May 2006
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Luxembourg: 2006 Article IV Consultation—Staff Report; Staff Statement; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Luxembourg

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 2006 Article IV consultation with Luxembourg, the following documents have been released and are included in this package:

- the staff report for the 2006 Article IV consultation, prepared by a staff team of the IMF, following discussions that ended on January 30, 2006, 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 4, 2006. 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 statement of April 26, 2006 updating information on recent developments.

- a Public Information Notice (PIN) summarizing the views of the Executive Board as expressed during its April 26, 2006 discussion of the staff report that concluded the Article IV consultation.

- a statement by the Executive Director for Luxembourg.

The document listed below has been or will be separately released.

Selected Issues Paper

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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INTERNATIONAL MONETARY FUND

LUXEMBOURG

Staff Report for the 2006 Article IV Consultation

Prepared by the Staff Representatives for the 2006 Consultation with Luxembourg

Approved by Alessandro Leipold and G. Russell Kincaid

April 3, 2006

- Discussions were held in Luxembourg during January 19-30, 2006. The mission met with the Ministers of the Treasury and Budget, Labor and Employment, and Economy and Commerce; the Central Bank President; the Parliamentary Commission of Finance and the Budget, and the Commission of the Economy, Energy, Postal Services, and Transport; officials of the Ministries of Foreign Affairs, Finance, Labor and Employment, the Social Security Administration, STATEC, and the supervisory commissions; representatives of the financial sector, and the social partners.

- The team comprised Messrs. Odenius (Head), Danninger, and Lundback (all EUR). Mr. Kiekens (Executive Director) and Mr. Crelo (Advisor) also participated in meetings.

- The authorities released the mission's concluding statement, and the mission held a closing press conference. They intend to publish this staff report. Luxembourg is on a two-year consultation cycle, and the previous Article IV staff report (IMF Country Report 04/125) was published, following the IMF Executive Board Meeting on April 28, 2004.

- Luxembourg is an Article VIII member and maintains an exchange system free of restrictions on payments and transfers for current international transactions, except for reasons related to security.

- Luxembourg does not subscribe to the SDDS. Economic statistics are adequate, though further progress is needed.

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EXECUTIVE SUMMARY

Background

The dominant financial sector has supported a steady rebound in economic activity. Growth is projected to remain healthy in the near term, but trend growth may decline as the rapid financial sector expansion may decelerate. The recovery notwithstanding, the fiscal deficit has widened to 2.3 percent of GDP in 2005, driven primarily by social expenditure growth, while unemployment has edged up to 4½ percent. The government plans to announce in May a comprehensive reform package to address fiscal and structural challenges.

Policy discussions focused on the following areas:

- ***Financial sector importance for growth.*** The financial sector's successful shift from traditional banking services to the investment fund industry (IFI) is well advanced. Notwithstanding farsighted initiatives to position the sector for future opportunities, its pace of expansion is likely to decelerate, moderating trend GDP growth. Hence, staff estimates that growth may fall short of the authorities' medium-term projections of 4½ percent a year by nearly 1 percentage point.

- ***Financial sector soundness.*** The financial system remains sound, resilient to potential adverse shocks, and well supervised. The close integration of Luxembourg's mostly foreign-owned financial institutions with their parent companies tends to enhance soundness, including asset quality and capital adequacy. Rising commission income, spurred by the shift into the IFI, bodes well for continued diversification of earnings and financial sector stability.

- ***Fiscal policy.*** There was broad agreement that social expenditures needed to be curtailed to reverse adverse fiscal trends. Staff called for a return to a moderate surplus, given the underfunding of future liabilities of the public pension system. While supporting the authorities' intention of restoring budget balance soon after 2008, staff noted durable expenditure measures remained to be defined and the adjustment needed to be strengthened. Staff proposed the adoption of a medium-term fiscal framework to anchor policies.

- ***Labor market.*** There has been a steady increase in structural unemployment, largely owing to a labor supply shock triggered by benefit reforms in neighboring countries. A widening gap between the entitlements to resident and foreign job seekers has heightened competition in Luxembourg's regional labor market and pushed a growing number of resident workers into unemployment. Addressing this issue requires modifying major entitlement benefits, including unemployment assistance and the minimum guaranteed income.

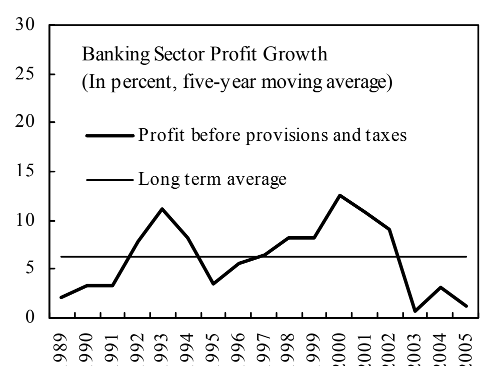
I. Introduction

1. **While among the smallest EU countries, Luxembourg's successful policies have given it a reach that extends well beyond its borders.** Following the steel crisis of the 1970s, Luxembourg managed the transition to a financial services-based economy because of its (i) advantageous tax and regulatory regime; (ii) early financial market liberalization; and (iii) responsible financial policies. These policies generated a virtuous growth cycle in the "golden 1980s and 1990s," permitting the public sector to accumulate substantial wealth.[1] Relying to a considerable extent on foreign labor and capital, this growth steadily raised the country's profile in the global financial system. Luxembourg's international banking industry is comparable in size to those of Hong Kong SAR and Singapore, while its investment fund industry (IFI) has become the second largest worldwide.

II. Background

2. **The momentum these policies imparted to the economy is waning, although growth remains well above the EU average.** Growth has decelerated this decade to an annual average of 3 percent from 5 percent in the 1980s and 1990s. This reflects in part the slowdown following the bursting of the equity bubble in 2000, and the fact that the 2004-05 recovery—with growth averaging nearly 4½ percent—was less buoyant than earlier upswings.

3. **The dominant financial sector helped extend the economic recovery in 2005** (Figure 1). The financial sector—together with the closely linked real estate, telecommunications, and other sectors—accounted for two thirds of GDP in 2005. Amid strong gains in European equity markets, services exports grew by an estimated 16 percent, fueling a substantial current account surplus last year (Figure 2). Contrary to earlier fears, the EU Savings Directive—introducing a withholding tax on interest income on foreign-held deposits in July 2005—does not seem to have undermined the private wealth business of the financial sector. Indeed, in anticipation of the tax, banks successfully facilitated a shift of foreign deposits into investment vehicles exempt from taxation, thereby boosting their commission income.

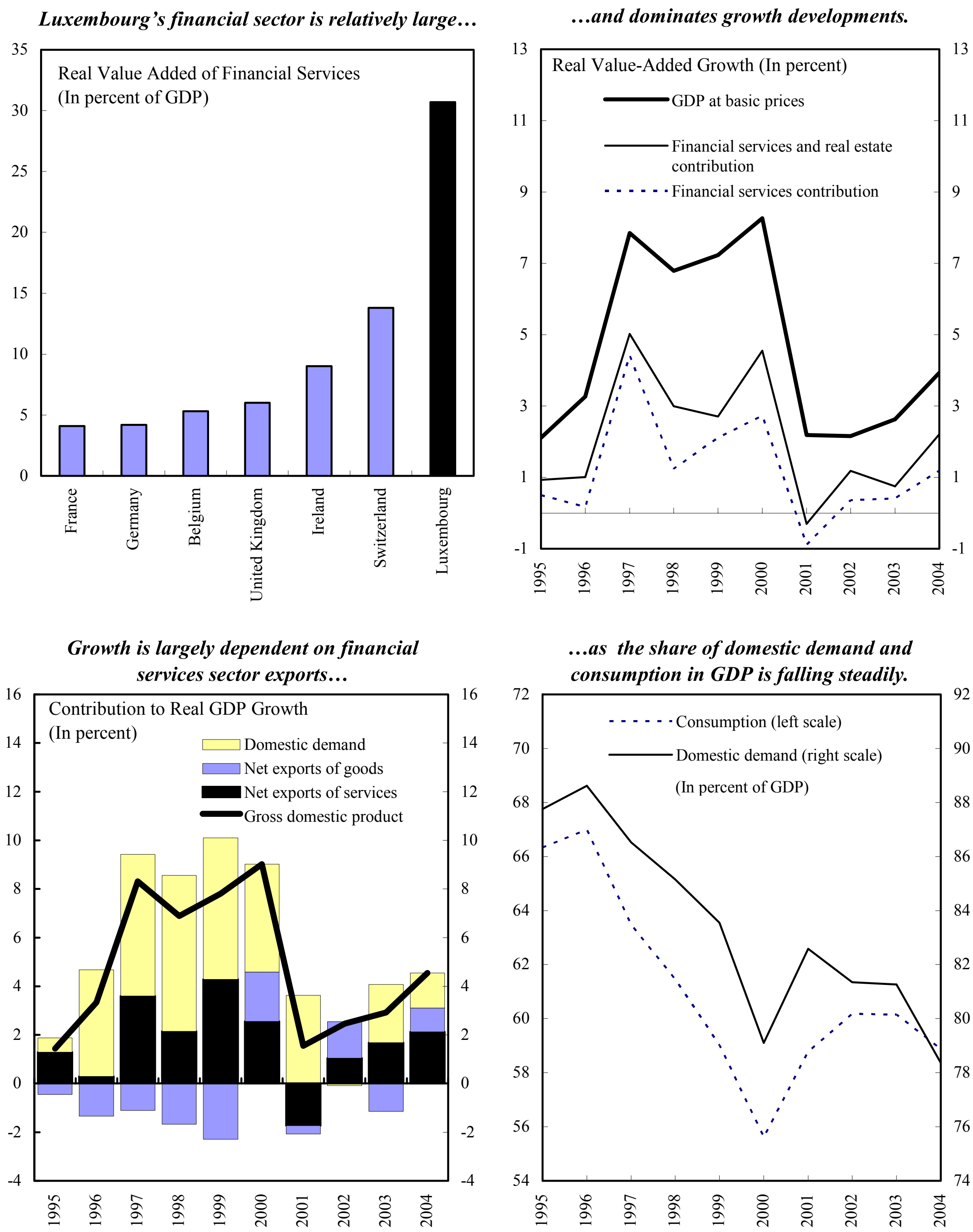


Source: BCL.

4. **Nevertheless, the financial services industry—especially the banking sector—is maturing, following a successful shift into fund management services** (Figures 3 and 4). Since the late 1990s, the financial sector has successfully specialized in custody and brokerage services for the IFI. However, stiff competition has kept portfolio management activities abroad, and

[1] General government net financial assets are estimated at 29.5 percent of GDP at end-2005.

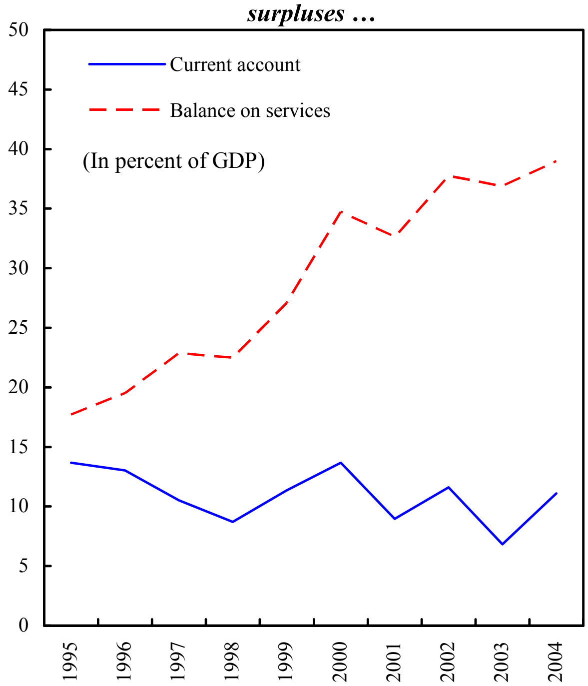
Figure 1. Luxembourg: Drivers of Economic Growth



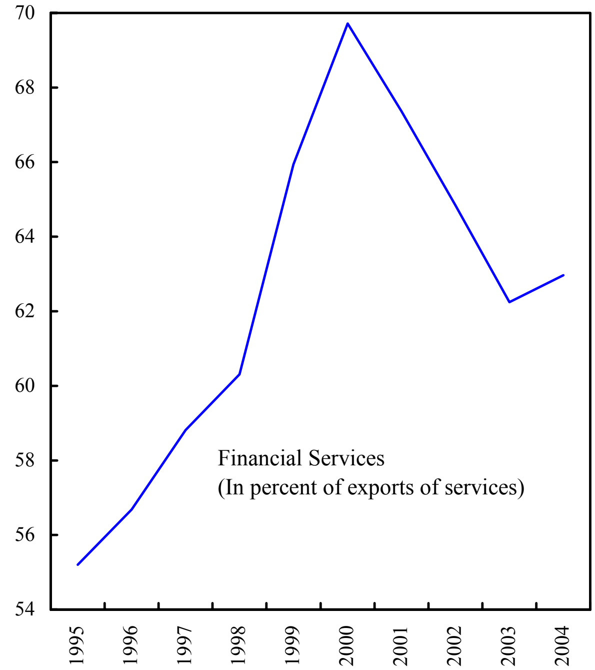
Sources: Statec; OECD; and IMF staff calculations.

Figure 2. Luxembourg: Current Account Trends, 1995-2004

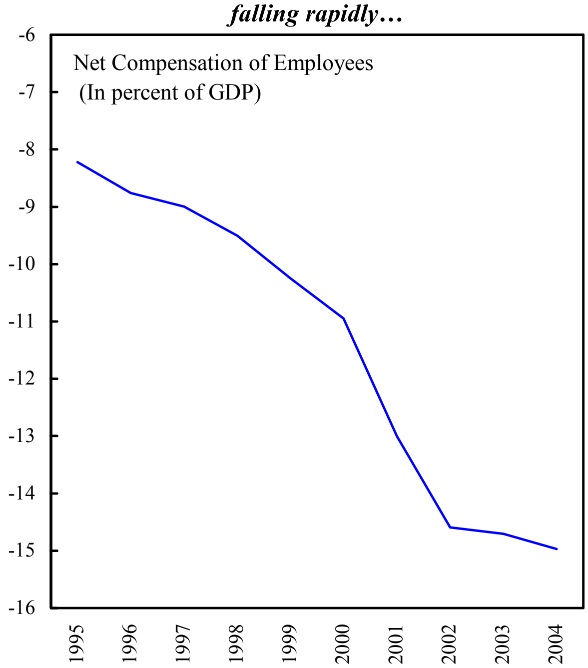
Luxembourg's large current account and services surpluses …



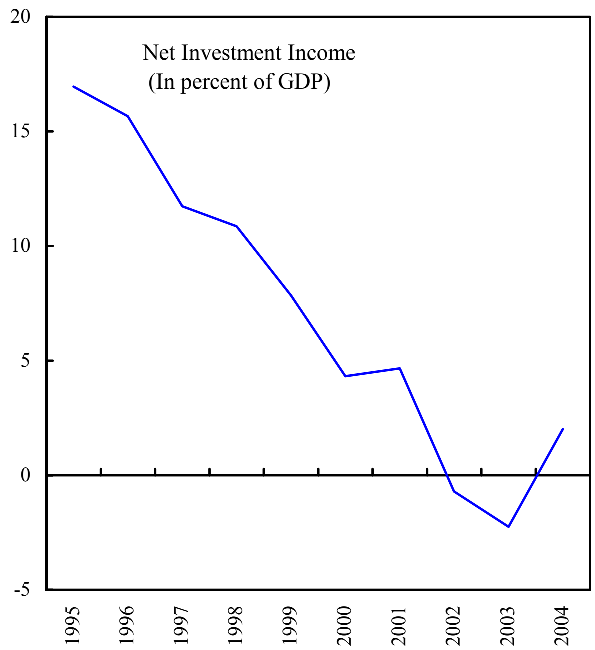
…are driven by its vast financial sector.



However, amid rising dependence on foreign financial sector employees, labor income is falling rapidly…



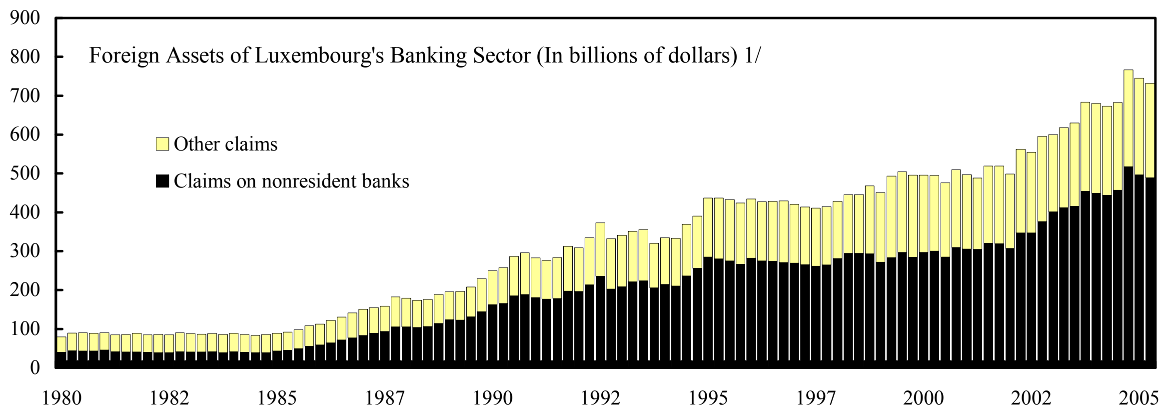
…while investment income is dwindling, given rapid growth in the fund management industry.



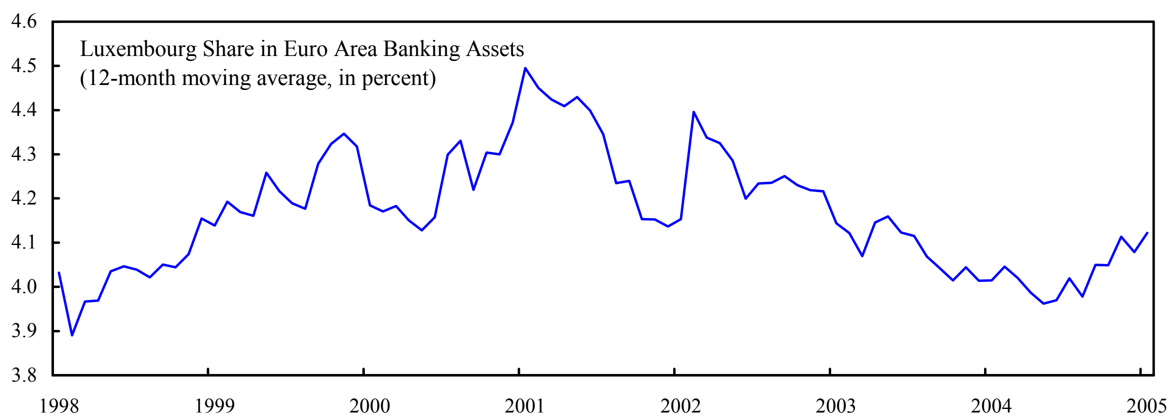
Sources: BCL; IFS; and IMF staff calculations.

Figure 3. Luxembourg: Banking Sector

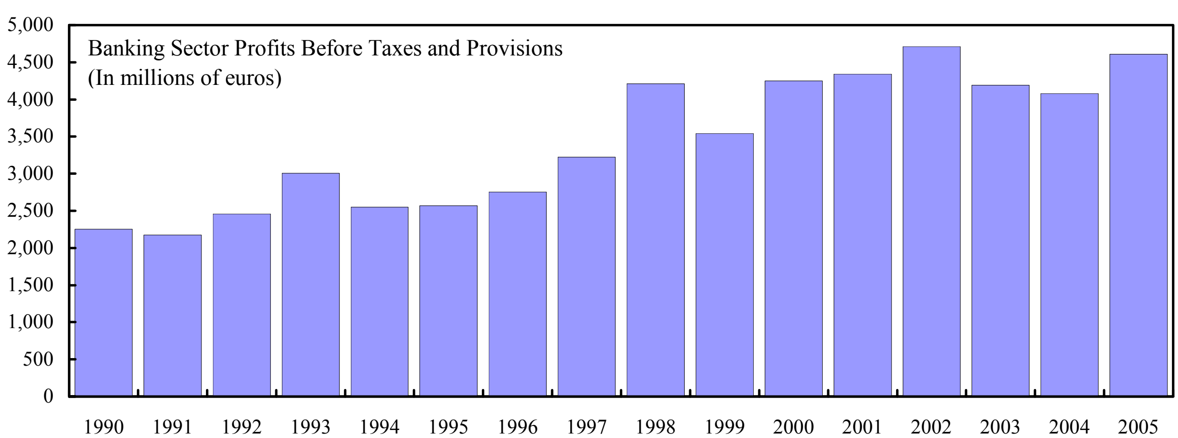
Growth of banking sector assets is leveling off...



...and Luxembourg's share in the euro area market is declining.

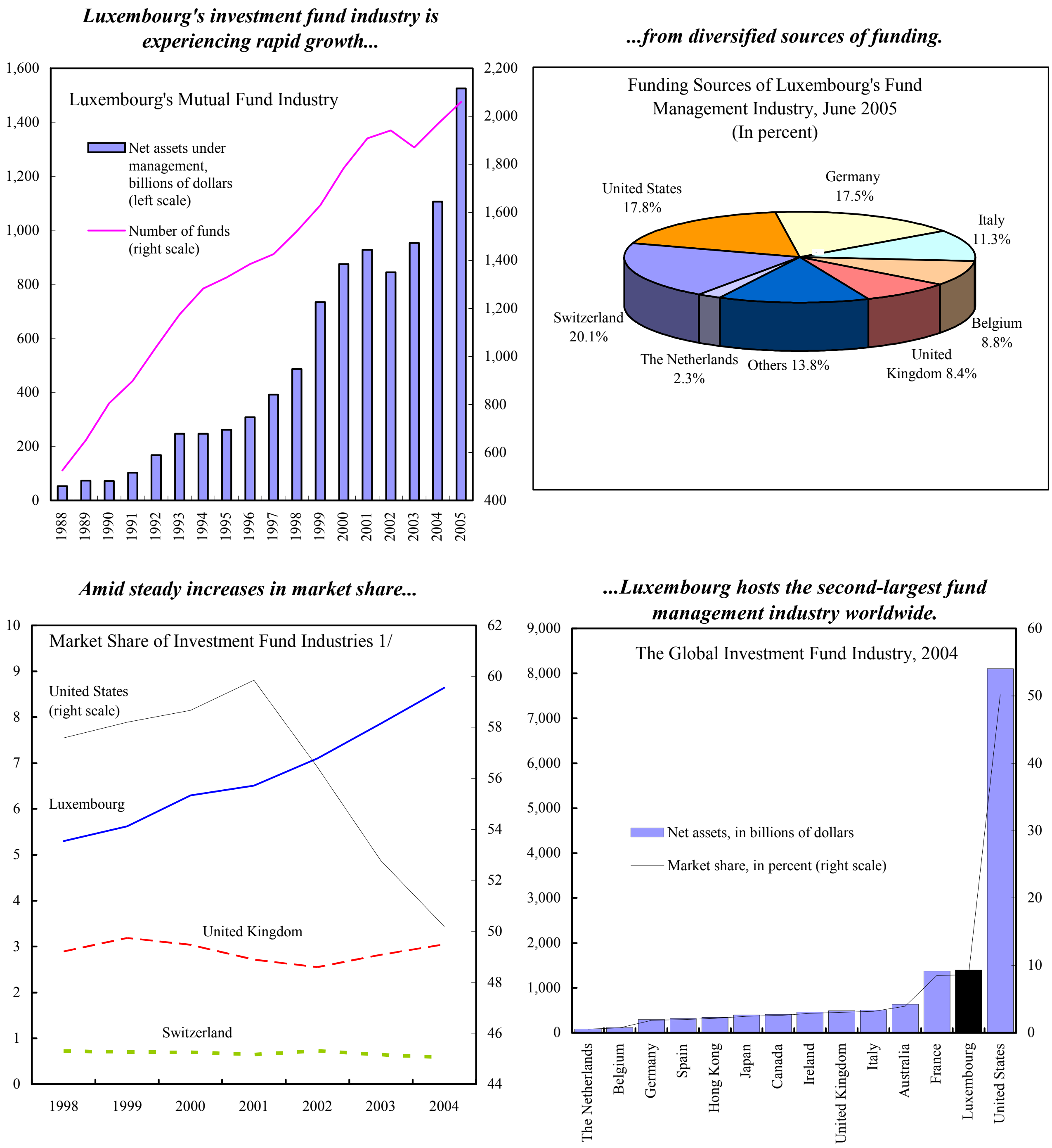


Profits have, however, been largely stagnant in recent years.



Sources: Bank of International Settlements; BCL; and IMF staff calculations.
1/ 2005 data refers to end-June.

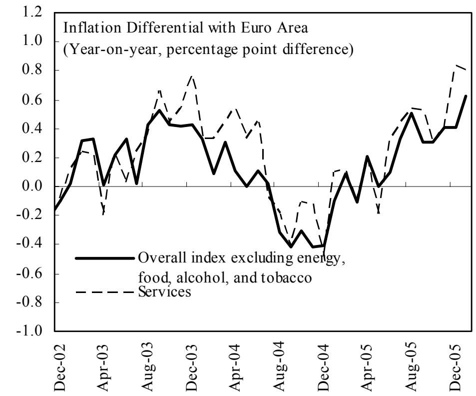
Figure 4. Luxembourg: Investment Fund Industry



Sources: CSSF, Investment Company Institute, and IMF staff calculations.
1/ Market share estimates based on net assets under management.

Luxembourg has not participated in the rapid growth of the hedge fund industry. Assets administered by Luxembourg's IFI reached €1.5 trillion in December 2005. Fund management companies and banks split the market almost evenly, which has supported a steady increase in banks' commission income. Nevertheless, banking sector profit growth has fallen short of its long-term average in recent years.

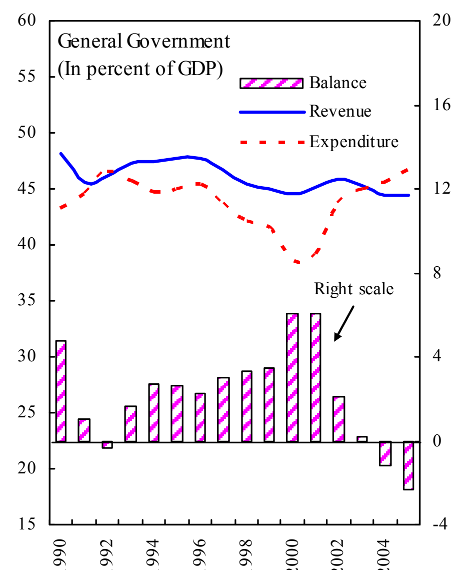
5. **While headline inflation is high compared to the EU average, underlying inflation has remained subdued** (Figure 5). HICP headline inflation was 3.9 percent in February, but this measure exhibits an upward bias.[2] There has been a modest widening of the underlying inflation differential with the euro area, as service price inflation has exceeded goods price inflation. Rental costs have risen sharply, reflecting a boom in the housing market.



Source: Eurostat.

6. **Unemployment is rising and becoming increasingly structural, while wage competition is intensifying in the regional labor market.** Cross-border employees are filling two out of three vacancies (Figure 6). The wage differential with abroad is rising, in part driven by the almost full indexation of incomes to the consumer price index (CPI).

7. **The fiscal deficit is widening, amid rising social expenditures, sizable investment outlays to mitigate structural bottlenecks, and less buoyant revenues.** Despite the recovery, the general government balance deteriorated in 2005 for the fourth consecutive year, falling to a deficit estimated at 2.3 percent of GDP. Delayed effects of the economic slowdown on corporate taxes and, more recently, shortfalls in VAT revenues—due to large reimbursements following a court order to speed up settlements—contributed along with an ambitious public investment program (5 percent of GDP) to the deficit. However, the primary cause of the protracted deterioration are rapidly rising social expenditures—especially for pensions and health care—and these have been the longstanding focus of staff advice (Box 1).

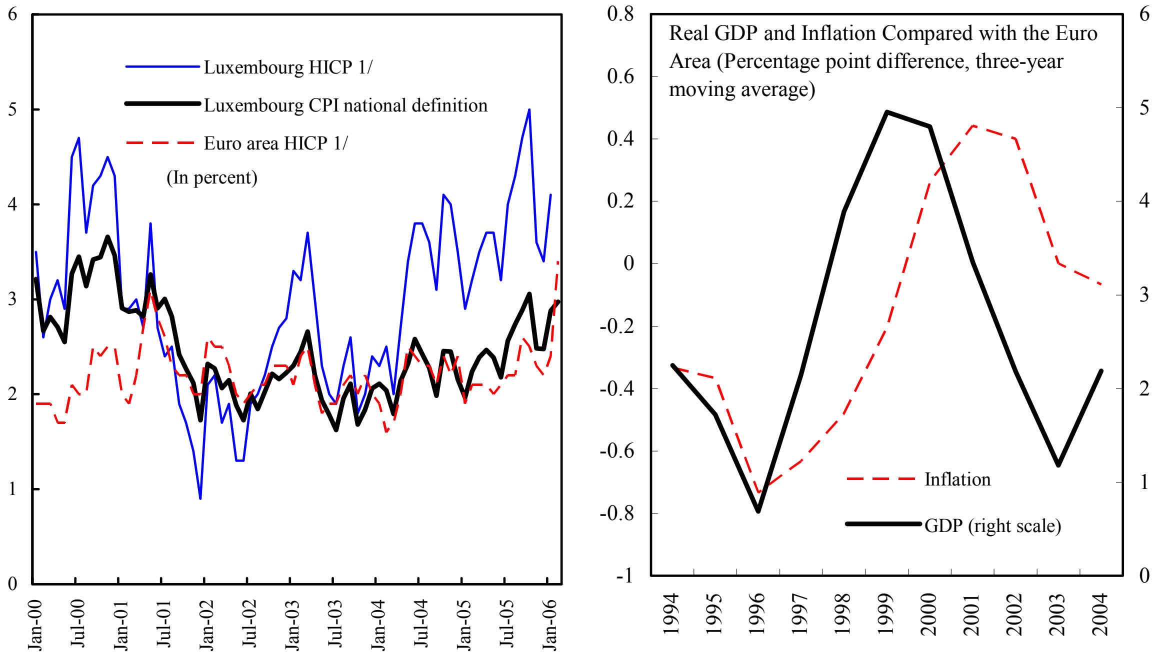


Source: Statec.

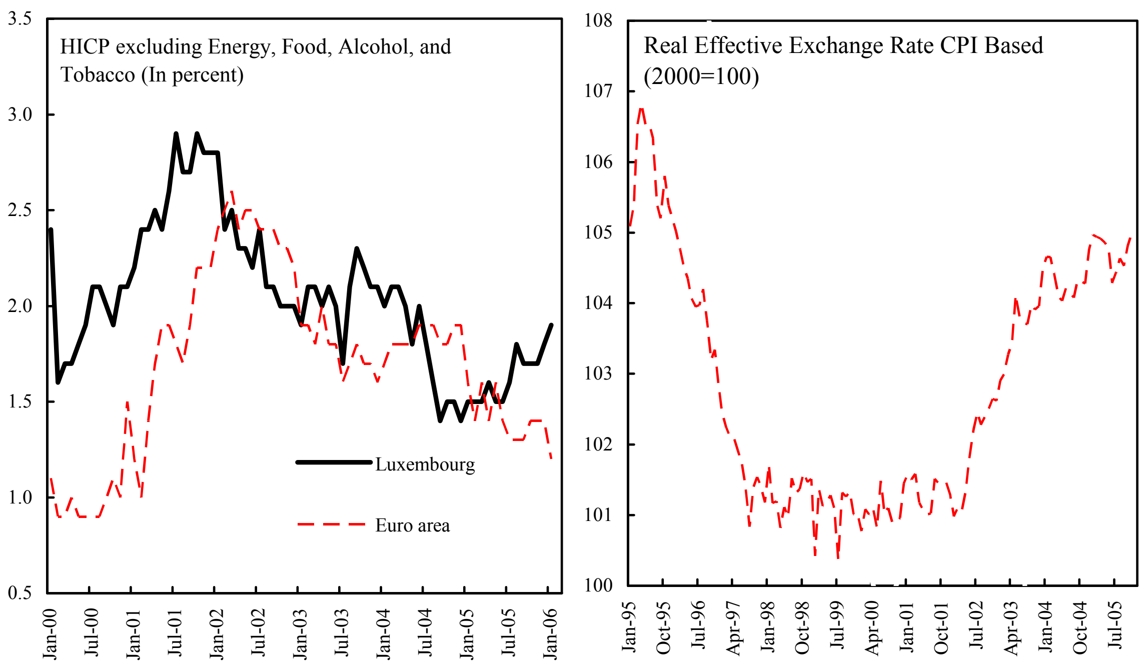
[2] Its weights reflect substantial consumption by nonresidents, including of gasoline and alcohol.

Figure 5. Luxembourg: Inflation and the Real Exchange Rate

Inflation has picked up compared with the euro area, partly reflecting higher GDP growth.



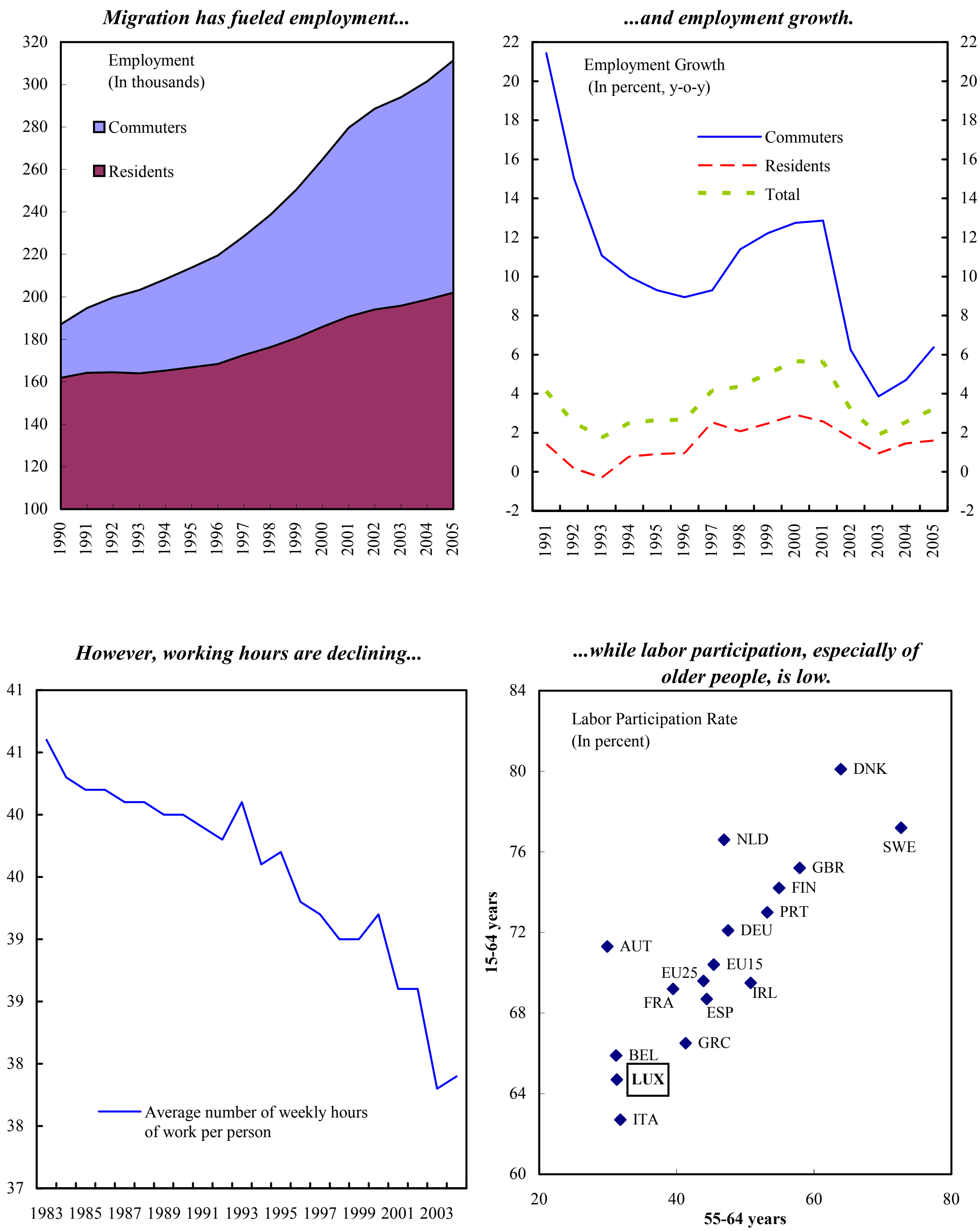
But underlying inflation is still low and the REER is near its long-run average.



Sources: IFS; Eurostat; STATEC; and IMF staff calculations.

1/ The weights of the HICP reflect consumption by non-residents, which is high for energy and tobacco, thereby impacting the inflation differential.

Figure 6. Luxembourg: Labor Market Developments



Sources: Eurostat, Statec.

Box 1. Past Fund Policy Recommendations and Implementation

Given the comfortable net asset position of Luxembourg's general government, Fund policy advice has tended to focus on medium- and long-term policy challenges. Key among those are the fiscal pressures stemming from generous social welfare policies, pension pressures relating to aging; rising health care costs; and labor market rigidities. While progress has been uneven, Fund surveillance has contributed to focusing the policy debate on critical tasks.

Fiscal policy. It has been longstanding Fund advice to curtail social expenditure growth to bring public finances back into surplus over the medium term. Important measures taken include tightened access to disability pensions and better enforcement of eligibility criteria for sickness allowances. However, a recommended scaling back of unemployment benefits or the minimum guaranteed income was not pursued. The latest Stability Program envisages a return to near balance by 2008.

Pension and health care reform. On pensions, the Fund has consistently advised that the pay-as-you-go pension system is unlikely to be sustainable under plausible growth assumptions. Future funding problems, therefore, needed to be addressed upfront, taking advantage of Luxembourg's overall favorable growth developments. Proposed measures included linking the replacement rate to the contribution base and the statutory retirement age to life expectancy, while introducing an intergenerational solidarity factor in the benefit adjustment formula. An increase of the retirement age is currently under consideration. The Fund advised the authorities to preempt an increase in health care contribution rates through comprehensive health care reforms, including higher co-payments, use of generic drugs, and rationalizing of hospital services. Efforts to rein in escalating costs have not been successful. Instead, an increase in payroll taxes became necessary in 2005. A reform plan to lower costs is currently under preparation.

Financial sector. The continuous strengthening of supervision has been largely consistent with Fund advice, including the higher frequency of stress testing for the insurance sector.

III. Report on the Policy Discussions

8. **The discussions focused on the policies required to overcome challenges to Luxembourg's trend growth and how to conduct fiscal policy in a lower growth environment.** The mission pointed to challenges from the maturing financial sector, heightening international competition, and rising international pressure to eliminate tax and regulatory advantages.[3] The authorities expressed confidence that innovation would allow the financial sector to continue functioning as an engine of growth and maintain its competitiveness (Box 2). Nevertheless, they concurred that a more prudent fiscal policy framework was needed, and that the generous social and pension system should be reviewed to ensure its viability and enhance potential growth. A broad-based policy package addressing these issues was under preparation and expected to be unveiled in May, but few details were made available to the mission.

9. **There was consensus that the near-term growth outlook is positive** (Table 1). Upward revisions to global growth and signs that the recovery in the euro area was taking hold boded well for the outlook. External demand would continue to be a major driver of growth, while the prospects for domestic demand and consumption remained uncertain, amid planned restraint of social expenditures, disappointing retail sales, limited real wage gains and continued weak consumer sentiment (Figure 7). However, monetary conditions were supportive, and investment demand would continue to strengthen gradually, driven largely by replacement investments. The authorities acknowledged that their 2006 forecast might need to be lowered to the staff's 4.0 percent projection.

GDP Growth 2005-2008

	2005	2006	2007	2008
		(In percent)		
GDP				
Stability Program	4.0	4.4	4.9	4.9
IMF staff	4.3	4.0	3.8	3.5
Private Consumption				
Stability Program	1.2	2.4	3.2	3.0
IMF staff	0.5	1.2	1.8	2.5

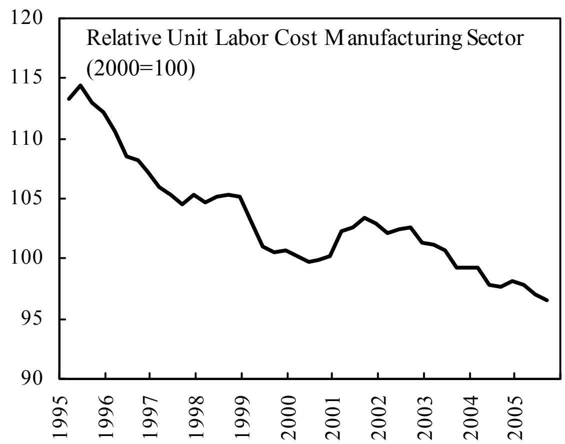
10. **All agreed on a number of downside risks.** Higher-than-expected oil prices or a disorderly unwinding of global imbalances might choke the recovery in the euro area, the destination for nearly all of Luxembourg's exports. Either scenario could spell serious risks for capital markets and, consequently, financial sector profits. On the domestic front, the

[3] Amid concerns about distortions to competition and market efficiency, the European Commission began investigating on February 9, 2006 legislation exempting holding companies from corporate taxation.

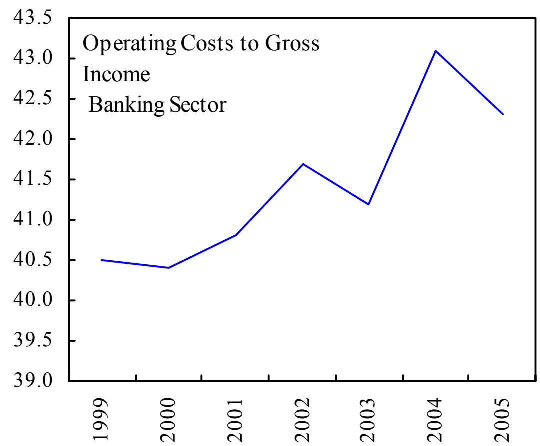
Box 2. Competitiveness

Given the unique characteristics of its economy, it is not straightforward to analyze Luxembourg's competitiveness. Financial service and steel exports combined represented about two thirds of total exports in 2005. Exporters in these sectors tend to be price-takers in international markets and, therefore, movements in the CPI-based REER provide little insight. At the same time, standard indicators—such as unit labor costs (ULC)—are not available for the dominant financial sector.

The financial sector is potentially becoming more vulnerable to competition, notwithstanding its continued export success. The shift from high to low profit margin activities point to heightening risks of competition, especially for the custody business. At the same time, financial sector wage developments have been relatively favorable and cost-income ratios remain low compared to other financial centers.[1]



Source: OECD.



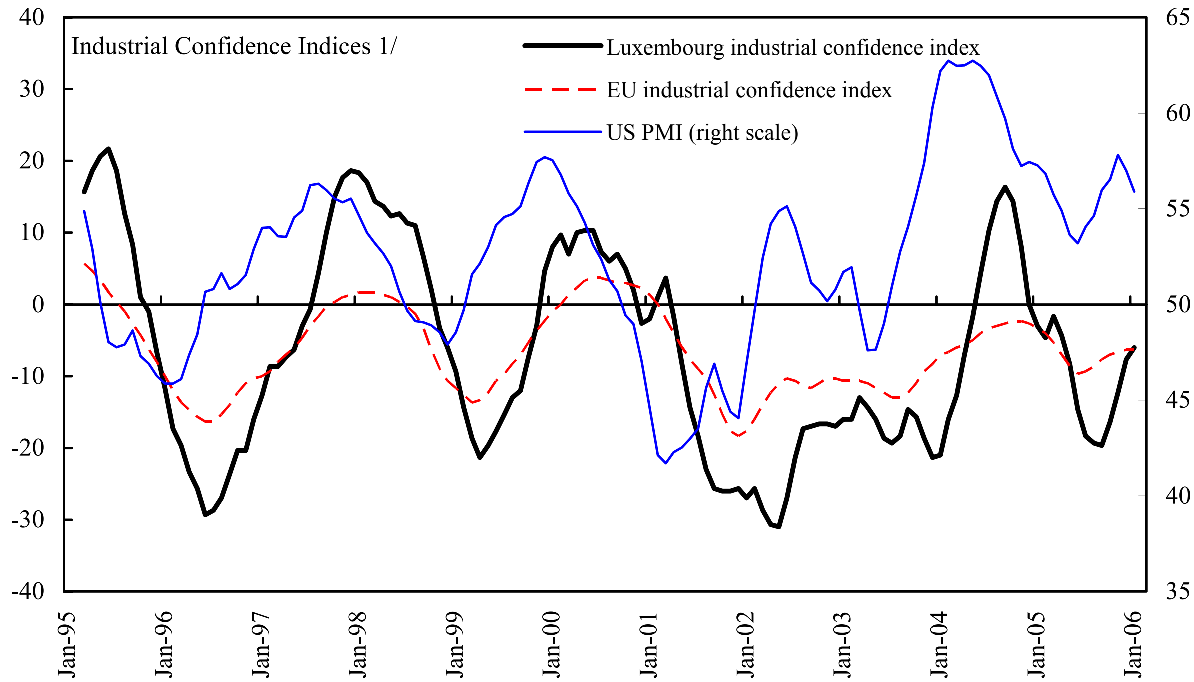
Source: BCL.

While ULC in manufacturing have been decreasing since late 2001, Luxembourg's large steel industry is confronted with heightening competition. Global capacity in the steel industry is rising, especially in Asia. The decline in relative ULC has been driven by output gains combined with a moderate reduction in employment, including in the steel sector. With the steel boom possibly ending, as additional capacity comes online, wage moderation and layoffs may be necessary to prevent unit labor costs from rising.

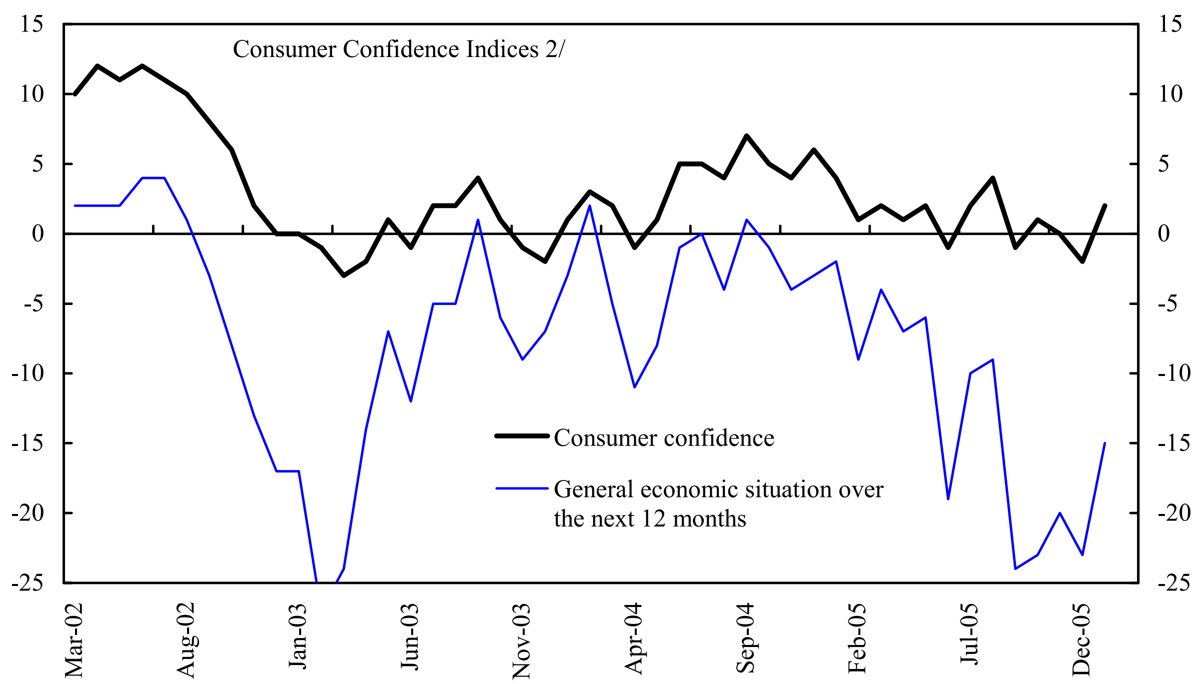
[1]See Fontagné, Lionel "Compétitivité du Luxembourg: Une Paille dans L'Acier," 2004.

Figure 7. Luxembourg, United States and EU:
Industrial and Consumer Indicators, 1995-2005

Industrial confidence is recovering...



...while consumer confidence remains feeble.



Sources: Banque Centrale du Luxembourg; and Eurostat.
1/ Balance of opinions; three-month moving average.
2/ Balance of opinions.

authorities viewed the repercussions from a possible decline in housing prices as manageable. House price inflation had been concentrated in the upper price segment of the market, where the fallout for consumption would be more limited.

A. Financial Sector and the Medium-Term Outlook

11. **The financial sector and its key role for the Luxembourg economy featured most prominently in the discussions.** There was agreement that there had been a slowdown in traditional banking activities and that Luxembourg's banking sector was losing market share within the EU. The authorities ascribed these developments largely to the cyclical decline of credit in Germany. Nevertheless, slowing asset growth was also due to the banks' shift into off-balance-sheet activities, especially their IFI-related business.[4]

12. **The authorities were more sanguine than the staff about the prospects for continued rapid financial sector expansion.** They agreed that the profit margins of IFI-related activities were lower than in traditional banking, but they expected strong retail and institutional demand for investment funds to continue. Therefore, the IFI would remain an engine of financial sector growth, notwithstanding the advanced stage of the sector's expansion. Moreover, Luxembourg stood to gain from ongoing EU financial market integration, including efforts to further simplify and streamline procedures underlying the distribution of investments funds across the EU. Laws on pension funds (SEPCAVS and ASSEPS) passed in 2005 were intended to position the industry for potential further privatization of pension systems within the EU, and a 2004 law would spur private equity and venture capital business (SICAR). However, all agreed that competition for the pension fund business was likely to be stiff, and that the impact of these initiatives would be felt only gradually.

13. **Expectations for trend growth, therefore, diverged** (Box 3). Staff argued that less buoyant, albeit still strong, financial sector growth would lower real GDP trend growth to 3¾ percent over the medium term, almost 1 percentage point below the assumptions underlying the November 2005 Stability and Program (SP). The authorities, however, emphasized the sector's inherent flexibility as a source of future growth, as demonstrated by its versatile response to the EU Savings Directive.

B. Financial Sector Supervision and Soundness

14. **The authorities noted that financial sector soundness compared favorably with the EU average** (Table 2). As discussed in the 2002 Financial Sector Assessment Program (FSAP), this reflected in large part the very high foreign ownership of the banking sector and the close involvement, via the interbank market, of Luxembourg's subsidiaries in liquidity

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[4] Off-balance-sheet positions grew by 33 percent during 2005, more than double the 14 percent growth of assets during the same period.

Box 3. Financial Sector and Growth

To assess Luxembourg's medium-term growth potential, financial sector linkages need to be examined. No other sector will be able to take over as the engine of growth in the next several years. This box assesses two different real GDP growth scenarios for 2006-11, estimating the strength required of the financial sector for these scenarios to materialize. The two scenarios are (i) the authorities' November 2005 Stability Program (SP); and (ii) the staff's medium-term scenario. In a stylized model, three sectors are considered: the financial sector, those sectors that have exhibited close linkages with the financial sector, and other sectors.

A breakdown of financial sector growth illustrates that the investment fund industry has been a major driver of growth in recent years (see table below). In both scenarios it is assumed that the IFI will grow to the extent required to reach the targeted growth path. For simplicity, it is assumed that the banking industry—excluding investment fund activities—will maintain its average growth of 2000-05. Growth in the insurance industry and in other financial sector professionals (OFSP) is assumed to average that of the banking sector and IFI. Growth in the two nonfinancial sectors has been set either to (i) follow the growth rate in the financial sector, using observed relationships in 2000-05; or (ii) to equal their average growth rate in 2000-05.

Real Growth Scenarios
(Annual percent change)

	2000-05 1/	2006-11	
		SP 2/	Staff
GDP	4.1	4.6	3.7
Financial sector	3.9	5.3	3.8
Banks	2.1	2.1	2.1
IFI	10.8	10.5	6.8
Insurance	2.1	6.3	4.4
OFSP	0.5	6.3	4.4
Sectors related to the financial sector	5.0	5.3	3.8
Other sectors	3.4	3.4	3.4

Sources: Statec; Deloitte; and IMF staff calculations.
1/ 2005 estimate.
2/ GDP growth rate official forecast; sectoral breakdown staff forecasts.

Reaching the real GDP growth rate assumed in the SP scenario requires strong financial sector growth. An average growth rate of 5 ¼ percent is about 1 percentage point below the average for 1986-2004, which includes the period when Luxembourg expanded rapidly into an international financial center. In particular, unless growth in the more traditional banking industry will substantially accelerate, the fund industry has to continue growing almost as rapidly as in 2000-05. The staff's growth scenario requires close to 4 percent real growth in the financial sector, very similar to its 2000-05 average. More important, it still implies robust annual IFI growth of slightly less than 7 percent, suggesting that the staff scenario is not overly conservative.

management of their foreign parent companies.[5] Interbank deposits—about half of the sector's total liabilities in 2005—were typically channeled back into the interbank market as short-term loans. These linkages resulted in high asset quality and liquidity ratios, and tended to enhance capital adequacy ratios.[6] The authorities agreed that it would be timely to review develpoments through an FSAP update in 2007.

15. **The authorities agreed that the sector's unique characteristics impacted gearing and profitability measures.** They noted that approximately two-thirds of interbank assets and liabilities resulted from subsidiaries' involvement in liquidity management with their EU parent companies (Table 3). These transactions were recorded on a gross basis—only because parent companies tended to be located abroad—thereby "inflating" assets and lowering capital-to-asset ratios of Luxembourg-based subsidiaries. Higher gearing explained banks' lower returns on assets and higher return on equity compared to the EU average. The authorities were not concerned by these features, especially given high asset quality. They clarified that the classification of non-performing loans (NPLs) followed the standards adopted by the parent company. They agreed with staff that introducing a unified standard would be desirable, but no immediate steps were envisaged.

Comparative Banking Sector Indicators, 1999–2005

	1999	2000	2001	2002	2003	2004	Latest
Regulatory capital to risk-weighted assets							
Luxembourg	12.9	13.1	13.7	15.0	17.1	17.5	17.5
EU-15 average 1/	12.0	11.7	11.8	12.0	13.0	12.9	...
United States	...	12.4	12.9	13.0	13.0	13.2	13.0
Capital to assets 2/							
Luxembourg	4.5	4.7	5.0	5.5	5.8	5.5	5.3
EU-15 average 1/	6.0	6.1	6.2	6.1	6.0	...	...
United States	...	8.5	9.0	9.2	9.2	10.3	10.3
Impaired loans to total gross loans							
Luxembourg	0.5	0.5	0.5	0.6	0.5	0.3	...
EU-15 average 1/	3.5	3.3	2.9	2.9	2.8	2.4	...
United States	...	1.1	1.3	1.4	1.1	0.8	0.7
After-tax return on average assets							
Luxembourg	0.4	0.5	0.5	0.4	0.5	0.5	0.5
EU-15 average 1/	0.9	0.8	0.6	0.6	0.6	0.8	...
United States	...	1.1	1.1	1.3	1.4	1.3	1.3
After-tax return on average equity							
Luxembourg	34.0	36.7	40.7	36.4	34.9	39.8	37.8
EU-15 average 1/	17.2	16.6	14.0	12.1	14.5	...	...
United States	...	13.5	13.0	14.1	15.0	13.2	12.7

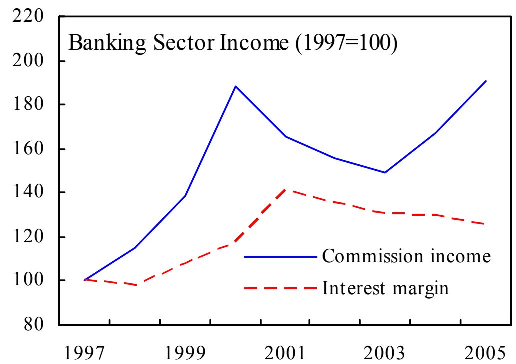
Sources: Data provided by the authorities; and Fund staff calculations.

1/ Excluding Denmark.
2/ Capital is defined as Tier 1+2.

[5] The financial sector supervisory authority supervises all Luxembourg registered credit institutions, including foreign subsidiaries of banks, and most other financial sector institutions. The insurance sector is supervised by a separate institution.

[6] Capital adequacy is boosted to the extent that interbank loans replace loans requiring higher risk weighting. Interbank loans with a maturity of less than 12 months are classified as liquid assets, and require no more than 20 percent risk weighting.

16. **An improvement in the quality of earnings was seen to bode well for continued soundness.** The authorities and staff agreed that the successful expansion into the IFI had resulted in a structural shift towards commission income and diversified the sources of income growth. The authorities noted that exceptional factors had buoyed commission income last year, including the strong showing of European equity markets and the shift of foreign deposits into investment funds resulting from the EU Savings Directive. Amid a widening in the interest margin and favorable non-operating income developments, profits—excluding taxes and provisions—rose by an estimated 13 percent last year. The authorities agreed—given the various one-off factors in 2005—that profit growth would decelerate this year but expected it to remain robust.



Sources: BCL and IMF staff calculations.

17. **The authorities stressed the financial system remained resilient to shocks, including a potential real estate price shock.** They reported that the combination of rising own funds and reduced exposure— to credit risks emanating from eight selected sectors, including airlines, insurance and the technology, media, and telecom sector—had limited vulnerabilities. Under the extreme assumption of a full loss of banks' claims in any individual sector, stress tests showed that there would be no systemic consequences. However, losses would reduce the capital of a limited number of banks below capital adequacy requirements, depending on the sector experiencing duress. The mission suggested that the authorities extend the coverage of credit risk stress tests to sectors currently experiencing difficulties, including the automobile sector, and to update these tests more frequently. The authorities reported that—among 17 banks with real estate exposure exceeding 10 percent of own funds—the capital of virtually all banks would remain above the required level under the extreme assumptions of 100 percent loan-to-value ratios and full losses. The banks' exposure to interest rate and exchange rate risks was minor. Stress tests for on- and off-balance-sheet interest rate risks—modeled as a 2 percentage point variation in rates—for the 19 banks with the highest interest rate exposure on their trading and proprietary books did not lower the capital of any of these banks below the regulatory minimum.

18. **Banking sector supervision and crisis management had been further strengthened.** The authorities pointed to continued improvements of crisis management—already closely coordinated with foreign supervisors—through the signing of various bilateral and multilateral memoranda of understanding. In particular, the authorities noted that cooperation had been broadened, involving for the first time EU finance ministries, in addition to central banks and supervisors. Staffing of the banking supervisory authority had steadily risen over the past two years from 199 to 256 by end-2005, enhancing supervision, including of the rapidly expanding IFI.

19. **The authorities noted that insurance sector solvency remained high and supervision was effective.** Solvency remained comfortable, but the coverage ratio was

declining, owing to expansion in both life and nonlife segments (Table 4). The authorities noted that they were conducting regular stress tests, in line with FSAP recommendations. A 25 percent fall of equity markets would lower the solvency of three companies below standards (September 2005), but the impact of a shift in interest rates would be limited. The number of supervisory staff had been further increased.

C. Fiscal Policy

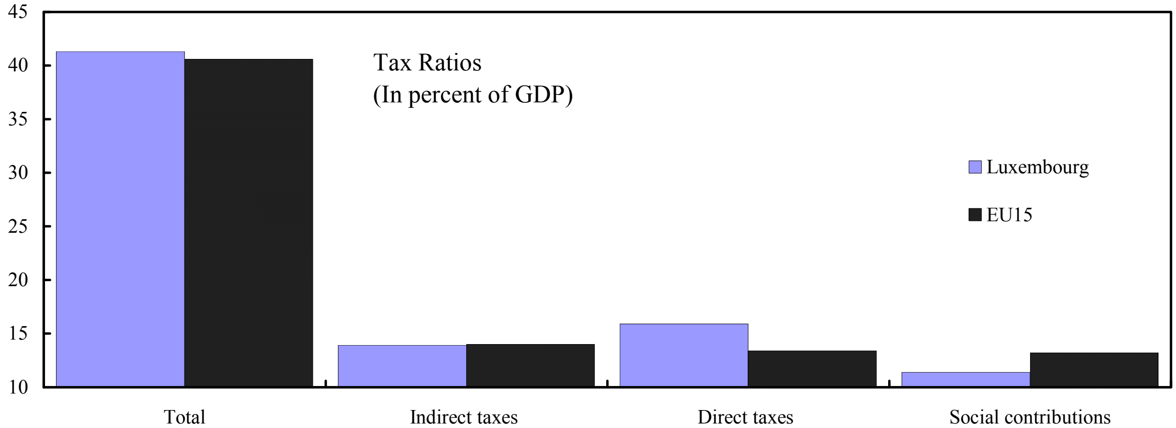
20. **There was agreement that additional measures may be needed to reach the 2006 budget deficit target.** The budget envisages a reduction in the general government deficit by ½ percent of GDP to 1.8 percent of GDP. Staff noted that the underlying expenditure measures were not well defined, and saw the deficit stabilizing rather than declining (Table 5). The authorities responded that the deficit target could still be reached through a temporary slowdown in investment expenditures. They noted last year's unanticipated VAT refunds—which reached 1 percent of GDP largely due to a single company—were unlikely to be repeated.

21. **The authorities emphasized that at the core of the forthcoming reform package would be measures to improve fiscal developments.** There was agreement that maintaining Luxembourg's attractiveness as a destination for foreign labor and capital was of paramount importance, and, therefore, adjustment should primarily rely on expenditure measures (Figure 8). These should be front-loaded, given the strength of the cyclical upswing, and—in the staff's view—the decline in trend growth.

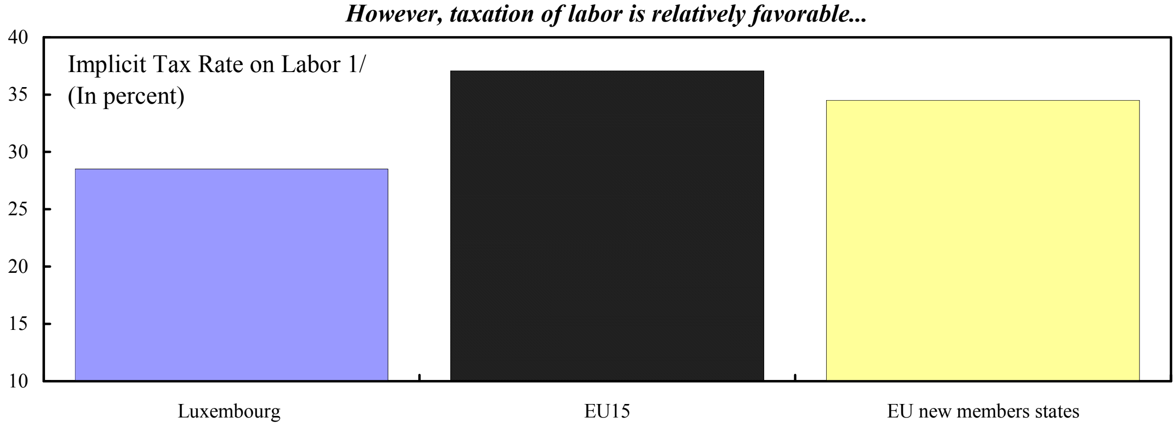
22. **The authorities stated their intention to return the budget to balance soon after 2008.** The staff supported such a stance, noting that the economy's high degree of openness caused revenue volatility and required a safety margin. However, the emerging funding gap of the public pension system needed to be addressed. While official forecasts projected a funding gap of at least 50 percent of GDP by 2050, staff viewed the underlying growth trajectory as optimistic (Box 4). Under more realistic assumptions, baseline projections showed that the gap would reach 100 percent of GDP, excluding aging-related increases in health care costs. This gap might best be closed through cuts in benefits, but these would need to be larger than the authorities have been prepared to consider. The gap could also be closed through smaller cuts in pension benefits and a gradual build-up of the asset position of the pension fund so that its income would cover its liabilities. Staff estimates suggested this might require a general government surplus of 1 percent of GDP or more. Such an approach would forestall harmful increases in contribution rates at a later stage. The authorities agreed that a small general budget surplus might be required to address the underfunding of the pension system, and indicated that an increase of the retirement age was under consideration. In any case, the public sector financial asset position remained comfortable (Table 6).

Figure 8. Luxembourg: Tax System, 2003

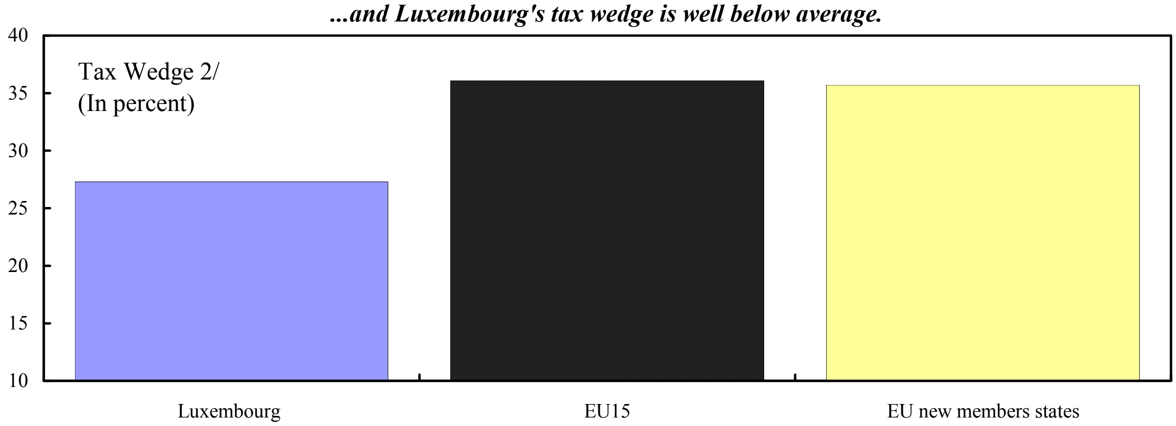
Luxembourg's overall tax burden is somewhat heavier than the EU15 average.



However, taxation of labor is relatively favorable...



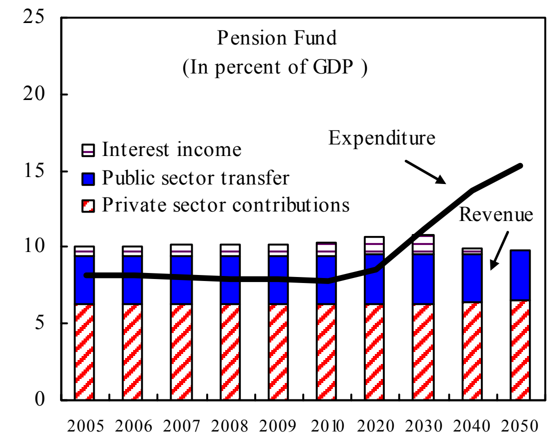
...and Luxembourg's tax wedge is well below average.



Source: EU Commission Services.
1/ Sum of all direct and indirect taxes and social contributions levied on employed labor income divided by total compensation.
2/ For a single worker at two-thirds of average earnings.

Box 4. Preserving the Sustainability of the Pension System

Notwithstanding current surpluses, strains are building on the public pension system. Rapid employment growth of young cross-border workers has lowered the current pension dependency ratio, while raising future pension liabilities. The authorities' actuarial review of pension finances in 2005 concluded that a slowdown in growth and its repercussions on employment growth would open up a sizeable funding gap, threatening the pensions of those below the age of 40 years. By 2050 the pension system would accumulate debt of at least 50 percent of GDP, reversing the fund's comfortable net asset position (25 percent of GDP in 2005). However, staff projections show a funding gap of 100 percent of GDP by 2050 in a baseline growth scenario, which could reach 221 percent of GDP in case of a sharp deceleration in GDP growth.[1] Unusually high replacement rates—exceeding 100 percent of the last salary on average—the low effective retirement age, and automatic benefit indexation to inflation and wage growth are the main reasons for these developments.



Source: Social security administration.

Priority should be given to pension benefit reform. Luxembourg has little room to increase contribution rates due to its extreme openness of factor markets. Staff suggested the introduction of a "solidarity factor" (IMF Country Report No. 04/125) to align the pension replacement rates with the contribution base. The OECD maintains its longstanding recommendations to raise the retirement age, to put early retirement benefits in relation to the standard retirement age, and to terminate subsidies for pre-retirement pensions.[2] However, the authorities are not considering at this stage reforms sufficient to fully resolve the funding problem.

Any remaining funding gap should be closed through income from pension fund assets. Building up an appropriate asset position requires running budget surpluses. The necessary expenditure savings are determined by (i) the scope of pension benefit reform; (ii) potential improvements of hitherto low returns on pension fund assets of which three quarters are held in time deposits; and (iii) trend growth. Assuming moderate pension benefit reforms, staff estimates that expenditure cuts of 1.7 percent of GDP are needed for pension fund income to cover all liabilities starting in 2050. The required expenditure savings could drop to 1 percent, if returns on pension fund assets increase from their currently low levels by 100 basis points on average, depending on trend growth.

Simulation Results--Supplementary Public Transfer 1/

	Without entitlement reform	With entitlement reform 2/	With entitlement reform and improved returns on assets 2/ 3/
		(In percent of GDP)	
Scenario 1: growth slowdown to 3 percent 4/	2.4	0.2	-0.3
Scenario 2: growth slowdown to 2 percent 5/	3.9	1.7	1.0

1/ Public transfer to pension fund in addition to wage-related contribution beginning in 2007.
2/ Cumulative decrease in pension liabilities by 3 percent of GDP in equal increments beginning in 2010 for 20 years.
3/ Increase of return on pension fund assets by 100 basis points relative to baseline projections.
4/ Deceleration of real growth to 3 percent by 2030 (Stability Program 2005).
5/ Deceleration of real growth below 3 percent by 2020.

[1] See accompanying selected issues chapter.
[2] OECD 2006, Economic Policy Reforms: Going for Growth.

23. **The authorities confirmed their intention to reduce expenditures by a cumulative 2½ percent of GDP during 2006-08**, as set out in the 2005 Stability Program (SP). The staff supported the authorities' expenditure target but cautioned that achieving it would require determination, especially if structural expenditures were to be reduced only beginning in 2007. Moreover, revenue shortfalls could heighten the need for expenditure cuts. Growth projections for the outer years in the SP seemed optimistic, and EU action could trigger revenue shortfalls. The authorities acknowledged the possibility of losses resulting from an EU decision possibly shifting tax revenues from internet services to those countries where these services were consumed. Although growth projections were somewhat elevated for 2007-08, a safety margin was built into revenue projections.

Fiscal Projections

	2004	2005	2006	2007	2008
			Stability Program 1/		
Revenue	44.5	44.7	44.5	44.1	44.3
Expenditure	45.6	47.0	46.3	45.1	44.5
Balance	-1.2	-2.3	-1.9	-1.0	-0.2
GDP (real)	4.5	4.0	4.4	4.9	4.9
			IMF 2/		
Revenue	44.5	44.2	44.2	44.1	44.2
Expenditure	45.6	46.5	46.4	46.2	46.2
Balance	-1.2	-2.3	-2.2	-2.1	-2.1
GDP (real)	4.5	4.3	4.0	3.8	3.5

1/ Stability Program, December 2005.
2/ Unchanged policies.

24. **The authorities stressed that comprehensive expenditure measures would be in place for next year's budget.** They indicated that the automatic indexation of social expenditures to inflation and their biannual adjustment to wages would be reviewed. However, the authorities saw little political support for the staff's proposal to improve the targeting of social expenditures and enhance means testing for unemployment aid, the minimum guaranteed income (MGI), and family and education allowances. They agreed that expenditure reduction should not unduly rely on a shift of investment expenditures to Public Private Partnerships (PPPs). Instead such decisions would be taken exclusively on efficiency grounds and ensure adequate risk sharing, monitoring, and transparency.

25. **There was recognition that the health care sector needed reforms.** The authorities acknowledged that reforms initiatives by the health care commission needed to be intensified given rising cost pressures. Staff stressed that further increases in payroll taxes should be avoided, following the 2005 hike to 5.4 percent of gross wages, including through (i) setting financial incentives for the use of generic drugs; (ii) streamlining the list of eligible services while improving the efficiency of existing services; and (iii) raising co-payments.

26. **The authorities viewed the Stability and Growth Pact (SGP) as providing an appropriate medium-term framework to facilitate adjustment.** They noted that the revised SGP provided enhanced incentives for steady consolidation and would help curtail expenditure growth to below GDP growth, as set out in the government's coalition agreement. Therefore, adopting a formal medium-term fiscal framework (MTFF), as

proposed by the staff, would be duplicative. The mission responded that at a minimum, more timely fiscal data, regular analysis, and clearer budget prioritization were needed to enhance transparency, foster public support of policy requirements, and prevent policy drift.

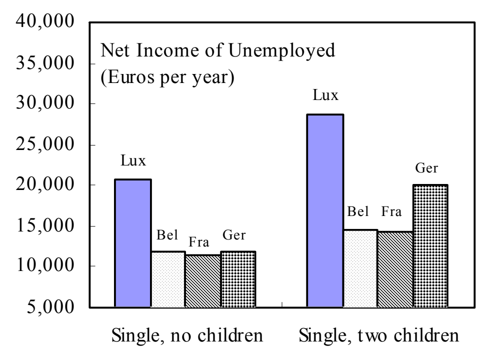
D. Improving Labor Market Flexibility and Participation

27. **Luxembourg is at the heart of a regional labor market attracting an increasing number of cross-border employees**. The authorities expressed concern over the continued rise in unemployment and its concentration among low-productivity workers and the young (Box 5). They saw uncompetitive skills as the primary reason for these adverse developments. Nevertheless, they recognized that a labor supply shock—resulting from entitlement reforms in neighboring countries—was heightening wage competition. With the number of unemployed in the neighboring regions exceeding Luxembourg's resident labor force three times, staff noted structural unemployment risked escalating and efforts to curtail social expenditures could be frustrated.

Luxembourg's Regional Labor Market

	2005	
	(In thsds)	(In percent) 1/
Resident labor force	210.9	100.0
Resident employment	201.9	95.8
Resident unemployment	8.9	4.2
Cross-border workers (net)	109.4	51.9
Unemployment in Greater Region 2/	650.0	308.3

Sources: Statec, and IMF staff calculations.
1/ Of resident labor force.
2/ Lorraine, France; Saarland and Rhineland-Palatinate, Germany; Walloon Region and the French- and German-speaking communities of Belgium; and the Grand Duchy of Luxembourg.



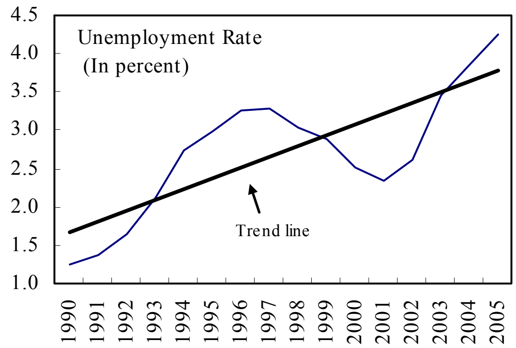
Source: OECD.

28. **Policy measures to alleviate unemployment would focus on training measures and life-long learning programs combined with a possible moderation of social benefits.** The authorities reiterated that the indexation of the MGI to wage and inflation developments was under review. Nevertheless, a general reduction in unemployment assistance and the MGI, as proposed by the staff to lessen disincentive effects for residents, was politically difficult.[7] Staff questioned whether the measures under preparation could forestall a further rise in unemployment given much higher social assistance to the unemployed in Luxembourg compared to abroad. In any event, training should focus on on-the-job measures to maximize success.

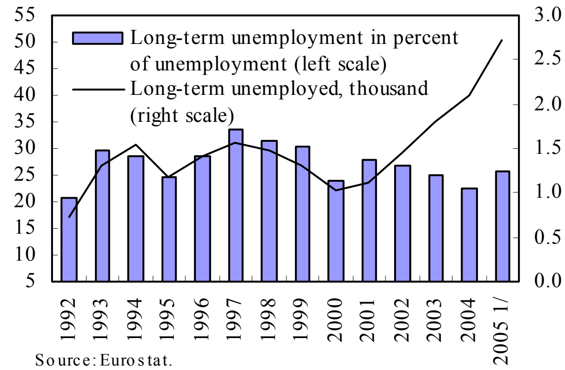
[7] Cross-border workers are not eligible for unemployment benefits in Luxembourg.

Box 5. Luxembourg's Structural Unemployment

The unemployment rate has been increasing on a trend line since the early 1990s. A marked deviation from this trend coincides with the financial sector boom in the late 1990s. Long-term unemployment has risen sharply—especially in the last three years—although its share in overall unemployment has remained largely unchanged.



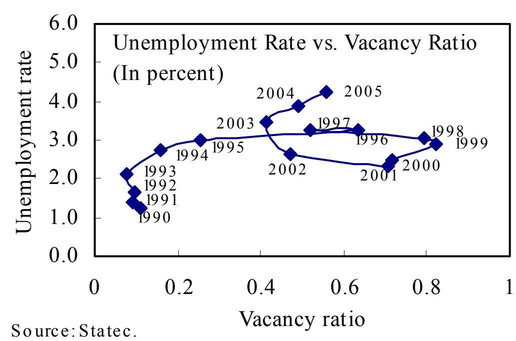
Source: Statec.



Source: Eurostat.
1/ IMF Staff estimate.

Generous social welfare poses serious impediments to entry into employment. Staff calculations show that unemployment benefits for unemployed singles in Luxembourg are almost twice as high as those in neighboring countries, and a similar pattern holds for families. Furthermore, the net losses from the combined effects of higher taxes and smaller social benefits when moving from unemployment into employment are estimated to be among the highest in the OECD.[1] The OECD thus maintains its longstanding recommendation that replacement rates in unemployment insurance be lowered and the withdrawal rate of social assistance be reduced as recipients' incomes rise in order to avoid unemployment and poverty traps. In addition, employment may be impeded because Luxembourg's minimum wage is the highest in the EU (18 percent of all employed are being paid at the minimum wage).

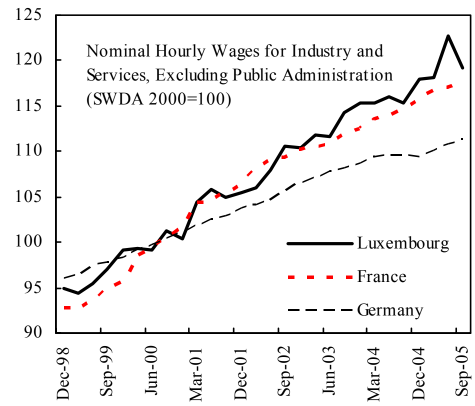
The skills gap is widening, reflecting the increasingly specialized needs of the financial sector. Indicative of a mismatch between skills on offer and demanded, the vacancy ratio and unemployment rate have risen in parallel for most of the 1990s and again since 2003. Analysis confirms a deepening mismatch between job seekers and vacancies on a sectoral level.[2]



Source: Statec.

[1] OECD 2004, Benefits and Wages, OECD Indicators.
[2] BCL, Bulletin 2004/4.

29. **The authorities indicated that the wage indexation mechanism was under review.** While various proposals to alter the near-full indexation of wages to the CPI were under discussion, the authorities stressed that the principle of wage indexation should be maintained. A proposal to align wage developments in Luxembourg with those abroad—in order to lessen the wage differential vis-à-vis neighboring countries—was gaining prominence. The staff welcomed the proposal, but maintained that indexation—even if modified in line with the proposal—would continue to distort hiring decisions at the margin.



Source: Eurostat.

30. **There was agreement that labor force participation remained low by international standards, notwithstanding actions taken.** While satisfied with last year's tightening of eligibility criteria for the sickness allowance and, the continued success in reducing access to disability pensions, the authorities noted with concern that early retirement schemes were still serving as a vehicle for corporate restructuring. Reforms were therefore being prepared to limit early retirement programs to exceptional cases. Staff ascribed low labor force participation by the young mainly to perverse incentive effects; it suggested that eligibility criteria for unemployment aid be tightened and granted only after a minimum period of employment. Also, while female labor force participation was increasing steadily, staff noted bottlenecks arising from the lack of affordable child care.

E. Other Issues

31. **Against the background of the country's tradition of openness to foreign capital (Table 7), the staff queried the authorities' reaction to the takeover bid for the steel industry by a foreign investor**. The authorities explained that they had acted as any single largest shareholder—Luxembourg owns 5.6 percent of Arcelor—would when faced with a potentially hostile takeover bid. However, they did not exclude that the bid would succeed. They underscored their continued commitment to openness to foreign capital and labor.

32. **The authorities indicated delays in the publication of quarterly national accounts data.** These delays mainly resulted from the inclusion in the accounts of financial-intermediation-services-indirectly-measured; quarterly data were soon to be published. Staff noted—while statistical data were adequate for surveillance purposes—the continued absence of quarterly national accounts data, including within year information on general government performance, hampered policy and economic analysis.

33. Luxembourg transposed into law in 2004 the major EU directive on **AML/CFT** issues and explained its contents in a circular in 2005.[8] The legal framework was further

[8] Directive 2001/97/CE.

strengthened in a number of different ways. Luxembourg targets a further increase of its **official development assistance** (ODA) from 0.85 percent of GDP in 2005 to 0.89 percent of GDP in 2006.

IV. Staff Appraisal

34. **Its dynamic financial sector and comfortable public sector net financial asset position leave Luxembourg well placed to meet future challenges.** Key among these is the need to adjust the conduct of fiscal and social policies to likely lower trend growth. Social policies should be reviewed with the aim of preserving the economy's dynamism and reversing the rise in structural unemployment. The authorities' forthcoming reform package is an opportunity to address these challenges in a comprehensive manner. While judicious adjustments to policies might suffice if action is taken soon, delays would risk requiring more difficult and far-reaching measures.

35. **The near-term growth outlook remains positive, but momentum could weaken over the medium term reflecting the maturing of the dominant financial sector.** The recovery in the euro area, combined with the continued strong performance of capital markets, bodes well for the 2006 outlook. However, the financial sector's successful shift from traditional—wide margin—banking activities to narrower margin activities supporting the investment fund industry is entering an advanced stage. Staff welcomes the farsighted initiatives to position the financial sector for future opportunities, including recent laws on equity capital funds and private pension funds. Nevertheless, a shift to lower trend growth appears likely.

36. **The financial sector appears sound and resilient to shocks.** Banking sector solvency seems to have remained at comfortable levels last year, supported in part by improvements in the quality of banks' earnings. Stress tests carried out by the authorities indicate that the financial sector is well positioned to withstand various market risks, including interest rate risk and potentially adverse developments in the real estate market. Supervisors should continue such tests, adjusting them as needed to a changing environment, and continue to monitor the risks stemming from the rapid expansion of the investment industry.

37. **A large and sustained current account surplus is testimony to Luxembourg's continued competitiveness.** Nevertheless, the successful shift into the investment fund industry has lowered the profit margins in the dominant financial sector, thereby leaving the sector—and the economy—vulnerable to heightening competition.

38. **Sound public finances have been critical to Luxembourg's success in attracting substantial foreign capital and labor, and safeguarding these achievements should remain a priority.** Adverse fiscal trends need to be reversed, with the fiscal adjustment relying on expenditure measures, given the high mobility of capital and labor. Cyclical strength, a possible decline in trend growth, and potential revenue losses from tax harmonization across the EU underscore the need to front-load expenditure cuts. Moreover, medium-term budget targets need to reflect long-term sustainability requirements, including those arising from aging.

39. **The 2006 budget and the latest Stability Program are welcome steps into this direction but need to be strengthened.** Measures underpinning the targeted tightening of the budget deficit in 2006 by ½ percent of GDP need to be clarified to ensure that the deficit target will be reached. Durable expenditure measures to reach the authorities' target—of a cumulative reduction by 2½ percent of GDP during 2006-08—should be defined in the forthcoming reform package. These measures should focus on curtailing social expenditures, including through enhanced targeting of benefits and means testing, and delinking social expenditures from wages. Absent a commitment to deep-seated reforms, achieving long-term fiscal sustainability requires a sustained general government surplus of 1 percent of GDP or more, and durable expenditure restraint—going beyond the commitments made in the latest Stability Program—will be necessary.

40. **Sustaining the targeted slowdown in expenditure growth requires pension and health care reforms.** A substantial funding gap of the public pension system is opening up, and therefore pensions should be reformed to help close the gap. An increase in the retirement age would be a welcome step, and should be followed by linking the statutory retirement age to life expectancy and the replacement rate to the contribution base. Benefit reform should be complemented by enhancing the hitherto low returns generated by the assets of the pension fund. To forestall harmful increases in contribution rates and close any remaining funding gap, the asset position of the pension fund should be built up gradually. Furthermore, health care reforms need to be intensified to prevent deleterious increases in payroll taxes, including by raising co-payments.

41. **Reversing the rise in structural unemployment requires reducing regional differences in reservation wages, and further raising labor force participation is essential.** Social benefits, especially unemployment aid and the minimum guaranteed income, should be aligned more closely with those in the region, with a view to preventing wage competition from pushing resident job seekers into long-term unemployment. The apparent skills gap should be addressed by on-the-job training. To further enhance the competitiveness of resident job seekers, wage indexation should be revised, at a minimum, to reflect wage developments in the neighboring countries. The authorities' intention to review early retirement schemes to raise participation is welcome. Access to unemployment aid by the young should also be tightened.

42. Luxembourg's high level of **official development assistance** and its leadership in this field is commendable.

43. Although Luxembourg's **economic statistics** are adequate for surveillance, improvements are needed, also to allow it to subscribe to the Fund's Special Data Dissemination Standard.

44. 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 (2004, thousand)	451.6
GDP per capita (2004)	$70,654
GDP per capita plus commuters (2004)	$57,548

	2001	2002	2003	2004	2005 Est.	2006 Proj.	2007 Proj.
	Volume changes, in percent						
Supply and demand							
Gross domestic product	1.5	2.5	2.9	4.5	4.3	4.0	3.8
Total domestic demand	4.5	-0.2	2.9	1.6	2.4	2.6	2.8
Private consumption	5.1	3.2	1.6	1.4	0.5	1.2	1.8
Public consumption	6.5	3.2	5.0	6.0	4.2	4.0	4.1
Gross fixed investment	10.0	-1.1	-6.3	3.5	4.6	4.0	3.6
Inventory accumulation 1/	-1.7	-1.9	2.2	-1.1	0.0	0.0	0.0
Foreign balance 1/	-2.1	2.5	0.5	3.1	2.4	1.9	1.6
Exports of goods and nonfactor services	1.8	-0.6	1.8	8.2	6.1	6.5	6.1
Imports of goods and nonfactor services	3.7	-2.6	1.6	6.8	5.1	6.0	5.9
	In thousands, unless otherwise noted						
Employment and unemployment							
Resident labor force	195.3	199.2	202.9	206.7	210.9	214.8	217.9
Unemployed	4.5	5.2	7.0	8.0	8.9	9.7	10.3
(As a percent of total labor force)	2.3	2.6	3.5	3.9	4.2	4.5	4.7
Resident employment	190.7	194.0	195.9	198.7	201.9	205.1	207.6
(change in percent)	2.6	1.7	0.9	1.5	1.6	1.6	1.2
Cross-border workers (net)	89.0	94.6	98.2	102.9	109.4	116.3	121.5
Total employment	279.7	288.6	294.1	301.6	311.3	321.4	329.1
(Change in percent)	5.6	3.2	1.9	2.5	3.2	3.2	2.4
	Annual changes, in percent						
Prices and costs							
GDP deflator	1.9	1.1	2.1	2.5	2.5	2.5	2.5
CPI (harmonized), p.a.	2.4	2.1	2.5	3.2	3.8	2.5	2.2
CPI (national definition), p.a.	2.7	2.1	2.0	2.2	2.5	2.3	2.2
Average nominal wage growth 2/	4.0	3.5	2.0	2.6	3.4	3.2	3.1
Nominal unit labor costs 2/	6.5	3.2	-1.0	-1.7	...	...	...
	In percent of GDP						
Public finances							
General government revenues	45.2	45.8	45.2	44.5	44.2	44.2	44.1
General government expenditures	39.1	43.7	45.0	45.6	46.5	46.4	46.2
General government balance 3/	6.1	2.1	0.2	-1.2	-2.3	-2.2	-2.1
General government gross debt	6.7	6.8	6.7	6.6	6.7	7.6	8.4

Table 1. Luxembourg: Basic Data (concluded)

	2001	2002	2003	2004	2005 Est.	2006 Proj.	2007 Proj.
				In percent of GDP			
Current account							
Current account balance	9.0	11.6	6.8	11.1	7.9	7.3	7.3
Balance of trade in goods and services	20.1	28.4	26.1	28.2	30.1	31.7	32.9
Factor income balance	-8.3	-15.3	-17.0	-13.0	-18.9	-20.9	-22.0
Transfer balance	-2.8	-1.5	-2.3	-4.1	-3.4	-3.4	-3.6
				Period average			
Exchange rates							
U.S. dollar per euro	0.90	0.94	1.13	1.24	1.25	…	…
percent change	-3.1	5.4	19.7	9.9	0.2	…	…
Nominal effective rate (1990=100)	99.2	99.5	100.8	101.1	100.8	…	…
percent change	-0.1	0.2	1.3	0.4	-0.3	…	…
Real effective rate (CPI based; 1990=100)	101.3	101.9	103.7	104.3	104.2	…	…
percent change	0.3	0.6	1.7	0.6	-0.1	…	…
Interest rates							
Short term 4/	4.3	3.3	2.3	2.1	2.2	…	…
Long-term government bond yield 5/	4.9	4.7	4.0	4.2	3.4	…	…

Sources: Data provided by the authorities; IMF, WEO database; and Fund staff calculations.
1/ Contribution to GDP growth.
2/ Overall economy.
3/ In 2001, improved by a one-off transaction over 2 percent of GDP recorded as negative capital expenditure.
4/ 3-month Euro deposit rate.
5/ Secondary market yields of government bonds with average maturity of 10 years.

Table 2. Luxembourg: Financial Soundness Indicators of the Banking System, 1999-2005 1/

(In percent, weighted period average unless otherwise indicated)

	1999	2000	2001	2002	2003	2004	2005
Capital adequacy							
Total regulatory capital ratio	12.9	13.1	13.7	15.0	17.1	17.5	17.5
Tier 1 regulatory capital ratio	10.4	11.0	11.4	13.1	14.4	14.7	14.1
Asset quality							
Net new value adjustments to own funds	1.7	0.9	1.9	5.1	2.1	1.6	0.8
Value adjustments on credit to total gross credit	0.7	0.5	0.4	0.4	0.3	0.3	0.2
Non-performing large exposures to total large exposures 2/	1.5	0.8	0.6	0.4	0.5	0.5	0.4
Real credit growth 3/							
Non-financial corporate sector	18.7	6.6	9.8	-7.9	-11.2	-6.6	5.8
Luxembourg households	5.5	18.5	6.5	9.1	19.5	10.5	11.6
Liquidity							
Liquidity ratio	62.0	61.0	63.0	63.0	63.0	62.0	62.0
Coefficient of maturity transformation 4/	3.5	3.2	2.5	2.7	2.7	2.5	2.5
Ratio of non-bank loans to non-bank customer funds	0.56	0.58	0.57	0.56	0.50	0.47	0.44
Market risks							
Total gross exposure in financial derivatives to own funds	3,160	2,988	3,492	3,302	2,815	2,986	2,745
Interest rate operations to own funds	1,994	1,817	1,817	2,127	2,083	2,216	1,913
Exchange rate operations to own funds	1,026	1,015	1,009	860	686	724	781
Other operations to own funds 5/	140	150	662	315	45	47	52
Net foreign currency position to own funds							
CHF positive net position	1.3	1.5	1.7	1.9	0.6	0.8	1.5
negative net position	-3.4	-2.5	-1.7	-2.8	-3.2	-7.1	-8.5
GBP positive net position	1.1	2.0	1.6	0.8	1.2	1.5	1.2
negative net position	-0.9	-1.5	-1.5	-1.4	-0.8	-1.2	-0.8
JPY positive net position 6/	1.0	1.8	2.1	0.5	7.6	7.4	0.9
negative net position	-2.7	-2.2	-3.0	-2.2	-4.2	-1.9	-1.4
USD positive net position	5.6	9.6	7.4	3.3	3.3	1.4	1.6
negative net position	-9.2	-8.0	-5.1	-4.2	-2.9	-2.8	-3.8
Asset composition							
Overall exposure to the corporate sector in total exposures	80.6	82.2	83.5	83.3	83.6	82.3	82.3
Financial corporations	67.6	68.4	69.5	70.0	71.0	70.8	71.2
Nonfinancial corporations	13.0	13.8	14.0	13.3	12.6	11.5	11.1
Total debt securities exposures in total exposures	27.1	27.3	26.7	26.5	27.9	28.8	30.4
of which: to the corporate sector	58.2	63.1	66.0	65.0	66.7	64.7	65.6
Exposure to Luxembourg households in total exposures	1.2	1.3	1.3	1.3	1.5	1.6	1.6
Share of mortgage lending in total lending to the private sector 7/	10.7	13.3	14.2	17.8	19.6	20.4	19.2
Large exposures to total exposures 2/	94.0	94.6	94.6	94.1	93.2	93.1	94.1
Equity portfolio to own funds	25.1	21.1	17.6	15.5	13.1	15.9	15.2
Foreign assets as share of total assets 3/ 8/	84.0	84.7	82.2	86.0	79.7	83.1	81.2
Geographical distribution of assets 3/ 8/							
Luxembourg	16.0	15.3	17.8	14.0	13.1	15.0	15.1
Other euro countries	53.4	54.9	53.3	57.5	53.9	56.5	54.0
Other developed countries	17.9	17.8	18.3	17.7	16.3	16.9	18.5
Central and eastern European countries	1.3	1.3	1.1	1.3	1.5	1.5	2.1
Emerging markets and developing countries	7.0	6.8	5.3	5.2	11.7	6.7	1.9
Off-shore centers	4.5	4.0	4.2	4.2	3.6	3.4	4.6

Table 2. Luxembourg: Financial Soundness Indicators of the Banking System, 1999-2005 (concluded) 1/
(In percent, weighted period average unless otherwise indicated)

	1999	2000	2001	2002	2003	2004	2005
Deposit composition							
Shares in total deposits							
Non-residents	69.5	67.9	68.5	68.7	67.6	65.2	64.2
Banks and other financial institutions	76.4	74.0	77.6	78.2	77.4	77.9	81.6
Physical persons	13.7	12.3	11.7	12.0	11.7	10.1	8.5
Total deposits in percent of total assets	81.1	80.5	79.6	79.2	80.3	80.7	80.5
Profitability and Earnings Structure							
Return on assets							
Income before provisions to total assets	0.7	0.8	0.8	0.7	0.6	0.7	0.7
Net after-tax income to total assets	0.4	0.5	0.5	0.4	0.5	0.5	0.5
Return on equity (Net after-tax income to paid-in capital)	34.0	36.7	40.7	36.4	34.9	39.8	37.8
Share in gross income 8/							
Net interest income	53.3	49.5	56.7	58.4	57.2	53.1	48.4
Commissions and fees	38.5	43.5	38.0	38.0	36.3	38.8	42.9
Results on financial operations	8.1	6.7	5.3	3.6	6.5	8.2	8.7
Operating costs to gross income 8/	40.5	40.4	40.8	41.7	41.2	43.1	42.3
Interest spread 3/ 9/	1.79	1.13	1.13	1.57	1.84	1.82	1.67

Sources: Banque Centrale du Luxembourg.

1/ All banks operating on the basis of Luxembourg law, excluding branches of foreign banks.

2/ Large exposures are defined as exposures above 6.2 million euros or 10 percent of banks' own funds.

3/ All banks including branches of foreign banks.

4/ A coefficient above 1 means that banks' assets have a longer average duration than liabilities.

5/ Variation in 2003 compared to 2002 due to a transfer of activities from a subsidiary to a branch within the same group.

6/ Increase in 2003 and 2004 compared to 2002 mainly due to a significant position of a bank at 31/12/2003.

7/ 2004 data end of period.

8/ Data end of period.

9/ Trend break in 2003 due to change in reporting.

Table 3. Luxembourg: Financial System Structure, 2000-2005

	2000	2001	2002	2003	2004	2005
			(Number)			
Banks	202	189	177	169	162	155
Domestic	4	4	4	4	4	4
Foreign	198	185	173	165	158	151
Majority foreign owned	135	124	118	115	112	108
Branches of foreign banks	63	61	55	50	46	43
Investment funds	1,785	1,908	1,941	1,870	1,968	2,060
Insurance companies	93	93	94	95	95	95
of which: Non-life insurance	32	32	33	34	34	36
Other financial sector professionals 1/	113	145	145	142	166	185
			(Assets in euro billion)			
Banks	648	721	663	656	695	792
Domestic	...	...	40	40	41	43
Foreign	...	...	623	616	654	749
Majority foreign owned	...	...	508	521	539	604
Branches of foreign banks	...	...	115	95	115	145
Investment funds	875	928	845	953	1,106	1,525
Insurance companies 2/	24	26	26	30	36	...
Life insurance	22	24	24	28	33	42
Non-life insurance	2	2	2	2	2	...
Other financial sector professionals 1/		3	2	3	37	50
			(Assets in percent of GDP)			
Banks	3,044	3,274	2,906	2,738	2,709	2,886
Domestic	...	...	173	167	161	157
Foreign	...	...	2,732	2,571	2,547	2,730
Majority foreign owned	...	...	2,228	2,175	2,100	2,201
Branches of foreign banks	...	...	505	397	447	528
Investment funds	4,110	4,216	3,703	3,979	4,310	5,557
Insurance companies 2/	113	117	113	127	139	...
Life insurance	103	108	104	117	130	154
Non-life insurance	9	9	9	9	9	...
Other financial sector professionals 1/		11	10	11	146	184
Banking sector Gini coefficient 3/						
Distribution of the total balance sheet	0.74	0.76	0.77	0.77	0.77	0.77
Distribution of non-bank loans	0.83	0.83	0.82	0.81	0.81	0.81
Distribution of interbank loans	0.71	0.75	0.75	0.76	0.76	0.77

Source: Luxembourg authorities.

1/ The number of entities and total assets increased due to change in legislation in 2003.

2/ Assets representing technical provisions.

3/ The Gini coefficient takes a value between 0 and 1. A value of 0 means equal distribution of the measured activity among banks.

Table 4. Luxembourg Insurance Sector Indicators

	1999	2000	2001	2002	2003	2004
Coverage ratio 1/	2.1	2.3	2.2	2.5	2.0	1.9
Life	1.7	1.9	1.8	1.8	1.5	1.6
Non-life 2/	3.7	3.8	3.6	5.1	3.6	2.8
Profitability (return on average equity, in percent)						
Life	13.3	8.2	6.0	-4.7	0.1	5.3
Non-life	23.2	13.4	9.5	0.8	19.3	11.9

1/ Available solvency margin over required solvency margin.
2/ Heavily capitalized company entered the market in 2000 and withdrew in 2003.

Table 5. Luxembourg: General Government Operations 1995-2010

	1995	2000	2004	2005	2006	2007	2008	2009	2010
				Est.			Proj		
	(In percent of GDP)								
Revenue	47.7	44.6	44.5	44.2	44.2	44.1	44.2	44.1	44.1
Current revenue	47.5	44.5	44.3	44.0	44.0	43.9	44.0	43.9	43.9
Tax revenue	30.1	29.4	28.2	28.3	28.4	28.4	28.5	28.5	28.5
Indirect taxes	12.6	13.9	14.4	14.4	14.5	14.5	14.6	14.6	14.7
Direct taxes	17.5	15.4	13.9	13.8	13.9	13.9	13.9	13.9	13.8
Social security contributions	12.5	11.2	12.3	12.3	12.3	12.4	12.4	12.4	12.4
Other current revenue	4.9	3.9	3.7	3.4	3.2	3.1	3.1	3.0	3.0
Capital revenue	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Expenditure	45.0	38.6	45.6	46.5	46.4	46.2	46.2	46.3	46.3
Current expenditure	39.1	33.5	39.2	39.3	39.1	39.0	38.9	38.9	39.0
Wages and salaries	9.6	7.8	8.7	8.7	8.6	8.5	8.5	8.6	8.5
Goods and services	3.6	3.0	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Social transfers in kind	4.4	4.2	5.5	5.5	5.6	5.7	5.8	5.8	5.9
Social transfers and pensions	16.4	13.6	15.7	15.8	15.6	15.4	15.2	15.2	15.0
Subsidies	1.8	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Interest payments	0.5	0.4	0.2	0.3	0.3	0.3	0.3	0.4	0.4
Other current expenditure	2.8	3.0	3.9	3.8	3.8	3.8	3.8	3.8	3.8
Capital expenditure	6.0	5.0	6.4	7.2	7.3	7.3	7.3	7.3	7.3
Overall balance	2.6	6.1	-1.2	-2.3	-2.2	-2.1	-2.1	-2.1	-2.2

Source: Luxembourg Statistical Office and Staff Estimates

Table 6. Luxembourg. Public Sector Debt Sustainability Framework, 2000-2010
(In percent of GDP, unless otherwise indicated)

	Actual					Est.	Projections					
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Baseline: Public sector debt 1/	6.6	6.7	6.8	6.7	6.6	**6.7**	**7.6**	**8.4**	**9.4**	**10.6**	**12.1**	**13.5**
o/w foreign-currency denominated	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change in public sector debt	-0.5	0.1	0.2	-0.1	-0.1	0.1	0.9	0.8	1.0	1.2	1.5	1.5
Identified debt-creating flows (4+7+12)	-6.9	-6.3	-2.3	-0.5	0.7	1.9	1.8	1.6	1.6	1.6	1.6	1.6
Primary deficit	-6.4	-6.4	-2.4	-0.5	0.9	2.0	1.9	1.8	1.7	1.8	1.7	1.7
Revenue and grants	44.6	45.2	45.8	45.2	44.5	44.2	44.2	44.1	44.2	44.1	44.1	44.1
Primary (noninterest) expenditure	38.2	38.7	43.3	44.7	45.4	46.2	46.1	45.9	45.9	45.9	45.8	45.8
Automatic debt dynamics 2/	-0.5	0.1	0.1	0.0	-0.2	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
Contribution from interest rate/growth differential 3/	-0.5	0.1	0.1	0.0	-0.2	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1
Of which contribution from real interest rate	0.1	0.2	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3
Of which contribution from real GDP growth	-0.6	-0.1	-0.2	-0.2	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.4
Contribution from exchange rate depreciation 4/	0.0	0.0	0.0	0.0	0.0	...	...	...	...	...	...	...
Other identified debt-creating flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Privatization receipts (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Recognition of implicit or contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other (specify, e.g. bank recapitalization)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Residual, including asset changes (2-3) 5/	6.5	6.4	2.5	0.4	-0.8	-1.8	-0.9	-0.8	-0.6	-0.4	-0.1	-0.1
Public sector debt-to-revenue ratio 1/	14.8	14.7	14.9	14.8	14.8	15.1	17.2	19.1	21.3	24.0	27.3	30.6
Scenario with key variables at their historical averages 7/						**6.7**	**2.5**	**-1.5**	**-5.2**	**-8.7**	**-11.9**	**-15.0**
Scenario with no policy change (constant primary balance) in 2005-2010						**6.7**	**7.7**	**8.8**	**10.1**	**11.5**	**13.3**	**15.1**
Key Macroeconomic and Fiscal Assumptions Underlying Baseline												
Real GDP growth (in percent)	9.0	1.5	2.5	2.9	4.5	4.3	4.0	3.8	3.5	3.5	3.5	3.5
Average nominal interest rate on public debt (in percent) 8/	5.9	5.8	5.4	4.9	3.6	4.4	4.2	4.2	4.2	4.3	4.3	4.3
Average real interest rate (nominal rate minus change in GDP deflator, in percent)	1.7	3.9	4.3	2.8	1.2	1.9	1.7	1.7	1.9	2.1	2.2	2.3
Nominal appreciation (increase in US dollar value of local currency, in percent)	-13.4	-3.1	5.4	19.7	9.9	...	...	...	...	...	...	...
Inflation rate (GDP deflator, in percent)	4.2	1.9	1.1	2.1	2.5	2.5	2.5	2.5	2.3	2.2	2.1	2.0
Growth of real primary spending (deflated by GDP deflator, in percent)	1.1	3.0	14.6	6.2	6.1	6.2	3.7	3.4	3.4	3.5	3.4	3.4
Primary deficit	-6.4	-6.4	-2.4	-0.5	0.9	2.0	1.9	1.8	1.7	1.8	1.7	1.7

1/ General government gross debt.
2/ Derived as [(r - ≅□●g≅- g + ≅□● r≅]/(1+g+≅+g≅)) times previous period debt ratio, with r = interest rate; ≅ = growth rate of GDP deflator; g = real GDP growth rate; ≅ = share of foreign-currency denominated debt; and ≅ = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).
3/ The real interest rate contribution is derived from the denominator in footnote 2/ as r - π (1+g) and the real growth contribution as -g.
4/ The exchange rate contribution is derived from the numerator in footnote 2/ as ≅□(1+r).
5/ For projections, this line includes exchange rate changes.
6/ Defined as public sector deficit, plus amortization of medium and long-term public sector debt, plus short-term debt at end of previous period.
7/ Historical primary surplus of 3.5 percent of GDP. The key variables include real GDP growth; real interest rate; and primary balance in percent of GDP.
8/ Derived as nominal interest expenditure divided by previous period debt stock.

Table 7. Luxembourg: Balance of Payments

	2002	2003	2004	2005 Est.	2006 Proj.	2007 Proj.	2008 Proj.	2009 Proj.	2010 Proj.
					In percent of GDP				
Current account balance	11.6	6.8	11.1	7.9	7.3	7.3	7.2	6.9	6.6
Balance of trade in goods and services	28.4	26.1	28.2	30.1	31.7	32.9	33.5	34.0	34.5
Exports of goods and services	139.2	134.4	146.8	152.8	157.2	159.8	162.2	164.8	168.0
Exports of goods	44.4	40.8	42.8	42.2	41.3	40.6	39.9	39.5	39.3
Exports of services	94.7	93.6	104.0	110.6	115.9	119.2	122.3	125.3	128.7
Imports of goods and services	110.8	108.3	118.7	122.7	125.5	127.0	128.7	130.8	133.5
Imports of goods	53.8	51.6	53.6	53.0	52.3	51.4	50.6	50.2	50.1
Imports of services	57.0	56.7	65.0	69.6	73.2	75.6	78.1	80.5	83.4
Factor income balance	-15.3	-17.0	-13.0	-18.9	-20.9	-22.0	-22.8	-23.6	-24.4
Employees' compensation	-14.6	-14.7	-15.0	-15.4	-15.8	-15.8	-15.9	-15.9	-16.0
Employees' compensation, credit	3.7	3.7	3.6	3.6	3.6	3.6	3.6	3.6	3.6
Employees' compensation, debit	-18.3	-18.4	-18.6	-19.0	-19.4	-19.4	-19.5	-19.6	-19.6
Net investment income	-0.7	-2.2	2.0	-3.5	-5.2	-6.2	-6.9	-7.6	-8.4
Investment income, credit	225.5	185.2	189.5	...	...	...	...	...	...
Investment income, debit	-226.2	-187.4	-187.5	...	...	...	...	...	...
Transfer balance	-1.5	-2.3	-4.1	-3.4	-3.4	-3.6	-3.6	-3.6	-3.6
Capital and financial account	-13.2	-6.8	-11.8	-10.2	-7.2	-7.2	-7.0	-6.7	-6.4
Capital account	-0.5	-0.6	-0.7	-0.8	-0.7	-0.7	-0.7	-0.7	-0.7
Financial account	-12.7	-6.2	-11.0	-9.3	-6.5	-6.5	-6.4	-6.1	-5.8
Direct investment, net	-49.6	-35.2	-14.0	-7.7	-6.9	-6.2	-5.4	-4.6	-3.8
Abroad	-585.7	-369.0	-256.3	-86.0	-77.4	-69.7	-62.6	-56.2	-50.5
In reporting economy	536.1	333.7	242.3	78.3	70.5	63.5	57.2	51.6	46.6
Portfolio investment	339.7	72.2	161.7	145.5	114.7	83.4	80.2	87.0	94.5
Equities	193.1	132.0	236.2	289.4	158.5	134.3	129.3	140.1	152.3
Debt instruments	146.6	-59.8	-74.5	-143.8	-43.8	-51.0	-49.0	-53.2	-57.8
Financial derivatives	-0.3	24.8	-9.9	2.6	4.3	4.3	4.3	4.3	4.3
Other investments	-302.5	-68.0	-148.9	-149.8	-118.6	-88.0	-85.4	-92.7	-100.8
Financial sector, excl. BCL	-38.4	54.2	-35.6	-27.7	-11.9	-11.9	-11.9	-11.9	-11.9
Long-term	10.6	-6.2	61.3	23.8	22.4	22.4	22.4	22.4	22.4
Short-term	-49.0	60.4	-96.8	-51.5	-34.2	-34.2	-34.2	-34.2	-34.2
Other, net	-264.0	-122.2	-113.3	-122.2	-106.7	-76.1	-73.6	-80.9	-88.9
Reserves	-0.2	-0.4	0.0	0.0	-0.1	-0.1	-0.1	-0.1	-0.1
Errors and omissions	1.8	0.4	0.7	2.2	0.0	0.0	0.0	0.0	0.0

Sources: BCL and Fund staff calculations.

Luxembourg: Fund Relations

(As of February 28, 2006)

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	252.31	90.40
Reserve position in Fund	26.80	9.60

III. SDR Department:	**SDR Million**	**% Allocation**
Net cumulative allocation	16.95	100.00
Holdings	11.71	69.04

IV. Outstanding Purchases and Loans: None

V. Financial Arrangements: None

VI. Projected Payments to Fund:

(SDR Million; based on existing use of resources and present holdings of SDRs)

	Forthcoming				
	2006	2007	2008	2009	2010
Principal					
Charges/Interest	0.13	0.18	0.18	0.18	0.18
Total	0.13	0.18	0.18	0.18	0.18

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 is an Article VIII member and maintains an exchange system free of restrictions on payments and transfers for current international transactions, except for reasons related to security. In accordance with IMF Executive Board Decision No. 144-(52/51), the authorities notified the Board on April 15, 2004, they had imposed a series of exchange restrictions, solely for the preservation of national and international security, with respect to Burma/Myanmar, the Democratic Republic of Congo, Iraq, Somalia, Zimbabwe, people related to Mr. Milosevic, the Taliban regime, Al Qaeda, and persons and entities related to terrorism.

IX. Article IV Consultations:

The last Article IV consultation was concluded on April 28, 2004, IMF Country Report 04/125.

Luxembourg: Statistical Issues

In recent years, Luxembourg's macroeconomic statistics have improved substantially as to coverage and timeliness. This reflects the authorities' undertakings in the context of EU/EMU membership, Luxembourg's monetary union with Belgium until end-1998, and a significant increase in budgetary resources. Most statistics are now available electronically to the public at no cost. Since the last Article IV consultation, the following improvements have been made:

- The *ESA95* national accounts data were extended back to 1985, from 1995.
- Central government accounts were compiled on an *ESA95* basis.
- In 2002, the Central Bank of Luxembourg began compiling and disseminating quarterly balance of payments statements including current and financial accounts, in accordance with the framework of the *Balance of Payments Manual, Fifth Edition (BPM5)*.

However, general government accounts are not available at a quarterly frequency, unlike in almost all other euro-area countries. The publication of quarterly national accounts data, beginning in 2005, has been interrupted and the work to include FISIM has been delayed

Luxembourg has yet to fulfill its obligations to produce quarterly financial accounts as specified in the *Update of the Guideline on Monetary Union Financial Accounts* (ECB/2005/13).[9]

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 accounts. Preliminary data were already discussed in a seminar hosted by STATEC.

[9] This matter was taken up in 2005 by the ECB Governing Council, in regard to which Luxembourg agreed in principle to prepare the accounts, but stated that it would time to establish in-country arrangements for compilation. It has now been agreed that the National Statistical Institute will compile the accounts.

Luxembourg: Table of Common Indicators (as of February 28, 2005)

	Date of latest observation	Date received	Frequency of data	Frequency of reporting	Frequency of publication
Exchange rates	2/28/06	2/28/06	Daily	Daily	Daily
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	Jan. 2006	2/28/06	Monthly	Monthly	Monthly
Reserve/Base Money	Jan. 2006	2/28/06	Monthly	Monthly	Monthly
Broad Money	Jan. 2006	2/28/06	Monthly	Monthly	Monthly
Central Bank Balance Sheet	Jan. 2006	2/28/06	Monthly	Monthly	Monthly
Consolidated Balance Sheet of the Banking System	Jan. 2006	2/28/06	Monthly	Monthly	Monthly
Interest Rates[2]	2/28/06	2/28/06	Daily	Daily	Daily
Consumer Price Index	Jan. 2006	2/16/06	Monthly	Monthly	Monthly
Revenue, Expenditure, Balance and Composition of Financing[3] – General Government[4]	2004	9/23/05	Annually	Annually	Annually
Revenue, Expenditure, Balance and Composition of Financing[3]– Central Government	2004	9/23/05	Annually	Annually	Annually
Stocks of Central Government and Central Government-Guaranteed Debt	Feb. 2006	3/30/05	Monthly	Monthly	Monthly
External Current Account Balance	Q3 2005	12/20/05	Quarterly	Quarterly	Quarterly
Exports and Imports of Goods and Services	Dec. 2005	2/28/05	Monthly	Monthly	Monthly
GDP/GNP	Q1 2005	7/19/05	Quarterly	Quarterly	Quarterly
Gross External Debt[5]	Q3 2005	12/27/06	Quarterly	Quarterly	Quarterly

[1] Includes reserve assets pledged or otherwise encumbered as well as net derivative positions.
[2] Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes and bonds.
[3] Foreign, domestic bank, and domestic nonbank financing. Monthly data on the composition of financing of the central government are available with the latest observation from December 2005.
[4] The general government consists of the central government (budgetary funds and extra budgetary funds), social security funds, and local governments.
[5] Including currency and maturity composition.

Statement by the IMF Staff Representative
April 26, 2006

This statement provides information that has become available since the staff report was issued. The thrust of the staff appraisal remains unchanged.

1. National accounts data for the period of 1995-2004 were revised, in large part reflecting the inclusion of financial intermediation services indirectly measured (FISIM), in line with European System of Accounts 1995 standards. Given the importance of the financial sector, the level of nominal GDP was revised upwards by about 6 percent in 2004. GDP data for 2005 remain to be released.

2. The fiscal deficit came in better than expected in 2005. Based on the authorities' estimates, the general government budget deficit was 1.9 percent of GDP last year (versus 1.2 percent of GDP in 2004), 0.4 percentage point stronger than the staff estimate. Lower investment expenditures accounted for close to half of this deviation.

3. The authorities raised their real growth estimate for 2005 to 4.5 percent and lowered their 2006 forecast to 4 percent, which is in line with the staff's forecast. The current account surplus was higher than expected in 2005—reaching 10 percent of GDP—underscoring the continued strong contribution of external demand to GDP growth.

INTERNATIONAL MONETARY FUND
Public Information Notice
EXTERNAL
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Public Information Notice (PIN) No. 06/52
FOR IMMEDIATE RELEASE
May 8, 2006

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

IMF Executive Board Concludes 2006 Article IV Consultation with Luxembourg

On April, 26, 2006, the Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation with Luxembourg.[1]

Background

Luxembourg's dominant financial sector has supported a steady rebound in economic activity in recent years and growth is projected to remain relatively strong in the near term. While headline inflation is high compared to the EU average, underlying inflation has remained subdued. The recovery notwithstanding, the fiscal deficit widened to 1.9 percent of GDP in 2005, driven primarily by social expenditure growth, while unemployment edged up to 4½ percent. The government plans to announce in May a comprehensive reform package to address fiscal and structural challenges.

Trend growth may decline as the financial services industry is maturing, following a successful shift into investment fund services. This shift stimulated growth, but the expansion is likely to decelerate over time given the lower value added of these new activities. The staff projects growth to slow down to about 3½ percent over the medium term; about 1 percentage point below the authorities' forecast.

[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.

The financial sector remains sound and resilient to potential adverse shocks. Supervision is adequate. Financial stability is underpinned by the close integration of foreign-owned financial subsidiaries with their parent companies, which tends to enhance asset quality and capital adequacy. Financial sector soundness is also helped by an increasing diversification of income sources, as the shift to investment fund services has boosted commission income.

The 2006 budget targets a moderate reduction of the deficit and the authorities intend to restore fiscal balance soon after 2008. Achieving this target requires cumulative expenditure measures equivalent to 2½ percentage points of GDP during 2006-08, which remain to be defined. Moreover, securing funding of the future liabilities of the public pension system would require additional measures.

There has been a steady increase in structural unemployment, largely owing to a labor supply shock triggered by benefit reforms in neighboring countries. A widening gap between the entitlements to resident and foreign job seekers has heightened competition in Luxembourg's regional labor market, pushing a growing number of resident workers into unemployment.

Executive Board Assessment

Directors noted that Luxembourg's near-term growth outlook remains positive, supported by the continued strong performance of the dominant financial sector. Directors welcomed the sector's successful shift from traditional banking activities into the investment fund industry and the authorities' initiatives to create an environment for future opportunities. Nevertheless, they noted that growth prospects could weaken over the medium term as the financial sector is maturing.

Against this background, Directors saw the need to adjust fiscal and social policies as Luxembourg's major policy challenge. They called on the authorities to address this challenge in a comprehensive manner in their forthcoming reform package. Directors attached particular importance to reining in expenditure growth and redesigning social policies with the aim of reversing structural unemployment.

Directors noted that the financial system appears sound and well supervised. They welcomed the banking sector's continued diversification of income sources, and resulting improvement in the quality of banks' earnings. Directors noted that the sector is well positioned to withstand various market risks, as well as potentially adverse developments in the real estate market. They encouraged the authorities to adjust stress tests in a timely manner to changing market conditions and to continue to closely monitor potential risks stemming from the rapid expansion of the investment fund industry. Directors welcomed continued progress in strengthening the Anti-Money Laundering/Combating the Financing of Terrorism regime.

Directors supported the authorities' policy of returning the fiscal accounts to balance over the medium term, noting that sound public finances have been critical to Luxembourg's success in attracting substantial foreign capital and labor—highly mobile factors. While commending the targeted reduction in expenditures over 2006-08, Directors looked forward to specific measures to underpin this target as part of the authorities' forthcoming reform package. In this context, Directors called for a strengthening of the 2006 budget and saw a need for curtailing social expenditures, including through enhanced targeting of benefits and means testing, and delinking social expenditures from wage developments.

Directors stressed the need for setting medium-term budget targets consistent with long-term sustainability requirements, including those arising from aging. They called therefore for sustaining a small general government surplus in the absence of deep-seated reforms, in particular in the benefit system.

Directors emphasized that the targeted slowdown in expenditure growth will require health care and pension reforms. In view of the projected emergence of a substantial future funding gap in the public pension system, Directors called for a benefits reform, including linking the statutory retirement age to life expectancy and the replacement rate to the contribution base. They called for pension reforms to be complemented by efforts to raise low returns on pension fund assets. Directors encouraged the authorities to gradually build up the assets of the pension fund to close any remaining funding gap and forestall harmful increases in contribution rates. To avoid deleterious increases in payroll taxes, Directors underscored the need to intensify health care reforms, including by raising co-payments.

Directors expressed concern over the steady increase in structural unemployment and stressed the need to raise labor force participation. Reservation wages in Luxembourg need to be aligned more closely with those in neighboring countries, so as to prevent wage competition from pushing resident job-seekers into long-term unemployment. To this effect, Directors urged a review of social benefits, especially unemployment benefits and the minimum guaranteed income. They also looked forward to a review of early retirement schemes to raise labor force participation.

Directors welcomed Luxembourg’s high level of official development assistance and commended its leadership in this area.

Directors observed that Luxembourg’s economic statistics are adequate for surveillance. Nonetheless, they encouraged further improvements, also to allow subscription to the Fund’s Special Data Dissemination Standard.

Public Information Notices (PINs) form part of the IMF's efforts to promote transparency of the IMF's views and analysis of economic developments and policies. With the consent of the country (or countries) concerned, PINs are issued after Executive Board discussions of Article IV consultations with member countries, of its surveillance of developments at the regional level, of post-program monitoring, and of ex post assessments of member countries with longer-term program engagements. PINs are also issued after Executive Board discussions of general policy matters, unless otherwise decided by the Executive Board in a particular case. The Staff Report for the 2006 Article IV Consultation with Luxembourg is also available.

Luxembourg: Selected Economic Indicators

	2002	2003	2004	2005
Real economy	(Change in percent unless otherwise indicated)			
Real GDP	2.5	2.9	4.5	4.3
Real total domestic demand	-0.2	2.9	1.6	2.4
Unemployment (as percent of total labor force)	2.6	3.5	3.9	4.2
Resident employment	1.7	0.9	1.5	1.6
Total employment	3.2	1.9	2.5	3.2
Harmonized CPI index, p.a.	2.1	2.5	3.2	3.8
Gross fixed investment (in percent of GDP)	21.9	19.8	19.3	19.4
Public finances 1/	(Percent of GDP)			
General government revenues	45.8	45.2	44.5	42.0
General government expenditures	43.7	45.0	45.6	43.9
General government balance	2.1	0.2	-1.2	-1.9
General government gross debt	6.8	6.7	6.6	6.0
Balance of payments	(Percent of GDP)			
Current account balance	11.6	6.8	11.1	7.9
Balance of trade in goods and services	28.4	26.1	28.2	30.1
Factor income balance	-15.3	-17.0	-13.0	-18.9
Transfer balance	-1.5	-2.3	-4.1	-3.4
Exchange rate				
Exchange rate regime	Member of the Euro area			
US dollar per Euro	0.94	1.13	1.24	1.25
Nominal effective rate (1990=100)	99.5	100.8	101.1	100.8
Real effective rate (CPI based; 1990=100)	101.9	103.7	104.3	104.2

Sources: Data provided by the authorities; and IMF staff calculations and projections.
1/ 2005 ratios reflect revised GDP data.

Statement by Willy Kiekens, Executive Director for Luxembourg and Cedric Crelo, Advisor to Executive Director
April 26, 2006

The authorities convey their appreciation for the constructive discussions they had with the staff. While Luxembourg continues to be among the good economic performers of the European Union, the deterioration of public finances and the continued increase in unemployment cause concern. The government's priority is to address these challenges, which are rightly emphasized in the well-written Staff Papers. In order to enable the Ministers in charge to focus more on the budget and the labor market, the government cabinet decided to reshuffle ministerial portfolios in February 2006.

A reform package is currently being negotiated with social partners. Recommendations by the staff serve as a valuable input to this debate, the outcome of which will be announced by the Prime Minister on May 2, 2006.

Recent Economic Developments and Prospects

After a slowdown in 2001 and 2002, due to a less favorable global environment and dismal financial markets, the Luxembourg economy began to recover gradually in the second half of 2003 and rebounded strongly in 2004. This momentum was maintained in 2005. Real GDP grew by 4.5 percent, driven mainly by a robust increase in exports of financial services. Private consumption, which grew by 1.2 percent, remained rather weak. Higher energy and real estate prices, the rise in unemployment and an uncertainty about future economic developments contributed to this tamed enthusiasm.

For 2006 and 2007, economic growth projections have been revised downwards. Real GDP is now forecast to grow by 4 percent in 2006 and by 4.5 percent in 2007. This is slightly lower than the projections included in the latest update of Luxembourg's Stability Program (November 2005). Potential output is estimated at 4 ¼ percent. Private consumption is anticipated to be supportive of growth, while the net contribution of the foreign balance is likely to decrease due to the expected higher imports. Higher wages and a rise in residents' employment are expected to fuel real disposable income and, hence, stimulate private consumption. Also, accelerated growth in the euro area is anticipated to be conducive to increased consumer confidence. The authorities project private consumption to rise by 2.4 percent in 2006 and by 3.2 percent in 2007, an assessment broadly shared by the European Commission.

Measured by the National Index of Consumer Prices (NICP), which excludes consumption of non-residents, inflation increased by 2.5 percent. Assuming that oil prices will remain at the current levels, inflation is unlikely to come down in 2006.

While growth relies heavily on the health of the financial sector, constant efforts are further being made to promote the financial center and to diversify the economy. Accordingly, the government intends to develop Luxembourg as a major ITC hub. So far, this strategy has been successful.

Fiscal Policy

The Luxembourg authorities remain strongly committed to the objectives enshrined in the Stability and Growth Pact (SGP) and aspire to implement a fiscal policy path that will lead to a balanced budget by 2009.

For 2005, the fiscal deficit outcome was better than expected, 1.9 percent of GDP instead of the earlier estimate of 2.3 percent. A lower execution rate of public investments, better than expected revenue mainly due to the strong performance of the financial sector, as well as statistical impacts relating to the revision of the national accounts and the partial attribution of VAT reimbursements to previous fiscal years, explain this difference.

Compared to 2004, when the fiscal deficit stood at 1.2 percent of GDP, the deterioration of the fiscal balance is mainly explained by a series of exceptional VAT reimbursements that affected the budget deficit in excess of 1 percent of GDP. Also, revenues stemming from corporate taxes continued to be weaker. These taxes are collected with a lag and currently relate to the fiscal years 2001 – 2003, a period during which corporate profits were lower. This effect will gradually phase out. Moreover, expenditure has continued to grow as a share of GDP.

Given the volatility on the revenue side, fiscal consolidation efforts will be concentrated on the expenditure side. The cornerstone of this strategy is that expenditure growth should be compatible with medium-term economic prospects. The consolidation path embedded in the 2006 budget targets a reduction equivalent to 0.5 percent of GDP in the fiscal deficit. The bulk of the measures are centered on reducing the level of social transfers and improving the efficiency of public spending, notably investment.

In the area of social security, several measures taken by the authorities, such as a stricter handling of sick leaves, incentives to increase the use of generic drugs and more stringent controls over hospital expenditures, are expected to bear results. Additional measures are currently being negotiated with social partners as, for instance, mitigating the effect of price increases via the wage indexation mechanism on social security benefits.

Amidst the consolidation efforts, the authorities remain committed to a high level of public investment. These investments, which aim at addressing certain bottlenecks and at safeguarding the attractiveness of the business environment, will focus on transportation-related infrastructures, education, research and health. In order to limit the cost associated with these investments, the authorities are determined to improve the costing of such initiatives and to explore the avenue of Public Private Partnerships (PPPs).

Wage moderation in the public sector, after the current wage agreement phases out at the end of 2006, will also contribute to fiscal consolidation.

Public debt, which stood at 6.4 percent of GDP, remains extremely low compared to the Euro Area average of about 72 percent of GDP. New debt has been issued in order to finance transportation-related infrastructure. The debt-to-GDP ratio is expected to reach barely 10 percent by 2009.

The authorities are committed to uphold intergenerational equity of the pension system and stand ready to use the flexibility embedded in the system to safeguard this principle. They are cognizant of the fact that without structural reforms, the pension system will be unsustainable over the long-term. Against this background, a stricter enforcement of rules has led to a decline in disability pensions and a new law was enacted in 2004 to increase the yield on pension reserves. Also, in line with the staff's advice, measures to increase the effective retirement age are being considered.

Labor market developments

While job creation in Luxembourg continued to grow at a pace of 3 percent in 2005, the unemployment rate increased concomitantly. This conundrum is due to the specificity of the Luxembourg labor market, which, in fact, is regional rather than domestic. In March 2006, the unemployment rate stood at 4.7 percent. *Prima facie*, this rate compares favorably to the Euro Area average, which hovers around 8.5 percent. Nonetheless, taken from a domestic perspective, the unemployment rate has increased rapidly over the past years. This increase stems partly from legislative measures taken in 2002 and 2004 to enlarge the labor force pool by integrating partially disabled and disabled workers. These measures started to affect the unemployment rate significantly in 2003. At the end of 2005, this effect accounted for 0.5 percent in the unemployment rate.

That said, the increase in unemployment, mainly confined to unqualified workers, is a cause of serious concern as it becomes increasingly structural. Initiatives under review pertain to a better targeting of employment measures, a strengthening of the unemployment agency, and a greater focus on education and on-the-job training.

Options on how to mitigate the impact of the wage indexation mechanism on wage developments are also being considered.

Financial sector

Amidst an improving economic environment and positive developments on the stock markets, the banking sector recorded an increase in net income of around 20 percent in 2005. While the interest margin dropped by 3.2 percent, net commission income increased by 14 percent. The continued boom of the investment fund industry strongly contributed to this development. At the end of February 2006, total assets of investment funds reached about EUR 1,600 billion, an increase of nearly 40 percent compared to the same period in 2005. Future developments in this industry remain promising against the backdrop of the newly-developed investment tools and active prospecting for new markets.

As concluded by the FSAP mission that took place in 2002, Luxembourg's financial sector is robust, efficient and well supervised. Stress testing exercises made by the banking supervisor (CSSF) confirmed the robustness of Luxembourg banks. This assessment was corroborated at the systemic level by the recent macro-prudential analysis conducted by the central bank (BCL). The resilience of the financial sector can be explained by a combination of good profitability and liquidity ratios and the high quality of assets.

Banking supervision and crisis management have been further strengthened. Also, in line with recommendations of the IMF staff, the supervisor of the insurance sector (CAA) is conducting regular stress tests and its staff has been further increased.

The authorities are considering an FSAP update in 2007.

Other issues

In line with the authorities' commitment to preserving the solid reputation of the financial center, the AML/CFT framework was further strengthened. The EU directive 2001/97/CE on AML/CFT was transposed into law in November 2004.

The authorities are working further on improving the quality and timeliness of statistics. Luxembourg intends to subscribe to the Special Data Dissemination Standard (SDDS) during the course of this year.

The Luxembourg authorities are strongly committed to further increasing their Official Development Assistance (ODA). While the UN threshold of 0.7 percent of GNP was already reached in 2000, the ODA target in the 2006 budget is 0.89 percent of GNP.