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December 28, 1983

To: Members of the Executive Board

From: The Acting Secretary

Subject: Luxembourg - Staff Report for the 1983 Article IV Consultation

Attached for consideration by the Executive Directors is the staff report for the 1983 Article IV consultation with Luxembourg, which has been tentatively scheduled for discussion on Wednesday, January 18, 1984.

If Executive Directors have technical or factual questions relating to this paper prior to the Board discussion, they should contact Mr. Leipold on ext. 73743.

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INTERNATIONAL MONETARY FUND

LUXEMBOURG

Staff Report for the 1983 Article IV Consultation

Prepared by the Staff Representatives for the
1983 Article IV Consultation with Luxembourg

Approved by L. A. Whittome and Subimal Mookerjee

December 28, 1983

Article IV consultation discussions were held in Luxembourg from November 29 to December 1, 1983. The staff team consisted of Messrs. Dhonte, Leipold, and Riechel (all EUR), and Miss De Leva (PAR) as secretary. The mission met with the Prime Minister, Mr. Werner; the Minister of Finance, Mr. Santer; the Director General of the Luxembourg Monetary Institute, Mr. Jaans; and officials in the Administration and the Luxembourg Monetary Institute. The Executive Director for Luxembourg, Mr. de Groote, attended the meetings as an observer. The previous consultation report (SM/82/177, 8/25/82) was discussed by the Executive Board at EBM/82/133 on October 8, 1982. In the past, consultations with Luxembourg have been conducted jointly with those with Belgium. In EBM/82/133 a number of Executive Directors asked that separate consultations be held with the two countries. Consultations with Belgium were held on October 5-17, 1983. The present report is thus the first separate consultation report for Luxembourg prepared by the staff, and consequently contains a somewhat longer background section than is habitual.

Luxembourg has accepted the obligations of Article VIII, Sections 2, 3, and 4.

I. Background

1. Structural change, 1974-82

The economy of Luxembourg is subject to some important factors which help explain its development over the past ten years. In examining these developments, due regard must be given to the particular situation and institutional framework for economic policy-making in Luxembourg. The small, open nature of the economy, and the commitments subscribed to within the Belgium-Luxembourg Economic Union (BLEU), bear significantly on the policy options and instruments available to the authorities.

The economy is very open. Nonnationals compose 25 percent of the total population (in 1980) and account for a third of domestic employment. Exports of goods and services absorb one half of total domestic and imported resources, or the equivalent of 85 percent of GDP.

At the time of the first oil shock, the steel sector contributed one half of industrial output (Table 1 and Chart 1) and 18 percent of dependent employment. Since then, the impact of weak world demand, compounded by the fact that the Luxembourg steel industry was concentrated on the less elaborate product lines, called for extensive cutbacks and restructuring. Steel output peaked at 6.4 million tons in 1974; by 1982, it had dropped to 3.5 million tons; over the same period, the share of the sector in GDP was halved, and its employment was reduced by a third.

The main countervailing influence came from a strong expansion of the international activities of the banking sector. There are 115 banks in Luxembourg and nonresidents hold a majority shareholding in 102 of the banks. The international assets of the banking system rose from US$18.2 billion at end-1974 to US$89 billion at end-1982, so maintaining somewhat over 10 percent of the international assets of banks in the European countries reporting to the BIS. The development of these activities made a major contribution to the domestic economy. In eight years, the sector doubled its share in GDP and, at least until 1980, its expansion more than offset the negative contribution to growth from the steel sector. 1/

Expansion in the other sectors of the economy weakened markedly after 1974, and the growth of GDP slowed to an average 2.3 percent in 1974-80 and 0.4 percent in 1980-82. It was nevertheless sufficient to assure a steady increase in employment, despite the loss of 8,000 jobs (5 percent of the labor force) in the steel sector in 1974-82. However, employment leveled off in 1980-82, and by end-1982 registered unemployment had risen to about 2,000, or 1.5 percent of the labor force.

Developments in unit labor costs in industry through the 1970s have been similar to those in Belgium, suggesting an effective deterioration of wage competitiveness through the late 1970s. This development contributed to a marked decline in industrial profitability, as the share of wages in value added in industry rose from 54 percent in 1974 to 70 percent in 1980. Much of the deterioration was attributable to the steel industry. However, the share of wages also increased in other industrial sectors, a development which may reflect, in part, the creation and the closure of plants and the pricing policies of the multinational enterprises to which some industrial establishments are affiliated, rather than a deterioration of profitability conditions.

Inflation, measured by the deflator of domestic demand, averaged 7.5 percent a year in 1970-82. Its path, however, was irregular, with two periods of double-digit inflation (1974-76 and 1981-82) separating

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1/ As explained in Appendix III, the international orientation of the banking sector in Luxembourg raises difficult issues for the measurement of GDP and of the current account. The estimates in the present report are those of the staff, and, while derived from national sources, are not official estimates.

Chart 1. Luxembourg: Structure of Output, 1974-82

(Percentage shares in GDP at 1975 prices)

Sources: Data provided by the Luxembourg authorities and staff estimates and calculations.

Table 1. Luxembourg: Structure of Output

(Value added at 1975 prices)

	1974	1980	1982
Shares in GDP (in percent)			
Steel sector	16.0	10.5	8.3
Other industry	16.7	15.6	16.6
Banking sector	5.6	11.3	12.8
Other	61.7	62.5	62.3
	1970-74	*1974-80*	*1980-82*
Growth rates (in percent per annum)			
Steel sector	3.9	-4.5	-10.8
Other industry	7.5	1.2	3.4
Banking sector	36.3	15.0	6.5
Other	6.1	2.5	--
GDP	6.9	2.3	0.4
GDP, excluding steel	(7.5)	(3.4)	(1.6)
Contributions to growth 1/			
Steel sector	0.55	-0.65	-1.20
Other industry	1.03	0.20	0.60
Banking sector	0.98	1.20	0.85
Other	3.20	1.62	0.15
Total	5.75	2.38	0.40

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

1/ In billions of Luxembourg francs at 1975 prices, annual average.

periods of slower price increases, averaging about 5 percent. The periods of high inflation were characterized by high increases in import prices, which were transmitted to the whole economy both directly, and indirectly, through an extensive system of wage indexation.

Consolidated general government data are not available. National accounts data indicate that the total tax pressure, including social security contributions, rose from 30 percent of GDP in 1970 to 40 percent in 1980. In addition, nontax revenues of the Central Government amounted to the equivalent of 6 percent of GDP in 1980. The tax structure has remained relatively stable since the early 1970s. It relies relatively more than the EC average on direct taxes (due to the greater contribution of corporate income tax, notably from the banking sector) and correspondingly less on indirect taxes. Fiscal policy has been traditionally prudent and only from 1979 did the central government budget move into deficit, which remained, however, within 2 percent of GDP up to 1982. The public debt 1/ has remained stable as a proportion of GDP (around 23 percent), and there are practically no official external liabilities. At around 1 percent of GDP, interest payments on the public debt are lower than in most industrial countries.

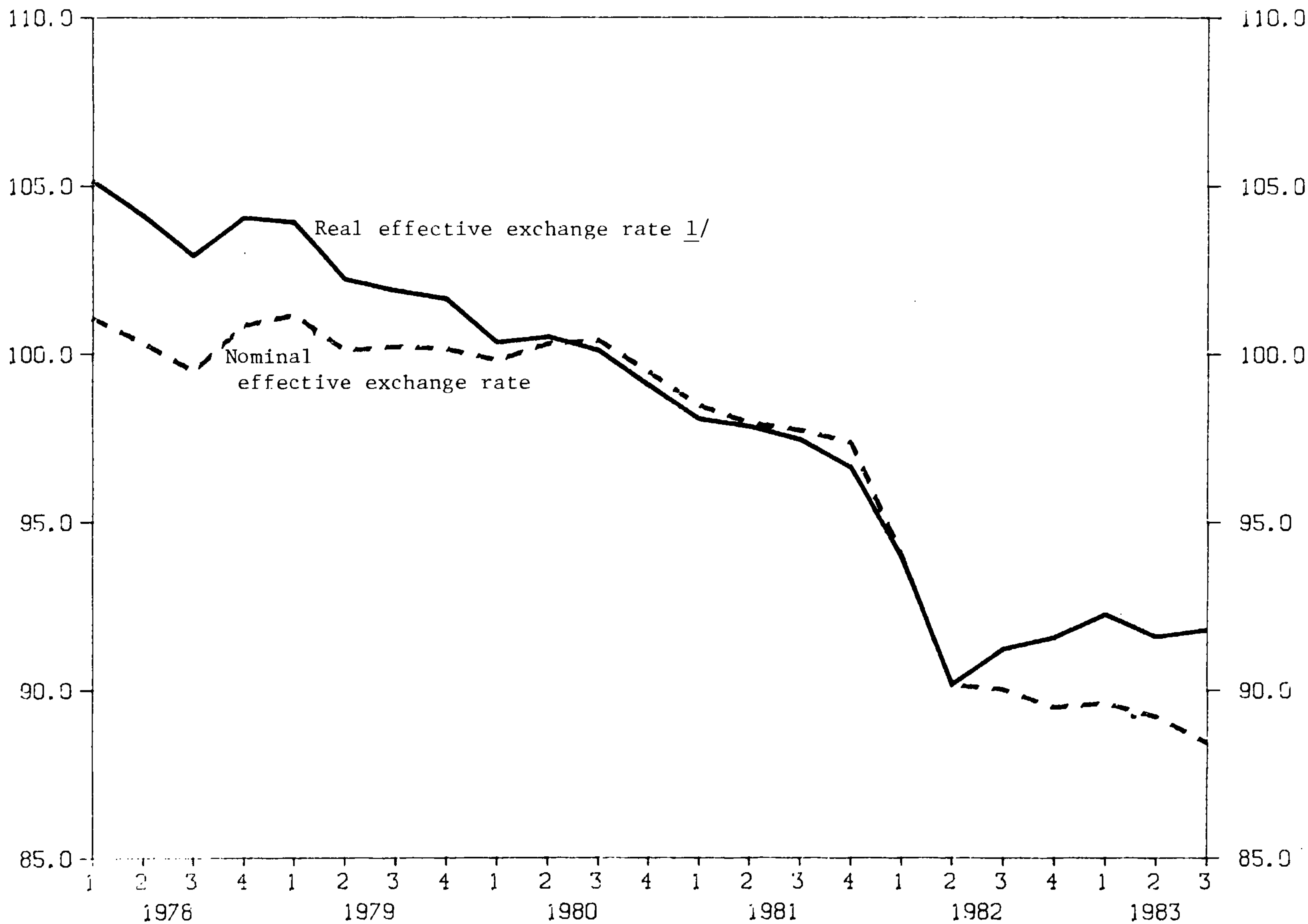
Since 1921, Luxembourg has been a member of the Belgian-Luxembourg Economic Union (BLEU), and the Luxembourg franc is at par with the Belgian franc, which is legal tender in Luxembourg. Luxembourg does not maintain foreign currency reserves; exchange intervention is conducted by the National Bank of Belgium. On a trade-weighted basis, the nominal effective exchange rate of the franc has been very stable through the 1970s, reflecting in part the weight of the Belgian franc (about 30 percent), with which the Luxembourg franc is at par. This relative stability was interrupted since late 1980 (Chart 2), as the appreciation of the U.S. dollar and the February 1982 EMS realignment contributed to a 10 percent effective depreciation in the two years to mid-1982. In real effective terms--based on relative consumer prices--the franc depreciated almost continuously from the fourth quarter of 1978; by the second quarter of 1982, the cumulative depreciation amounted to 14 percent.

A separate balance of payments for Luxembourg is not compiled; however, the Luxembourg Institute of Statistics (STATEC) publishes current account estimates, which, because of the complete freedom of transactions with Belgium, are subject to some uncertainties. These estimates indicate that the slowdown in GDP growth after 1974 was not fully reflected in a corresponding deceleration of domestic demand, so that the current account surplus declined by the equivalent of 12 percentage points of GDP between 1974 and 1982. However, the strong expansion of exports of banking and other services offset to a large extent the decline in exports of manufactures, and the current account seems to remain in strong surplus (Appendix III, Table B).

1/ Central Government and municipalities, including the so-called debt of undefined maturity. This latter debt (accounting for nearly half of the total public debt at end-1982 and showing the most dynamic growth) corresponds to certificates issued by the Central Government to constitute the pension funds' actuarial reserves on the basis of rather conservative accounting principles. The debt is largely notional in nature, and pending legislation on the reform of the financing of the pension funds will probably eliminate the Government's commitment in this respect, while however calling upon it to supplement the pension scheme's receipts via direct transfers. Excluding the debt of undefined maturity, public debt amounted to Lux F 23 billion, or about 12 1/2 percent of GDP, at end-1982.

Chart 2. Luxembourg: Effective Exchange Rates, 1978-83

(Index 1980 = 100)



Source: Staff estimates and calculations.

1/ Based on relative consumer prices (Information notice system index).

2. Recent developments

Real GDP declined by 0.3 percent in 1982, after a growth of 1 percent in 1981. This resulted from a negative contribution of domestic demand (-1.7 percent), which had been flat in 1981 and strongly positive in 1980. Real private consumption declined in 1982 (by 0.5 percent) for the first time in many years. The apparent drop in real disposable income of wage earners and some precautionary strengthening of savings were the main contributing factors. Gross fixed capital formation dropped by 8.8 percent in 1982, after a fall of 6.2 percent in 1981. This decline is largely explained by strong downward adjustments in investment in the steel industry--ahead of the Government's decisions on the future of this sector--and a considerable slowing of investment by the local authorities. Developments in the external sector were dominated by the continued growth of service receipts, albeit at a reduced rate, and by a fall in merchandise imports. Output of the financial sector was the most expansive element of domestic growth in 1982. By contrast, output growth in the steel sector declined strongly, and output growth in other industries decelerated.

Along with the Belgian franc, the Luxembourg franc was devalued by 8.5 percent against the other EMS currencies (except the Danish krone) in February 1982, and its effective exchange rate remained broadly stable within the EMS in the realignments of June 1982 and March 1983. On a trade-weighted basis (Chart 2), the nominal effective rate has been broadly stable since the second quarter of 1982, following the 10 percent depreciation of the previous two years. Since mid-1982, however, an adverse price differential has led to a slight real effective appreciation, which reverses only a small part of the 14 percent depreciation between late 1978 and mid-1982.

In support of the February 1982 devaluation, the prevailing wage indexation system was suspended and a system of step increases in wages and salaries, independent of the rate of consumer price inflation, was introduced. Two step increases, of 2.5 percent each, took place in 1982, limiting such adjustments for the year to an average of 5.3 percent, 4 points below the actual rate of inflation. Four step increases are to be granted over 1983 and 1984, of which three in 1983; these will provide adjustments, in year-average terms, of 7 percent in 1983 and 5.7 percent in 1984. Wage earners at the minimum income level were, however, compensated for the impact of these measures by an adjustment in social transfers. Self-employment incomes were subject, for equity reasons, to a special tax.

Developments in early 1983 were marked by a further fall in industrial production. The dominating influence was again exerted by steel output which, in the first quarter, was 26 percent below its level of the previous year. These developments contributed to a sharp drop in the demand for labor in industry, particularly in the steel sector where working time was cut and early retirement accelerated. Overall, total employment appears to be declining slightly. The drop in steel output was reflected in exports, but merchandise imports also declined as a result of weaker domestic demand and of reduced demand for industrial inputs.

Despite the removal of some price subsidies, consumer price inflation decelerated from a rate of 9.4 percent in 1982 to about 7.5 percent in the first half of 1983, as (judged from partner country data) import prices eased markedly. Inflation picked up again from July onward, in reflection notably of increases in VAT and excise taxes, and over the 12 months to October 1983 prices rose by 8.4 percent. By contrast, industrial prices registered a steady and strong deceleration from an average rate of 19.5 percent in 1982 to 4.9 percent in the second quarter of 1983, under the impact primarily of a decline in steel prices.

Recent fiscal developments have been dominated by the budgetary impact of the plan to restructure the steel industry of July 1, 1983. This plan increased expenditure over the two years 1983-84 by Lux F 10.4 billion (some 5 percent of 1983 GDP). The bulk of the increase is due to measures designed to alleviate the financial position of the main steel firms, notably ARBED, through capital endowments, bond subscriptions, and interest rate subsidies (for a total of Lux F 8.5 billion), with the remainder being accounted for by increased social transfers. 1/ The additional expenditure is to be financed in approximately equal proportions, each amounting to some 40 percent of the total, by higher direct and indirect taxation 2/ (yielding Lux F 4.1 billion, some 2 percent of GDP, over the two years) and by use of all remaining budgetary reserves. 3/ The remaining 20 percent (Lux F 2 billion) will be covered by exceptional borrowings. The net impact of the restructuring plan is borne almost totally by the 1983 budget, for an amount of Lux F 6.2 billion, raising the deficit from the original budgetary target of Lux F 2.5 billion (about 1.2 percent of GDP) to an officially estimated Lux F 8.7 billion (4.4 percent of GDP). The actual outcome is, however, likely to be considerably more favorable, given a probably marked underestimation of

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1/ Over a longer period, the total impact of social expenditure related to the steel restructuring plan is put at Lux F 11.7 billion in the 1983-88 period, with the greater part of the increased outlays being accounted for by the cost of early retirement schemes. The expenditure is to be borne by the Unemployment Fund and financed essentially by revenues from the "solidarity tax" (see below).

2/ As from July 1, 1983, the "solidarity tax" (calculated as a percentage of income tax and directly earmarked for the Unemployment Fund) was increased from 6.5 to 10 percent for individuals and from 2 to 4 percent for corporations; the standard VAT rate was raised from 10 to 12 percent; and other excise duties and public service charges were also increased.

3/ These consist of funds accumulated from the budget surpluses recorded until 1979. They are in practice a part of the Treasury's liquid funds detained at the Caisse d'Epargne de l'Etat.

receipts. 1/ The net impact on the 1984 draft budget is negligible, and the budget deficit in that year is projected to fall back to Lux F 2.3 billion (about 1 percent of GDP).

The central government budget figures as described above do not include the off-budget operations of a number of special purpose funds (Fonds de l'Etat) whose financing needs are normally covered by government borrowing. These operations add approximately the equivalent of 0.3 percent of GDP in 1982 and 0.6 percent in 1983 to the central government net financing requirement.

On June 1, 1983, the newly established Luxembourg Monetary Institute (LMI) started operations, centralizing a number of previously dispersed functions and having the following main responsibilities: the issuing of currency (under the renewed monetary protocol with Belgium, ratified by the Luxembourg Parliament in March 1983, Luxembourg's right of issue has increased); the regulation of domestic credit; the discharge of obligations and the exercise of rights resulting from international monetary and financial agreements; the holding and management of Luxembourg's official reserves (gold, IMF position, and SDRs); and the prudential supervision of the financial system. From December 31, 1983, the Institute will be Luxembourg's agency for the IMF and the depository for the Fund's holdings of Luxembourg francs. The creation of the LMI does not significantly alter the institutional framework for the conduct of monetary policy, whose scope and available instruments are circumscribed by the existence of the monetary association agreement with Belgium.

Total credit extended by the Luxembourg banks to the resident nonfinancial sector remained flat during the first three quarters of 1983, after having sharply decelerated in the course of 1982 (to 7.6 percent growth through the year, from 15.9 percent in 1981). Residents' deposits, on the other hand, increased by a little under 5 percent through the third quarter of 1983, with a marked shift from short-term to longer term deposits and passbook savings, following the return to a positively sloped yield curve in the course of the year. This development took place notwithstanding the first reduction in several years in the rate paid on passbook savings, as the authorities took advantage of the easing of rates on the Belgian money market to maintain their policy of keeping domestic interest rates as low as possible. The stagnation of loans to residents and the slight increase in resident deposits further widened the traditional imbalance between banks' liabilities and their claims on the resident nonfinancial sector, from Lux F 68.4 billion at end-1982 to Lux F 75.7 billion at end-September 1983. The deployment of this surplus allows Luxembourg banks to act as net suppliers of funds to the Euromarkets.

1/ Receipts have in fact been systematically underestimated in most recent budgets, and to a greater extent than expenditure, so that the balance has generally been more favorable than projected in the budget.

The slowdown in the activity of Luxembourg banks in the Euromarkets persisted in 1983, despite a slight pickup in the third quarter of the year. Luxembourg's share in the total external assets in foreign currencies of the European banks reporting to the BIS (corresponding to the Eurocurrency market narrowly defined) has been stable at around 10 percent since early 1982. Nevertheless, the banking sector reported record profits in 1982 and is performing equally well in 1983, partly as a result of its successful diversification into retail banking. The extent of this diversification is reflected in the banks' lesser dependence on the interbank market for funds; while in 1979 the ratio of private to interbank deposits was 1:7.8, the buildup of deposits from private clients had brought the ratio down to 1:4.3 by the first semester of 1983.

Official development aid amounted to 0.12 percent of GDP in 1982; budgetary austerity is likely to signify a smaller proportion in both 1983 and 1984.

II. Report on the Discussions

The two main concerns of the authorities were the decline in activity in the steel sector, and the unsatisfactory inflation performance. The need to diversify the economy had long been recognized, and service activities had been successfully developed, particularly in the banking sector. However, the problems of the steel sector had acquired a particular urgency in view of the deepening of the steel crisis since 1980. They required a comprehensive effort to distribute equitably the burden of reducing the surplus capacity of this sector. At the same time, inflation was not declining as rapidly as in a number of partner countries. While this development was seen to result mainly from external factors, restraint in wages and other domestic incomes was regarded as necessary to mitigate their influence.

1. Restructuring of the steel sector

The authorities explained that they had conducted comprehensive studies of the viability of a steel industry in Luxembourg. These had shown that extensive restructuring would be required to re-establish a competitive and commercially viable domestic steel sector. On this basis, the Government had introduced a "Law on the measures to favor the restructuring and modernization of the steel industry and the maintenance of the general competitiveness of the economy" (Law of July 1, 1983).

For the steel sector, the law foresaw a continued and sharp reduction in production and employment, 1/ to be combined with a major increase in

1/ Productive capacities are to be reduced from 6.38 million tons per year to 5.45 million tons per year, i.e., by almost 15 percent. Employment is to be reduced from an estimated average of 16,167 in 1983 to 13,280 in 1986, i.e., by roughly 18 percent.

investment for the modernization of the remaining capacities. The financing requirements for the investment plan were estimated to amount to a total of Lux F 15 billion over the period 1983-87. These investments would benefit from the Government's general investment support of 15 percent of the investment amount, plus an additional 10 percent subsidization which, however, would have to be repaid from future profits. The new scaled-down operation would not, however, be viable if it were to bear the full financial burden of the sector's accumulated liabilities, which were of the order of Lux F 50 billion. Accordingly, the budget would assume interest payments, amounting to Lux F 3.3 billion in 1983-84, on part of the outstanding debt. It would, moreover, facilitate the restructuring of the capital of the steel industry through the purchase of convertible bonds of the ARBED Corporation (Lux F 2.5 billion), the purchase from ARBED of shares in its Belgian subsidiary, Sidmar (Lux F 2.5 billion), an equity participation in the MMR-A steel concern (Lux F 225 million), and the provision of guarantees for further borrowing by the steel sector. Finally, the Unemployment Fund would be given the necessary resources to finance the loss of income by steel workers due to reductions in working time (Lux F 1.9 billion over 1983-84).

The authorities indicated that the restructuring of the steel sector was complicated by the fact that domestic producers were linked through shareholdings with foreign producers. All measures taken therefore had to take account of the multinational nature of the structural adjustment. Furthermore, domestic plans would have to be agreed with the European Communities (EC). The EC had indicated that a total reduction of capacity by 18 1/2 percent below the 1980 level would be required for the approval of the plan.

The authorities drew attention to a number of past and current efforts to ensure structural adjustment in sectors outside the steel industry. First, the most general and comprehensive measures were those that had directly affected the competitiveness of domestic producers. They consisted primarily of the wage restraint measures which had been taken after the devaluation of the Luxembourg franc within the EMS in February 1982. Second, there existed a number of fiscal incentives, which had recently been strengthened and broadened in coverage. They consisted primarily of interest and investment subsidies, tax credits (including accelerated depreciation), measures to encourage the formation of risk capital, and the opening of industrial free zones. Special attention was given to the support of research and development (R&D) and the attraction of modern, R&D-oriented firms. Third, the opening of new export markets had been encouraged through a number of fiscal and other measures. The authorities felt that, on the whole, the results of their efforts to stimulate the growth of the nonsteel industrial sector had been encouraging.

The problems posed by the decline of the steel sector had also necessitated an active employment policy. Three basic instruments were used. First, the transfer of excess labor to other sectors; second, the reduction in the active work force through early retirement and a more liberal application of the rules regarding disability, 1/ and third, the temporary maintenance of excess labor in the steel industry (Division Anticrise, DAC), 2/ and the "increase" in employment through a reduction in workdays. 3/ Employment measures not specifically geared to the steel sector had taken a number of forms. A first broad approach had consisted in maintaining or enhancing the employment capacity of industry, not through aids directly linked to the evidence of increased employment by the recipient enterprises, but more generally through incentives to investment in existing industries and to the establishment of new, especially innovative, industries. A second set of measures had been directed at promoting labor mobility, which the authorities viewed to be particularly low among the Luxembourg work force, and consisted in incentives to both geographic and professional mobility, compensating individuals who moved to new areas or jobs. Third, enterprises were granted direct employment subsidies for the hiring of persons difficult to place (long-term unemployed).

2. Incomes policies

The authorities indicated that, although some selected incomes policy measures had existed prior to 1982, the form of wage restraint put into effect since April of that year represented an important rupture from the established automaticity of wage adjustments to price developments which had existed theretofore. The substitution of full wage indexation by a predetermined number of stepwise adjustments of 2.5 percent each, independent of the rate of inflation, had initially been dictated by the Government's concern at avoiding the pass-through of higher import prices following the Luxembourg franc's devaluation within the EMS in February 1982. The prolongation of these measures through 1983 and 1984 was required to safeguard the economy's competitiveness.

The mission inquired how this programming of cost of living increases had been arrived at. The authorities explained that they had referred to forecasts of wage developments in the two most important partner countries, Belgium and Germany. They emphasized that, aside from these provisions, wage formation remained free. This had resulted in significant wage increases above the programmed step adjustments, estimated at 1.7 percent on average in 1982; there was, however, some differentiation between sectors and between firms. Altogether, the decline in real wages through 1982 and 1983 could perhaps be estimated at 4 percent.

1/ Between 1975 and 1983 (first eight months), 3,152 workers went into early retirement and 775 were released on account of disability.

2/ The excess costs of the DAC to steel firms is covered by the Unemployment Fund.

3/ Workdays have been reduced by 12 percent per annum, with a corresponding reduction in salaries paid by the employers, but with partial compensation for employees from the Unemployment Fund.

3. Fiscal policy

The authorities confirmed their intention to pursue a cautious fiscal policy stance, bearing in mind four main guidelines: the restraint of total expenditure growth below the projected rate of inflation, the attainment of a "structurally balanced" budget, the reconstitution of the budgetary reserves, and the pursuit of economic diversification and social progress. They stressed the exceptional circumstances, related to the steel restructuring plan, which had led them to accept a temporary increase in the public sector deficit for 1983. The mission noted that a substantial part of the support to the steel sector was financed from higher taxes and inquired whether increased borrowing or cuts in other expenditures would not have been a preferable approach. It noted that tax pressure was already at a relatively high level and that the increase in VAT rates had an adverse impact on consumer prices, and wondered whether the apparently large current account surplus did not indicate room for a larger deficit and debt financing. The authorities considered that a more expansionary fiscal stance would be inappropriate in view of the high rate of inflation. Furthermore, their decision to rely on higher taxation was dictated by the nature of the outlays, which were predominantly current expenditure. They nevertheless agreed that fiscal pressure, and most especially that deriving from direct taxation, was already relatively high. No additional tax burden had accordingly been imposed in the 1984 budget and income tax thresholds were regularly adjusted for inflation. Because of the limits to further increases in taxation, the authorities were willing, as witnessed in the 1983 budget, to finance exceptional expenditure (such as the capital participation in Sidmar) out of additional borrowings.

The authorities were confident that from 1984 onward the financial balance of the government would return to a more normal position, described as being one of "structural equilibrium." They noted that the persistence of a surplus on the ordinary budget (essentially current expenditure) allowed the financing of up to two thirds of the deficit on the investment budget, and that the tax measures of 1983 will reach their full yield by 1985. They expected no special outlays after 1984, as direct supports to the steel industry are to run out by the end of that year. They recognized, however, the growing pressures on the pension funds and expressed concern for their budgetary implications as they were not confident that retirement benefits could be significantly modified. A further budgetary burden might arise from the servicing of that part of ARBED's debt which that enterprise would be unable to meet out of internally generated funds.

Within their overall policy of fiscal rigor, the authorities stressed their continued commitment to sustaining the process of structural change in the economy, through the modernization of the steel sector, the encouragement of industrial development in sectors other than steel, and the promotion of an improved infrastructure for the continued strength of the services sector. They noted that total government expenditure of an economic character had in recent years amounted to about 30 percent of overall expenditure, involving a substantial redistribution effort, and that public investment had not been reduced.

4. Monetary policy and banking surveillance

The authorities reported on the functions of the newly created Luxembourg Monetary Institute. Among these, they underscored the importance of prudential supervision and surveillance over the efficient operation of the banking system, with a view to fostering a favorable regulatory climate for the sector's activities. They cited, for example, the banking secrecy law of 1981, stressing the fact that it had been drafted so as to fully comply with the requirements of supervision on a consolidated basis as laid down in the Basle Concordat. They also noted that a number of measures had removed legislative obstacles to the development of retail banking (with regard for example to gold transactions, forward operations and fiduciary deposits). They felt such diversification to be essential for the longer-term potential and stability of the sector's operations in Luxembourg. They welcomed in particular the banks' lesser reliance on the interbank market, following the buildup of deposits from private clients. They cautioned, however, against exaggerating the potential growth of retail banking, and felt that banking in Luxembourg will essentially remain a wholesale operation.

The slowdown in the latter type of activity was clearly not a local phenomenon but reflected a general lull in Euromarket operations. The authorities felt that the very high level of loss provisions set aside by the banks in recent years (an average of 70 percent of gross operating profits in 1981-82 were earmarked for such provisions, predominantly to meet risks on sovereign loans) were undoubtedly a reflection of the growing uncertainties surrounding international lending. They pointed, however, to the relatively favorable geographic exposure of Luxembourg banks, with a much heavier concentration on industrial countries (some two thirds of total exposure) than was the case for banks in the BIS reporting area as a whole. The authorities noted that they had been prepared to accept the loss in tax receipts resulting from the constitution of such large provisions, but they exercised vigilance to avoid any abuse. In the future, either the loan risks would materialize and the adequacy of the provisions would be tested, or the provisions would have to be unwound (around 1986-87) and considerable tax receipts would be generated.

With regard to monetary policy, the authorities noted the limits imposed by the openness of the economy and the monetary association agreement with Belgium. Although the Luxembourg Monetary Institute had been endowed with a number of functions which are normally those of a central bank (such as the regulation of domestic credit), these powers remained dormant and there was no credit policy as such in application. The fixing of the two interest rates determined by the authorities (the mortgage rate and the passbook savings rate) remained in the hands of the

Caisse d'Epargne de l'Etat, subject to government approval, and was highly political in nature. The traditional stance had been to keep these rates as low as possible, and interest rate policy was not seen to have an external dimension. The authorities also cautioned against attributing much significance to the development of monetary aggregates in Luxembourg, which they saw as merely reflecting shifts in the public's liquidity preference.

5. Exchange rate policy

The authorities restated their doubts as to whether the February 1982 devaluation had been appropriate for the Luxembourg economy, seeing the drawbacks of higher inflation as outweighing the advantages of improved competitiveness. They recognized, however, that such advantages were important for the nonsteel industrial sector, and that certain sectors generating a large cash flow in foreign currencies (notably the banking sector 1/), as well as other services operating abroad, had also benefited. In the case of the steel sector, however, these advantages had been offset by the exchange loss due to the firms' external debt. The authorities were satisfied that the difficulties which had arisen within the monetary association with Belgium at the time of the devaluation had been totally overcome, noting that the Luxembourg Parliament had in March 1983 ratified the protocol renewing the association. The two countries' authorities had agreed to maintain the franc in the zone of the most stable currencies within the EMS. This policy had been observed in the last two EMS realignments, in June 1982 and March 1983; as to future exchange rate adjustments, they would have to be guided by the overall economic situation in the two countries concerned, having due regard to existing policy priorities.

In the wake of the February 1982 devaluation, the potential for an independent Luxembourg currency had been examined. The authorities noted that, although the establishment of an independent currency was technically feasible, it would involve notable costs, including in all probability extremely high interest rates. They noted, however, that steps had been taken in September 1982 to ensure a relative symmetry in the use of the Belgian and Luxembourg francs on the two sides of the banks' balance sheets. 2/

1/ Banks had further benefited from legislation, retroactive to January 1982, eliminating taxation on gains in the value of their capital base (denominated in foreign currency) deriving from the depreciation of the Luxembourg franc.

2/ Banks receive deposits in Luxembourg francs, but a great part of their assets is placed in Belgian francs; a directive provided that all deposits by nonresidents and large (over Lux F 1 million) deposits of 12 months or less by residents could no longer be denominated in Luxembourg francs.

III. Outlook

Preliminary estimates suggest that the fall in real GDP will accelerate in 1983. After a drop of 0.3 percent in 1982, a decline by 1.5-2 percent is likely. Private consumption is believed to have declined by 1.5 percent--reflecting the drop in real disposable income--and gross fixed capital formation by between 2 percent and 5 percent. By contrast, the growth of public consumption is estimated to have remained positive. Foreign demand fell considerably, as reflected primarily in the sharp decline in steel exports (about 10 percent). However, the foreign balance has probably been neutral because imports fell much in line with private consumption and the drop in exports was accompanied by a reduced need for imported intermediate inputs.

Considerable uncertainties attach to the forecast for 1984. The growth of exports will depend strongly on the national and international decisions concerning the steel sector. If these decisions should result in the transfer of growth-oriented lines of production to the Luxembourg steel firms, positive growth could be possible. The development of exports of banking services is equally uncertain. Some slowing of growth from earlier rates can, however, be expected. All in all, export growth will be weak at best. On the domestic side, investment growth remains uncertain owing to unsettled decisions about investments in the steel sector. By contrast, public sector investment will drop again as will private consumption. On balance, a renewed fall of real GDP in the order of 1 percent is considered the most likely outcome for 1984.

Inflation will decelerate very little in 1984. After an estimated rate of 8.7 percent in 1983, the consumer price index is projected to increase by 7-8 percent in 1984. Employment, meanwhile, is likely to fall in 1984 by 1/2 percent, the same rate as in 1983.

IV. Staff Appraisal

The decline in steel output is a major challenge to the economy of Luxembourg. This challenge has so far been met with success. Despite heavy losses of employment in steel, total employment kept rising until 1982. The restructuring of the economy has resulted from a successful diversification toward service activities; most notable was the expansion of international banking, in line with the growth of Euromarkets, but other export-oriented service activities have also been performing well. The authorities also emphasize the need to maintain an industrial base in the nonsteel sector, and there have been encouraging signs recently of progress in that field.

The current and prospective difficulties are nevertheless severe. GDP is at best stagnating, and losses of employment are now in prospect. The downturn in activity in the steel sector has accelerated. Inflation persists at a rate which exceeds the industrial country average.

The staff agrees with the authorities that priority must be given to policies aimed at facilitating the process of structural adjustment. Considerable attention is being given to an orderly retrenchment of activity in the steel sector. The devaluation of the franc within the EMS in February 1982 appears to have been helpful in improving the competitiveness of the other sectors of the economy. These gains, however, would be quickly eroded in the absence of effective and continued wage restraint. The staff therefore believes that the partial disindexation of wages has been and remains a necessary measure to support the exchange rate adjustment. The effectiveness of this measure has, however, been greatly reduced by a sizable wage drift, and the acceleration of nominal wages in 1983 contributed to sustaining a high rate of inflation despite a deceleration of import prices. A strict observance of the norms defined for 1984 is therefore necessary to prevent an erosion of competitiveness and to bring about a decline in the rate of inflation. There would otherwise be a risk that the acceleration of inflation, resulting from the increase in VAT and other indirect taxes made necessary to finance the support to the steel sector, could be transmitted to wage costs.

The support extended to the steel sector under the umbrella of the Law of July 1, 1983 consists to a large extent of provisions for social transfers and for interest payments on debts inherited from past ventures. Even though the public debt is small, the staff agrees with the authorities that, given their nature and their likely recurring character, these outlays could not have been covered by higher borrowing. However, the total tax pressure now appears to have reached a limit, beyond which it would be likely to adversely affect incentives and to aggravate inflationary pressures, either directly if expenditure taxes are increased or indirectly through tax-push wage pressures in the case of higher income taxes. At the same time, there are indications that continuing increases in public expenditures will arise on behalf of the pension funds, and that further outlays may be required by the financial situation of the steel sector. It therefore appears necessary that, within a continued emphasis on the limitation of the public sector deficit, fiscal policy should shift from raising additional revenues to containing the growth in entitlements. This orientation is all the more necessary as there is a risk that rising social and interest charges might otherwise crowd out the budgetary resources which can be allocated to the support of new productive activities, at the very time when the acceleration of the decline in the steel sector makes their growth more urgent.

One of the main tasks of the newly created Luxembourg Monetary Institute will be to oversee the continued development of the international banking sector. Monetary and exchange rate policy are conducted within the monetary association agreement with Belgium, whose renewal has been ratified by the Luxembourg Parliament in March 1983. The staff notes the authorities' emphasis on securing a stable exchange rate, and observes that this objective poses constraints on economic policy and, in particular, provides an additional need for achieving a deceleration in the domestic components of inflation.

Activity is likely to remain depressed in 1984. Given the openness of the economy, this prospect could not be effectively mitigated by artificial demand support extended through the public sector. Although the current account data still point to a large surplus, the trend over the past ten years has been a declining one. The staff therefore agrees with the authorities' emphasis on the longer-term conditions for the development of a diversified and competitive economy. Continued success in this approach will, however, require sustained efforts in the years ahead.

It is recommended that the next Article IV consultation with Luxembourg be held on an 18-month cycle.

Fund Relations with Luxembourg

(As of November 30, 1983)

Date of membership:	December 27, 1945
Quota:	SDR 46.5 million. Luxembourg has consented to the proposed new quota of SDR 77.0 million.
Fund holdings of currency:	SDR 34.3 million (73.8 percent of quota)
Gold distribution:	17,116.999 fine ounces
SDR position:	Holdings amount to SDR 15.9 million, or 93.6 percent of net cumulative allocation.
Exchange system:	Luxembourg forms a monetary union with Belgium in which the Luxembourg and the Belgium francs are at par. The two countries have a dual exchange market. In the financial market, through which most capital and some current transactions are channeled, the franc is allowed to float freely. In the official market, a maximum margin of 2.25 percent is maintained between the Belgian and Luxembourg francs and the currencies of other countries participating in the European Monetary System (EMS).
Last Article IV consultation:	The staff report for the 1982 Article IV consultation with Belgium and Luxembourg (consultations for the two countries were combined at the time--SM/82/177, 8/25/82) was considered by the Executive Board (EBM/82/133, 10/8/82). No decision was taken at the time with regard to the dual exchange market arrangements.

Luxembourg - Basic Data

Population (end-1982):	365.5 thousand
GDP per capita (1982):	US$10,964

National accounts (in Lux F billions and percent of GDP)

	1974		1982	
	Lux F	Percent	Lux F	Percent
Private consumption	43.0	43.6	95.2	52.0
Public consumption	10.7	10.9	27.3	14.9
Gross fixed capital formation	21.0	21.3	35.8	19.6
Exports of goods and services	99.2	100.6	161.0	88.0
Imports of goods and services	74.2	75.3	136.8	74.8
GDP	98.6	100.0	183.1	100.0

Selected economic data (percentage changes)	1980	1981	1982	1983 1/
Private consumption	3.2	1.7	-0.5	-1.5
Public consumption	3.6	2.2	1.5	1.0
Gross fixed capital formation	9.0	-6.2	-8.8	-3.5
Foreign balance 2/	-2.6	0.5	1.8	--
GDP	2.0	1.0	-0.3	-1.8
Industrial production	-3.3	-6.8	-3.7	-3.7 3/
Unemployment rate (in percent)	0.7	1.0	1.2	1.6
Consumer prices	6.3	8.1	9.4	8.7
Money plus quasi-money 4/	19.2	8.8	1.2	-1.6 5/
Public finances (in percent of GDP)				
Central Government 6/				
Expenditure	32.3	32.3	33.7	34.5
Revenue	31.5	31.2	31.6	30.1
Financial balance	-0.8	-1.1	-2.1	-4.4

External accounts (in Lux F billions)	1980	1981	1982
Exports of goods	87.9	88.6	101.9
Imports of goods	105.6	111.3	124.5
Trade balance	-17.7	-22.7	-22.6
Exports of services	44.8	52.3	59.1
Imports of services	8.7	9.9	12.2
Services balance	36.1	42.4	46.9
Balance on goods and services	18.3	19.7	24.2
(In percent of GDP)	(12.1)	(11.9)	(13.2)

1/ Staff estimates.
2/ Change as a percent of previous year's GDP.
3/ First three quarters of 1983 on corresponding period of previous year.
4/ December on December.
5/ End-June 1983 on corresponding period of previous year.
6/ Administrative basis; for 1983, outturn as officially projected in the presentation of the 1984 budget.

The Definition of Luxembourg's GNP

The growth of international banking activities raises difficult issues for the definition of Luxembourg's GNP, with significant implications for the evaluation of such developments as the level and the change in fiscal pressure, or the external position. Standard national accounting conventions treat the activity of the banking system as an intermediate input to the rest of the economy, which is therefore not included per se in the measurement of GDP; however, to the extent that interest is earned or paid abroad, it is recorded as investment income in the derivation of GNP. Over time, these conventions have resulted in a large gap between these two aggregates (Tables A and B). The Luxembourg Institute of Statistics (STATEC) has argued, moreover, that the conventional treatment of banking services in GDP is unrealistic, in the case of Luxembourg, on the grounds that most of the banking services are rendered to nonresidents and can therefore not plausibly be considered as inputs to the domestic economy. STATEC's definition of GDP accordingly treats as final output, and therefore as a component of exports and of GDP, the part of the banks' intermediation margin which is earned abroad; this adjustment leaves the definition of GNP unchanged.

There is no doubt in the staff's opinion that the point of STATEC is well taken, and that the international banking sector in Luxembourg should be treated as an export sector. However, by the same standard, the profits of that sector (whether actually remitted or not) which accrue to non-resident parent companies should not be classified as part of national income. Failure to adjust for profit remittances has led in recent years to a growing distortion in the measurement of GNP, as the excess of earnings of the banking sector over their operational expenditures rose rapidly. Accordingly, the staff has treated the banking sector in the present report as a domestic supplier of services to nonresidents, by including its local value added (measured as the sum of wages and taxes paid, and depreciation) in GDP and its operational costs (value added, as above, plus purchases from the economy) as exports. 1/ This approach was discussed with the authorities who agreed that neither the ESA nor the national definition of GDP were satisfactory. They indicated that STATEC was in the process of revising the national definition of GDP. As to the staff's approach, while they could see its rationale, they would need a fuller examination of its methodological and economic implications. They noted in particular that, if the concept of foreign ownership were to be introduced, it should not be restricted to the banking sector. The staff agreed with this point but observed that the main distortions relate to that sector and that as a practical matter even a partial adjustment to the available data would facilitate the assessment of economic trends.

1/ It was not possible to make a full revision of the national accounts along these lines, and the data in the present report were derived by the staff by adjusting the STATEC estimates. Data for an adjustment to the GNP series were not available.

Table A. Luxembourg: Alternative Measures of Output

(In billions of Luxembourg francs)

	1970	1974	1980	1981	1982
Current prices					
1. GNP (ESA/STATEC)	55.9	102.3	166.6	197.5	238.2
2. GDP (ESA)	54.5	93.4	133.9	144.5	159.5
3. Exports of banking services 1/	2.3	10.9	30.3	47.2	70.3
4. GDP (STATEC)(2 + 3)	56.8	104.3	164.2	191.7	229.8
5. Local value added of banks 2/	1.1	5.2	17.3	20.5	23.6
6. GDP (staff estimate) (2 + 5)	55.6	98.6	151.2	165.0	183.1
1975 prices					
1. GNP (ESA/STATEC)	75.2	102.1	120.5	127.6	131.4
2. GDP (ESA)	73.1	92.2	99.3	99.3	98.4
3. Exports of banking services 1/	3.5	12.1	19.4	24.2	27.7
4. GDP (STATEC) (2 + 3)	76.6	104.3	118.6	123.5	126.1
5. Local value added of banks 3/	1.6	5.5	12.7	13.8	14.4
6. GDP (staff estimate) (2 + 5)	74.7	97.7	112.0	113.1	112.8

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

1/ National definition.
2/ Expenditure on taxes, wages, and depreciation.
3/ Deflated by domestic demand deflator.

Table B. Luxembourg: External Accounts

(In billions of Luxembourg francs, at current prices)

	1970	1974	1980	1981	1982
National definitions					
Exports	49.6	103.4	141.7	162.6	201.6
Goods	42.5	82.5	87.9	88.6	101.9
Banking services	2.3	10.9	30.3	47.2	70.3
Other services	4.8	10.0	23.5	26.8	29.4
Imports	40.3	74.2	114.4	121.2	136.8
Goods	38.2	69.5	105.6	111.3	124.5
Services	2.1	4.7	8.7	9.9	12.2
Balance	9.3	29.6	27.3	41.4	64.8
In percent of GDP	(16.4)	(28.3)	(16.6)	(21.6)	(28.1)
Staff estimates					
Exports of banking services	1.3	6.3	21.3	25.5	29.7
Balance on goods and services	8.3	25.0	18.3	19.7	24.2
(In percent of GDP)	(14.9)	(25.8)	(12.1)	(11.9)	(13.2)

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