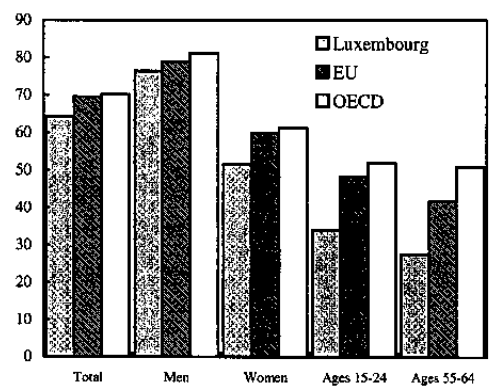
anti-money laundering. The staff welcomed the considerable progress made in this area, observing that swift adoption of the EU directive, strengthening of the Financial Intelligence Unit, and increased cooperation between supervisory and law-enforcement agencies would all be essential.

D. Structural Reforms to Raise Efficiency and Adaptability of the Economy

18. **Discussions with the authorities and the social partners reassured the staff that the labor market would continue to function flexibly despite *prima facie* rigid institutions and formal wage indexation.** Indeed, labor unions explicitly endorsed the objective of achieving as low an unemployment rate as possible and recognized the need for businesses to remain competitive and profitable in order to secure long-term growth. The authorities presented evidence that indexation had no long-term impact on inflation, but the staff argued that it was still likely to be associated with inefficiencies.[4] The mission encouraged the labor unions and the authorities to proceed swiftly with their analysis of how the indexation mechanism could be insulated from terms-of-trade shocks and suggested forward-looking wage setting as an alternative.

19. **The staff urged the authorities to adopt a more hands-on approach as regards labor market reform, in particular to raise participation rates that were still low by international standards** (Figure 6). In the context of annual National Action Plans for Employment initiated in 1999, progress had been made in removing legal obstacles to part-time employment, introducing more flexible working time arrangements and work week averaging, and expanding child care facilities. However, implementation of this more flexible legal framework had been left to the social partners and little *de facto* progress had been observed to date. Similarly, the proposals to increase the efficiency in the processes of entry and follow-up in the disability system—essential to discourage it from being used as a form of early retirement—seemed to be on a slow track. Making early retirement options actuarially fair would also help to raise participation of older workers. In this context, the authorities noted that important schemes

Figure 6. Luxembourg: Labor Force Participation Rates (In Percent, 2000)



Source: OECD Employment Outlook.

[4] During 1996-2001, only 2½ percent of the products in the CPI basket showed higher inflation than in the euro area, and during 1990-2001 inflation was not significantly higher than in trading partners or the EU (Statec, Bulletin No 2, March 2002).

related to the restructuring of the steel sector would run out in the near future, thus mechanically raising employment rates, *ceteris paribus*. Active labor market programs had been expanded to deal with the slight rise in structural unemployment, but it was agreed that analytical capacity needed to be built to allow assessment of their effectiveness.

20. **The mission discussed a range of other policies that could promote economic efficiency and alleviate constraints on growth.** Though the staff felt that faster progress would be desirable, the authorities expressed satisfaction with the pace of **product market reforms,** noting that they were proceeding in line with international commitments. They argued that in the case of network industries the benefits for Luxembourg would depend on what happened in the rest of Europe given the small size of the country and its central location. The authorities pointed to their swift adoption of an enabling legal and regulatory framework for **electronic commerce**, which appeared to have successfully launched this sector. They shared the staff's concern about possible constraints on growth from a poorly functioning **land market**. Much property was in the hands of local authorities, who also were responsible for regulations on land use and zoning. Work had begun on a more integrated, national approach that would make more land available for construction, which would, however, take several years to complete. The authorities did not see the legal limit on annual increases in **rents** (5 percent) as problematic as long as inflation remained low. Luxembourg's legal framework conforms to the OECD's **anti-bribery convention**.

21. The authorities strongly advocated further multilateral **trade liberalization,** which they saw as an essential and effective development tool. In the context of Doha, other important objectives were the integration of the environment and agriculture in the negotiations, and the reaching of an agreement on intellectual property rights in pharmaceutical products. In the EU, the authorities favored opening up trade to all foreign products (except arms). With respect to **official development assistance** (ODA), they argued that both quantity and effectiveness needed to be raised. They planned to increase ODA spending to about 1 percent of GNP by 2005, from an estimated 0.78 percent of GNP in 2001. As an example of how to improve quality, they cited their target-country and program-based approach.

III. STAFF APPRAISAL

22. **Luxembourg is continuing its long-running, impressive economic expansion, and medium-term prospects remain bright**. Real GDP and employment growth have been well above EU averages over the past decade. Domestic factors delayed the impact of the global slowdown, which will be reflected in relatively low average growth in 2002. Energy price behavior has dominated inflation since 1999, while wage increases have pushed core inflation above the regional average. These pressures are expected to dissipate during 2002.

23. **Openness to workers from the region and deep specialization underpin the excellent performance of the economy but also shape its vulnerabilities.** While labor inflows have permitted a fast-paced expansion, strong social cohesion has been cemented by

the build-up of a generous welfare system that requires high long-term growth and continuing large labor inflows for its sustainability. Specialization has been a source of strength but also of potential risk, in the case of the financial sector for the domestic economy as well as internationally.

24. **Economic policies should remain geared toward addressing these vulnerabilities.** In light of recent increases in public spending, likely lower medium-term growth, and some evidence of emerging constraints on growth, a return to a more cautious course and the adoption of a more activist approach would be desirable. Fiscal policies should be based on prudent projections of trend growth and focused on strengthening the social security system. Effective supervision should continue to support the financial sector, and more rapid progress on structural reforms should alleviate bottlenecks and raise the efficiency and adaptability of the economy.

25. **The authorities' intention to moderate spending as needed to ensure that the central government budget remains in balance over the medium term is welcome.** Ongoing tax reductions should be completed, but together with slower growth these tax cuts are likely to push the central government budget into deficit in 2002, a situation that could deteriorate further in the future, if projections continue to be based on overly optimistic growth assumptions. Given the comfortable asset position of the public sector, this is not an immediate concern. Nonetheless, maintaining central government budget balance over the medium term is desirable to safeguard the sound principles guiding fiscal policy and address demographic pressures.

26. **Consideration should be given to a fiscal strategy that keeps general government spending growth somewhat below trend-GDP growth and uses resources thus freed to convert part of the PAYG pension system into a funded pension pillar.** Such a strategy would recognize the peculiar nature of a growing cross-border labor force, shield the budget from pressures to spend current surpluses on higher social benefits, contribute to safeguarding the sustainability of the social security system, and greatly improve its robustness in withstanding growth reversals or shocks that could be large in Luxembourg's case. In addition, the management of existing assets, both in the social security system and the broader public sector, should be improved by permitting investments abroad and focusing on rate-of-return and risk considerations.

27. **Even with the prospect of disappearing tax advantages, cautious optimism about the outlook for the solid, efficient, and well-supervised financial sector appears justified, but the ongoing upgrading of supervisory capabilities should continue to be a policy priority.** The authorities' willingness to phase in a withholding tax on income from savings is welcome, as it lessens the scope for possibly harmful international tax competition. Luxembourg conforms fully with all supervisory and regulatory standards and achieves a high degree of transparency in all relevant areas. While it is reassuring that stress tests revealed that banks are broadly resilient to potential shocks, the financial sector remains nonetheless subject to global and regional economic conditions, especially equity market

developments, and is very susceptible to reputation risks, thus underscoring the need for a continued high degree of vigilance.

28. **The authorities' adoption of a comprehensive anti-money laundering Action Plan in the wake of the September 11 events is an exemplary response to the need to step up efforts to combat money laundering and terrorist financing.** It will be essential to complete its implementation swiftly.

29. **Labor market outcomes have been stellar in terms of employment creation and unemployment rates, reflecting a strong social partnership, but unit labor costs have risen faster than in the region during the last two years.** With the reversal of the upsurge in energy prices and easing of regional labor market tension, it will be important to observe wage moderation in the period ahead so as to restore profit margins. Though Luxembourg's labor market model has shown considerable flexibility, it would be beneficial to insulate the wage indexation mechanism from terms-of-trade shocks, or more broadly, to set wages in a fully forward-looking manner.

30. **A more comprehensive, hands-on approach should ensure that measures taken to improve labor market flexibility effectively raise participation rates and improve overall economic efficiency**. Policies adopted in the context of the National Action Plans for Employment are a useful first step. They should be complemented by a review of the tax-benefit system and the removal of any remaining disincentives to participate in the work force, the elimination of *de facto* barriers to part-time employment, and the introduction of actuarial fairness across all pension schemes.

31. **To raise productivity and remove constraints on growth, product and land market reforms should be further accelerated**, taking the same proactive course that has proven successful in the financial sector and in launching electronic commerce. It would be useful to ease or phase out rent controls in the rapidly growing economy.

32. **Luxembourg's commitments to promote trade liberalization and increase development assistance are commendable.** Luxembourg should continue to impress on the EU the need to reduce subsidies and import restrictions. ODA is estimated to be well above the United Nations' target, and scheduled to increase further.

33. Luxembourg's economic **statistics** need to be further improved to inform policy making and to allow it to subscribe to the Fund's Special Data Dissemination Standard.

34. It is proposed that the next Article IV consultation with Luxembourg be held within 24 months.

Table 1. Luxembourg: Basic Data

Land Area	2,586 square kilometers
Population (2000)	438,500
GDP per capita (2000)	US$43,324
GNP per capita (2000)	US$39,225

	1998	1999	2000	2001 Est.	2002 Proj.	2003 Proj.
	Volume changes, in percent					
Demand and supply						
Private consumption (real growth rate)	4.0	2.1	3.1	3.4	4.2	4.3
Public consumption	1.4	7.7	4.7	4.4	3.1	3.3
Gross fixed investment (real growth rate)	2.8	19.6	-3.0	5.9	4.5	6.7
Inventory accumulation 1/	-0.1	-0.4	0.2	0.1	0.0	0.0
Total domestic demand	2.9	7.3	1.8	3.6	4.1	4.8
Exports of goods and nonfactor services	12.9	13.3	16.4	8.4	3.5	8.4
Imports of goods and nonfactor services	11.5	15.6	13.8	8.6	3.1	8.0
Foreign balance 1/	3.2	-0.3	5.4	1.3	1.2	2.2
Gross domestic product	5.8	6.0	7.5	5.1	3.0	6.0
	In thousands, unless otherwise noted					
Employment and unemployment						
Resident labor force	179.6	183.7	188.2	192.7	195.6	199.1
Unemployed	5.5	5.4	5.0	4.9	5.7	5.4
(As a percent of total labor force)	3.1	2.9	2.6	2.5	2.9	2.7
Resident employment	174.1	178.3	183.2	188.2	189.9	193.7
Cross-border workers (net)	62.3	70.0	79.0	87.8	92.9	98.5
Domestic employment	236.4	248.3	262.3	276.0	282.8	292.2
(Change in percent)	4.3	5.0	5.6	5.2	2.5	3.3
Of which: Employment in international organizations 2/	7.8	7.7	7.6	7.6	7.6	7.6
	Annual changes, in percent					
Prices and costs						
GDP deflator	2.6	2.5	3.7	0.9	1.8	2.0
Harmonized consumer price index	1.0	1.0	3.2	2.7	1.9	1.8
Average nominal wage growth 3/	2.4	3.8	3.9	5.3	3.0	3.0
Nominal unit labor costs 3/	1.3	3.2	2.4	5.7	2.6	0.6
	(In percent of GDP)					
Public finances						
General government financial balance	3.2	3.8	5.8	5.0	1.0	1.1
General government gross debt	6.3	6.0	5.6	5.5	4.8	4.4
General government net financial assets 4/	44.9	48.0	50.8	50.4	49.3	46.8

Table 1. Luxembourg: Basic Data (concluded)

	1998	1999	2000	2001 Est.	2002 Proj.	2003 Proj.
			(In billion euro)			
Current account						
Trade balance	-2.1	-2.4	-2.6	-2.7	-2.7	-3.0
Nonfactor service balance	3.7	4.6	6.0	5.8	6.1	6.8
Factor income balance	0.2	-0.5	-1.2	-1.6	-1.9	-2.0
Employees' compensation	-1.6	-1.9	-2.3	-2.9	-3.2	-3.5
Net investment income	1.8	1.5	1.1	1.2	1.4	1.5
Transfer balance	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6
Current account balance	1.5	1.2	1.7	1.0	0.9	1.2
(In percent of GDP)	8.8	6.5	8.2	4.4	3.9	4.7
			(Annual changes, in percent)			
Exchange rates (averages)						
U.S. dollar per euro	-1.2	-4.8	-13.4	-3.1	...	...
Nominal effective rate	-0.2	-0.3	-1.0	-0.1	...	...
Real effective rate (CPI based)	-0.4	-0.2	-0.2	0.2	...	...
Interest rates						
Short term 5/	3.8	3.0	4.4	4.3	...	...
Long-term government bond yield 6/	4.7	4.7	5.5	5.1	...	...
			(In percent)			
Financial soundness indicators of the banking sector						
Capital adequacy						
Regulatory capital to risk-weighted assets	12.6	13.4	13.4	14.2	...	...
Regulatory Tier I capital to risk-weighted assets	10.0	11.0	11.3	11.6	...	...
Asset quality						
NPLs to gross loans 7/	0.5	0.5	0.5	0.5	...	...
NPLs net of provisions to capital 7/	4.2	3.5	3.3	3.4	...	...
Earnings and profitability						
Net interest income to gross income	44.2	50.7	45.7	45.6	...	...
Non-interest income to gross income	55.8	49.3	54.3	54.4	...	...
Return on assets	0.6	0.4	0.4	0.5	...	...
Return on equity 8/	15.6	10.1	11.1	12.1	...	...
Liquidity						
Liquid assets to total assets 9/	79.1	77.7	77.8	77.0	...	...
Liquid assets to total deposits	225.1	232.5	218.5	244.2	...	...

Sources: Data provided by the authorities; and Fund staff calculations

1/ Contribution to GDP growth.

2/ Including Statistical Office of the European Communities (Eurostat) and European Investment Bank (EIB).

3/ Overall economy.

4/ Data through 2000 reflect staff calculations.

5/ Until 1998, Belgian six-month interbank money rate, later deposits in Euro.

6/ Starting in 2000, provided by the OECD.

7/ NPLs (non-performing loans) include doubtful but performing debts, non-performing debts and irrevocable debts.

8/ Return on equity is calculated as net pre-tax income to Basle risk-weighted assets.

9/ Liquid assets include cash, central bank deposits, interbank loans and securities.

Luxembourg: Fund Relations

(As of March 31, 2002)

I. **Membership Status**: Joined December 27, 1945; Article VIII.

II. **General Resources Account:**	**SDR Million**	**% Quota**
Quota	279.10	100.00
Fund holdings of currency	180.18	64.56
Reserve position in Fund	98.95	35.45
Financial Transactions Plan transfers (net)	6.00	

III. **SDR Department:**	**SDR Million**	**% Allocation**
Net cumulative allocation	16.95	100.00
Holdings	5.33	31.43

IV. **Outstanding Purchases and Loans:** None

V. **Financial Arrangements:** None

VI. **Projected Obligations to Fund:** None

VII. **Exchange Rate Arrangement:**

On January 1, 1999, Luxembourg entered Stage 3 of the European Economic and Monetary Union (EMU) at a rate of 40.3399 Luxembourg franc per euro.

VIII. **Exchange Restrictions:**

Luxembourg maintains exchange restrictions vis-à-vis Iraq and the Socialist People's Libyan Arab Jamahiriya. These restrictions were notified to the Fund under Decision No. 144-(52/51) in EBD/90/280 (9/4/90) and EBD/96/43 (3/28/96), respectively.

IX. **Article IV Consultations:**

The last Article IV consultation was concluded at EBM/00/49 (5/8/00).

Luxembourg: Statistical Issues

Luxembourg's economic statistics have improved substantially as to coverage and timeliness in recent years reflecting in part Luxembourg's undertakings in the context of EU/EMU membership, and a significant increase in budgetary resources. They were weak, at least by the standards of most other advanced economies, as a result of Luxembourg's status as a very small open economy and its monetary union with Belgium until end-1998. Moreover, the sectoral shift away from manufacturing to services has raised difficult methodological issues.[5] Most statistics are now available electronically at no cost.

- In March 2000, Luxembourg's Statistical Office (Statec) released fiscal data for the general government based on the European System of Accounts 1995 (ESA95).

- In November 1999, Statec released national accounts data (excluding private household, corporate, and government accounts) based on ESA95.

- Monetary statistics, which were reviewed by a Fund mission in December 1999, have improved significantly in terms of coverage, periodicity, and timeliness.

Moreover, since the start of 2000, Statec has begun publishing an additional CPI that excludes spending by nonresidents in Luxembourg. This index appears to be somewhat less volatile in response to shocks to energy and food prices and is being used for automatic indexation of wages and social benefits.

The following two data lacunae continue to impede analysis:

- National accounts data based on ESA95 are only available at an annual frequency, and, at this point, the annual data only cover the short time period 1995–2000. Moreover, data are not available for some of the institutional sectors of the economy (households, and financial and nonfinancial corporations).

- As regards the balance of payments statistics, there are no data on financial and capital account transactions. A joint effort by the Central Bank of Luxembourg and Statec is scheduled to provide financial and capital account data in 2002.

The authorities intend to subscribe to the Fund's Special Data Dissemination Standard (SDDS), and efforts to provide the requisite metadata are under way. The main obstacles to subscription include the SDDS requirements to provide sub-annual national account and central government data.

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[5]The difficulties in measuring Luxembourg's GDP are vividly brought out by Als, 1988, "The Nightmare of Economic Accounts in a Small Country with a Large International Banking Sector," *The Review of Income and Wealth*, pp. 101–10.

Luxembourg: Core Statistical Indicators
As of End-March 2002

	Exchange Rates	Int'l Reserves	Central Bank Balance Sheet	Interest Rates	Consumer Price Index	Exports/ Imports	Current Account Balance	Overall Government Balance	GDP/GNP	External Debt/Debt Service
Date of Latest Observation	Mar 29	Dec 01	Mar 15	Mar 29	Feb 02	Nov 01	01Q3	2000	2001	1999
Date Received	Mar 29	Mar 02	Mar 29	Mar 29	Mar 02	Feb 27	Jan 24	Dec 01	Jan 02	Feb 00
Frequency of Data	Daily	Monthly	Weekly	Daily	Monthly	Monthly	Quarterly	Annual	Annual	Annual
Frequency of Reporting	Daily	Monthly	Weekly	Daily	Monthly	Monthly	Quarterly	Annual	Annual	Irregular
Source of Update	Reuters	Central Bank	Central Bank	Reuters	Statec	Statec	Statec	Ministry of Finance/ Statec	Statec	Statec
Mode of Reporting	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Electronic	Paper	Electronic	Paper
Confidentiality	Published	Published	Published	Published	Published	Published	Published	Published	Published	Published
Frequency of Publication	Daily	Monthly	Weekly	Daily	Monthly	Quarterly	Quarterly	Annual	Annual	Irregular

INTERNATIONAL MONETARY FUND

LUXEMBOURG

Staff Report for the 2002 Article IV Consultation
Supplementary Information

Prepared by the European I Department

Approved by Michael Deppler

May 30, 2002

1. **This supplement provides information on economic developments that has become available since the preparation of the staff report for the 2002 Article IV consultation with Luxembourg (SM/02/122).** It reviews the economic outlook in the light of an updated and revised set of national accounts as well as newly released data on economic activity and consumer prices. The new information does not alter the thrust of the staff appraisal. A revised Basic Data Table is attached.

2. **Real GDP growth for 2001 is now estimated to have been 3.5 percent instead of 5.1 percent, and CPI inflation in April 2002 was 2.1 percent.** In 2001, private and public consumption grew faster than estimated previously, while investment and the trade volume rose more slowly, reducing the contribution of the foreign balance to growth. Value added in the financial sector is now estimated to have declined slightly. Unemployment turned out marginally higher at 2.6 percent. CPI inflation in April 2002 remained at the level of March, sustained mostly by rising energy prices. The next wage indexation will take place in June 2002.

3. **Together with weakness in short-term indicators of economic activity and lackluster international stock markets, this new information has prompted the staff to lower its GDP growth forecast for 2002 and raise its inflation projection.** Projected GDP growth has been reduced from 3.0 percent to 2.7 percent, the same as the latest projection by Luxembourg's statistics office. Reflecting inflation in Luxembourg and elsewhere in the euro area that exceeded staff expectations somewhat during the first months of 2002, the projections for CPI inflation and the GDP deflator have been revised slightly upward to 2.0 percent in 2002. Staff projections for 2003 have remained broadly unchanged, leaving the staff somewhat more cautious on growth than Luxembourg's statistics office, which expects GDP to increase by 6.6 percent.

4. **On balance, these revisions do not significantly alter the staff's view on the evolution of the general government balance for 2002 and beyond.** Lower GDP in 2001 led to a higher general government surplus as a share of GDP. However, the resulting positive carryover on the government financial balance in 2002 (in terms of its share of a lower baseline GDP) is offset by the downward revision of GDP growth.

Table 1. Luxembourg: Basic Data

Land Area	2,586 square kilometers
Population (2001)	443,200
GDP per capita (2001)	US$42,881
GNP per capita (2000)	US$38,894

	1998	1999	2000	2001	2002 Proj.	2003 Proj.
	Volume changes, in percent					
Demand and supply						
Private consumption (real growth rate)	4.0	2.7	3.5	4.8	3.8	4.3
Public consumption	1.4	7.2	4.4	7.8	3.7	3.3
Gross fixed investment (real growth rate)	2.8	21.9	-5.9	3.3	0.0	6.7
Inventory accumulation 1/	-0.2	-0.2	1.7	-0.9	0.0	0.0
Total domestic demand	2.8	8.4	2.8	3.8	2.7	4.7
Exports of goods and nonfactor services	13.8	12.3	17.0	2.5	3.4	8.4
Imports of goods and nonfactor services	12.4	15.1	14.9	2.6	3.1	7.8
Foreign balance 1/	3.3	-1.1	4.8	0.3	0.9	2.2
Gross domestic product	5.8	6.0	7.5	3.5	2.7	6.0
	In thousands, unless otherwise noted					
Employment and unemployment						
Resident labor force	179.6	183.7	188.2	192.9	195.8	198.5
Unemployed	5.5	5.4	5.0	4.9	5.6	5.6
(As a percent of total labor force)	3.1	2.9	2.6	2.6	2.9	2.8
Resident employment	174.1	178.3	183.2	188.0	190.2	193.0
Cross-border workers (net)	62.3	70.0	79.0	89.0	94.2	99.7
Domestic employment	236.4	248.3	262.3	277.0	284.3	292.7
(Change in percent)	4.3	5.0	5.6	5.6	2.6	2.9
Of which: Employment in international organizations 2/	7.8	7.7	7.6	7.6	7.6	7.6
	Annual changes, in percent					
Prices and costs						
GDP deflator	2.6	2.2	3.5	0.2	2.0	1.9
Harmonized consumer price index	1.0	1.0	3.2	2.7	2.0	1.8
Average nominal wage growth 3/	2.4	2.5	4.6	5.2	3.4	3.8
Nominal unit labor costs 3/	1.3	1.9	3.2	7.7	3.5	1.0
	(In percent of GDP)					
Public finances						
General government financial balance	3.2	3.8	5.8	5.2	1.0	1.1
General government gross debt	6.3	6.1	5.7	5.7	4.9	4.5
General government net financial assets 4/	44.9	48.2	51.0	51.8	50.5	47.8

Table 1. Luxembourg: Basic Data (concluded)

	1998	1999	2000	2001	2002 Proj.	2003 Proj.
			(In billion euro)			
Current account						
Trade balance	-2.1	-2.4	-2.6	-2.7	-3.0	-3.3
Nonfactor service balance	3.7	4.6	6.0	5.8	6.3	7.1
Factor income balance	0.2	-0.5	-1.2	-1.6	-1.8	-2.0
Employees' compensation	-1.6	-1.9	-2.3	-2.9	-3.1	-3.4
Net investment income	1.8	1.5	1.1	1.2	1.3	1.5
Transfer balance	-0.4	-0.5	-0.5	-0.6	-0.6	-0.6
Current account balance	1.5	1.2	1.7	1.0	0.9	1.2
(In percent of GDP)	8.8	6.5	8.2	4.6	4.1	5.1
			(Annual changes, in percent)			
Exchange rates (averages)						
U.S. dollar per euro	-1.2	-4.8	-13.4	-3.1	...	...
Nominal effective rate	-0.2	-0.3	-1.0	-0.1	...	...
Real effective rate (CPI based)	-0.4	-0.2	-0.2	0.2	...	...
Interest rates						
Short term 5/	3.8	3.0	4.4	4.3	...	...
Long-term government bond yield 6/	4.7	4.7	5.5	5.1	...	...
			(In percent)			
Financial soundness indicators of the banking sector						
Capital adequacy						
Regulatory capital to risk-weighted assets	12.6	13.4	13.4	14.2	...	...
Regulatory Tier I capital to risk-weighted assets	10.0	11.0	11.3	11.6	...	...
Asset quality						
NPLs to gross loans 7/	0.5	0.5	0.5	0.5	...	...
NPLs net of provisions to capital 7/	4.2	3.5	3.3	3.4	...	...
Earnings and profitability						
Net interest income to gross income	44.2	50.7	45.7	45.6	...	...
Non-interest income to gross income	55.8	49.3	54.3	54.4	...	...
Return on assets	0.6	0.4	0.4	0.5	...	...
Return on equity 8/	15.6	10.1	11.1	12.1	...	...
Liquidity						
Liquid assets to total assets 9/	79.1	77.7	77.8	77.0	...	...
Liquid assets to total deposits	225.1	232.5	218.5	244.2	...	...

Sources: Data provided by the authorities; and Fund staff calculations
1/ Contribution to GDP growth.
2/ Including Statistical Office of the European Communities (Eurostat) and European Investment Bank (EIB).
3/ Overall economy.
4/ Data through 2000 reflect staff calculations.
5/ Until 1998, Belgian six-month interbank money rate, later deposits in Euro.
6/ Starting in 2000, provided by the OECD.
7/ NPLs (non-performing loans) include doubtful but performing debts, non-performing debts and irrevocable debts.
8/ Return on equity is calculated as net pre-tax income to Basle risk-weighted assets.
9/ Liquid assets include cash, central bank deposits, interbank loans and securities.

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL RELATIONS DEPARTMENT

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International Monetary Fund
700 19th Street, NW
Washington, D. C. 20431 USA

IMF Concludes 2002 Article IV Consultation with Luxembourg

On June 5, 2002, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Luxembourg.[1]

Background

Luxembourg has experienced a decade of high economic growth. Real GDP expanded by 5¾ percent per year while employment rose by more than 3½ percent annually, with the proportion of incoming cross-border workers rising to about one third of the work force. The unemployment rate averaged less than 3 percent. Inflation remained subdued, though it has accelerated somewhat since 1999, largely as a result of energy price and wage increases. Nonetheless, competitiveness remained sound with the current account continuing to post large surpluses. During the 1998-2000 expansion, some evidence of labor shortages, infrastructure bottlenecks, and a deceleration in total factor productivity growth emerged.

Reflecting the global slowdown, but taking into account supportive policy conditions and an expected regional recovery by mid-year, the staff projects real GDP to grow by 2¾ percent in 2002, after 3½ percent in 2001. Underlying trend growth is estimated at about 4¾ percent by the staff. With some slack returning to labor markets and barring further oil price shocks, the staff projects headline inflation to fall to 2 percent in 2002. Underlying inflation is expected to decline more gradually from 2¾ percent in 2001 to about 2 percent by 2003.

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board. At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. This PIN summarizes the views of the Executive Board as expressed during the June 5, 2002 Executive Board discussion based on the staff report.

Policies have been medium-term oriented. Fiscal policy has been guided by the objectives of balancing the central government budget, keeping spending growth in line with trend-GDP growth, and running a general government surplus. Consequently, the public sector holds net assets equivalent to about 50 percent of GDP. Nonetheless, the pay-as-you-go social security system requires high long-term growth and continuing worker inflows for its sustainability.

The government is proceeding with multi-year tax cuts and stepping up the pace of spending. Tax cuts aim to lower marginal rates, maintain an internationally attractive corporate tax system, reduce inactivity traps, and promote individual pension savings. On the expenditure side, infrastructure, research and development, and education received a boost, and pension benefits have been increased. With growth expected to be lower than budgeted, the staff estimates that the central government is likely to post a deficit in 2002, and that the general government budget surplus will be less than envisaged in the authorities' latest stability program.

The financial sector has continued to expand, with asset and liquidity management taking over from private banking as the main source of strong growth of the sector. Nonetheless, activity weakened in 2001. In the area of supervision, upgrading of supervisory capabilities and efforts to combat money laundering have continued, and in addition, the implementation of a comprehensive anti-money laundering Action Plan has started.

Structural reforms are proceeding. Progress has been made in removing legal obstacles to part-time employment, introducing more flexible working time arrangements and work week averaging, and expanding child care facilities. The authorities have adopted the legal and regulatory framework needed for the launch of an electronic commerce sector.

Executive Board Assessment

Executive Directors commended the authorities for the excellent economic performance of the past decade, in particular the high rates of GDP and employment growth and the low unemployment rate. They agreed that the outlook remained bright, although the recent global slowdown had slowed growth, and medium-term growth would likely be somewhat less than during the past decade. With the relaxation of labor market tightness and the waning of the effects of indexation, wage and price pressures were likely to ease during 2002.

Directors commented that economic performance had been underpinned by sound policies, as well as by several features specific to Luxembourg, such as specialization in financial services, a strong social partnership, and openness to worker inflows from the region. At the same time, the importance of the financial services sector in the economy made Luxembourg vulnerable to negative exogenous sectoral developments. Also, the funding of Luxembourg's generous social welfare system required continuous high growth and worker inflows. Policies had been prudent, however, and the accumulation of an appreciable net public asset position provides a cushion in the event of shocks.

In light of recent increases in public spending and emerging constraints on growth, Directors encouraged the authorities to return fiscal policy to a more cautious course and ensure continued soundness of the financial sector. They supported the ongoing tax cuts and the authorities' intention to moderate public spending as needed to ensure that the central government budget is in balance or surplus in 2003 and over the medium term. They cautioned against basing budget projections on overly optimistic trend-growth assumptions. Directors underscored the need to secure the sustainability and robustness of the pension system, including by accumulating reserves in the social security system and, if needed, by scaling back benefits. Consideration might also be given to converting part of the current pay-as-you-go component into a funded pillar, in part to shield the budget from pressures to spend surpluses on higher social benefits. By keeping general government spending somewhat below trend-GDP growth, resources could be freed for such a conversion. Directors also recommended that rapid further progress be made in managing social security system assets.

Directors welcomed the findings of the Financial System Stability Assessment that Luxembourg's financial sector is robust, efficient, and well supervised, and took note of the authorities' intention to implement the Assessment's recommendations. They emphasized the need for a continued high degree of vigilance in the area of supervision in order to preserve Luxembourg's outstanding reputation as a financial center. Directors were encouraged by Luxembourg's commitment to implement quickly and smoothly the EU financial directives, and they also appreciated the fact that the authorities support the effective taxation of cross-border interest income in Europe as a common objective.

Directors praised the authorities' intensified efforts to combat money laundering and the financing of terrorism, and stressed the need for the authorities to complete the implementation of their comprehensive anti-money laundering action plan.

Directors recommended a more comprehensive and proactive approach to labor, product, and land market reform, which would increase the economy's efficiency and adaptability. While Luxembourg's labor market had shown considerable flexibility, it would be important to observe wage moderation in the period ahead, and further reduce disincentives to participate in the labor force. An acceleration of product and land market reform, combined with the planned increase in infrastructure spending, would also be key to raising productivity and removing emerging constraints on growth.

Directors commended the authorities for their commitment to promote trade liberalization as a means to foster economic development, and for the increase in official development assistance, noting that Luxembourg was among the few countries that exceeded the United Nations' target in this regard.

Directors endorsed the authorities' intention to continue to improve economic statistics and encouraged them to take the necessary steps to subscribe to the Fund's Special Data Dissemination Standard in the near future.

Public Information Notices (PINs) are issued, (i) at the request of a member country, following the conclusion of the Article IV consultation for countries seeking to make known the views of the IMF to the public. This action is intended to strengthen IMF surveillance over the economic policies of member countries by increasing the transparency of the IMF's assessment of these policies; and (ii) following policy discussions in the Executive Board at the decision of the Board. The Staff Report for the 2002 Article IV Consultation with Luxembourg is also available.

Luxembourg: Selected Economic Indicators

	1998	1999	2000	2001[1]	2002[2]	2003[2]
Real economy						
Real GDP (change in percent)	5.8	6.0	7.5	3.5	2.7	6.0
Domestic demand (change in percent)	2.8	8.4	2.8	3.8	2.7	4.7
CPI (in percent, year average)	1.0	1.0	3.2	2.7	2.0	1.8
Unemployment rate (in percent)	3.1	2.9	2.6	2.6	2.9	2.8
Gross national saving (percent of GDP)	38.6	35.4	31.6	28.7	28.1	29.4
Gross capital formation (percent of GDP)	21.3	24.3	21.0	21.3	20.7	20.8
Public finance (percent of GDP)						
Central government balance	1.5	2.3	2.8	2.3	...	...
General government balance	3.2	3.8	5.8	5.2	1.0	1.1
General government gross debt	6.3	6.1	5.7	5.7	4.9	4.5
Interest rates (in percent)						
Short-term rate[3]	3.8	3.0	4.4	4.3	...	...
Government bond yield[4]	4.7	4.7	5.5	5.1	...	...
Balance of payments (in percent of GDP)						
Trade balance	-12.2	-13.2	-12.5	-12.5	-13.5	-13.7
Current account	8.8	6.5	8.2	4.6	4.1	5.1
Exchange rates						
Exchange rate regime			Member of euro area			
Nominal effective exchange rate (1995 = 100)	-0.2	-0.3	-1.0	-0.1	...	...
Real effective exchange rate (1995 = 100)	-0.4	-0.2	-0.2	0.2	...	...

Sources: Data provided by the authorities; and IMF staff calculations.
[1]Estimates.
[2]Projections.
[3]Until 1998, Belgian six-month interbank money rate, later deposits in Euro.
[4]Starting in 2000, provided by the OECD.