

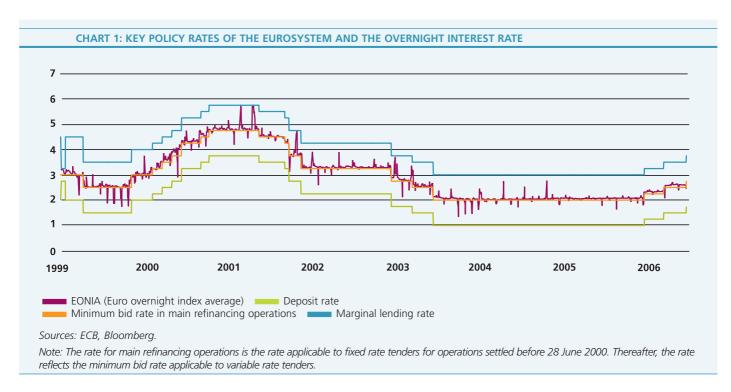
Artist: Roland Schauls Title: Untitled

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1.1 Economic situation at the international level

1.1.1 Short-term interest rates and monetary policy decisions

After leaving key interest rates at historically low levels for two and a half years, the Governing Council of the European Central Bank decided to raise the Eurosystem's key rates three times in the period under review. Rates were raised by 25 basis points in December 2005, as well as in March and June 2006. The minimum bid rate for the main refinancing operations thus stands at 2.75%, while the interest rates on the marginal lending facility and on the deposit facility were raised to 3.75% and 1.75% respectively.



Interest rates were thus left unchanged for most of 2005, largely because of sluggish economic growth at the beginning of the period under review. Growth projections did improve in the course of 2005 though, paving the way for the three above-mentioned rate hikes. After rising by 1.8% annually in 2004, real GDP (partially adjusted for the number of working days) rose by 1.4% in 2005 and by 1.9% in the first quarter of 2006.

Regarding price developments in the euro area, the average annual change in the HICP stood at 2.2% last year and at 2.3% in the first quarter of 2006; in April 2006, annual HICP inflation reached 2.4%, while Eurostat's flash estimate points to an inflation rate of 2.5% in May.

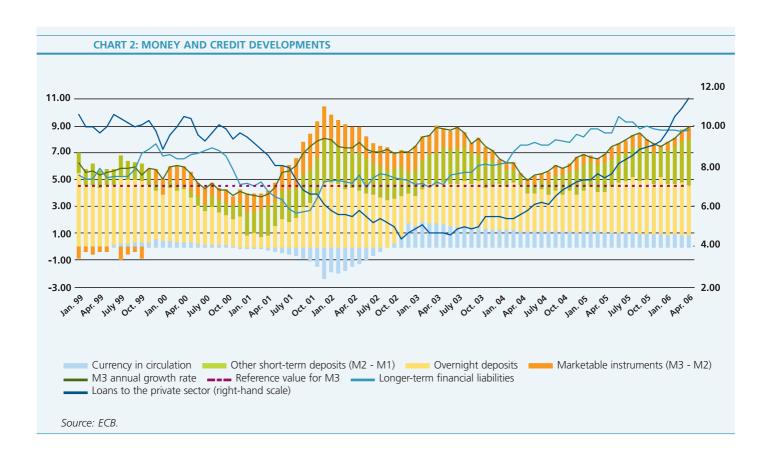
The Governing Council's decisions not to raise the Eurosystem's key rates until end-2005 can largely be explained by the fact that economic activity only improved in the second half of the review period, while inflationary pressures were building up in parallel. The Eurosystem staff growth projections published in June 2006 are broadly unchanged for 2006, while for 2007 there was a slight downward revision; as for the inflation projections, there was a slight upward revision for 2006. The interest rate adjustments will also help medium- and long-term inflation expectations to remain solidly anchored at levels consistent with price stability.

The adjustment to the accommodative monetary policy stance can also be explained in terms of monetary and credit developments. Monetary growth has been very dynamic in the period under review and remains well above the 4.5% reference value; thus, excess liquidity in the euro area has continued to build up and monetary growth remains above the level required for non-inflationary growth.

On an annual basis, M3 grew by 6.6% in the first quarter of 2005 but subsequently increased to 8.2% in the third quarter, before falling slightly, only to exceed 8% again in the first quarter of 2006; in April, the annual growth rate for M3 reached 8.8%.

Monetary dynamics continue to be largely influenced by the low level of interest rates, which implies a low opportunity cost of holding the most liquid assets included in M3. At the same time, portfolio normalisation slowed down in the course of 2005, as evidenced by the decomposition of the broad monetary aggregate, but also by the development of longer-term financial liabilities and net external assets.

The low level of interest rates has also fuelled credit growth to the private sector, in particular mortgage loans; the annual growth rate of loans to the private sector has exceeded 10% since February 2006. In this context, the evolution of housing markets in several countries has required careful monitoring.

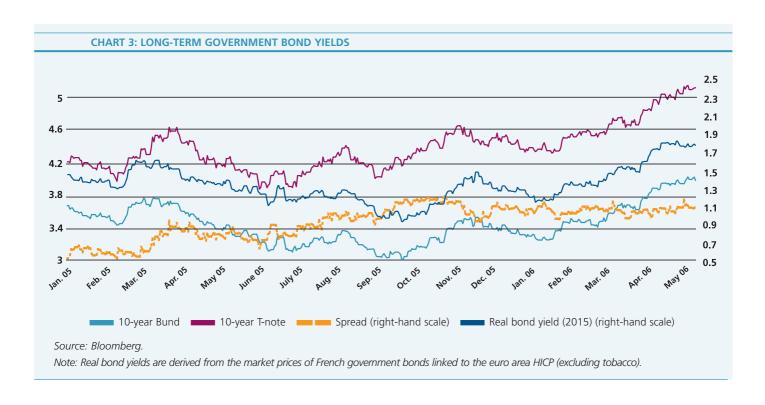


1.1.2 Long-term government bond yields

In 2005, long-term government bond yields in the euro area reached historical lows. More generally, these developments occurred in the context of very low yields in all major bond markets, mainly because of structural elements that affected bond markets across the world. Bond yields on both sides of the Atlantic moved largely in parallel, even though cyclical factors implied that yield developments were diverging on occasion. These cyclical factors also had an impact on the respective monetary policy decisions in the euro area and in the United States: while the Federal Reserve raised rates by 275 basis points between early 2005 and May 2006, rate hikes were much more moderate in the euro area.

Yields on long-term government bonds in the euro area, as measured here by the yield on the 10-year Bund, stood at 3.7% in early 2005, before embarking on a downward trajectory and reaching a historical low of 3.1% in September. Subsequently, this downward trend was reversed and yields moved up again, reaching roughly 4% at the end of May 2006. The yield on the 10-year T-note went from 4.2% in early 2005 to over 5.1% in May 2006.

The structural factors that put such downward pressure on long-term yields are, in essence, related to increased demand from various market participants. In the first place, increased demand from institutional investors (and from pension funds in particular) has contributed to the very low level of bond yields. Also, baby boomers and oil-exporting countries have pushed up demand by investing their excess savings in government bonds, while Asian central banks have continued to build up foreign reserves. Other factors likely to have had a significant impact on bond markets were carry trades, excess liquidity and firmly anchored inflation expectations.



In the euro area, two major periods can be distinguished: between January and September 2005, 10-year bond yields were on a downward path, a trend which was reversed around the end of the third quarter of 2005. These major trends were also discernible in the United States, although some shorter-term developments stand in stark contrast to euro area bond markets. In the euro area, yields reflected to a large extent rather modest growth prospects, as evidenced by the yield on French index-linked bonds.

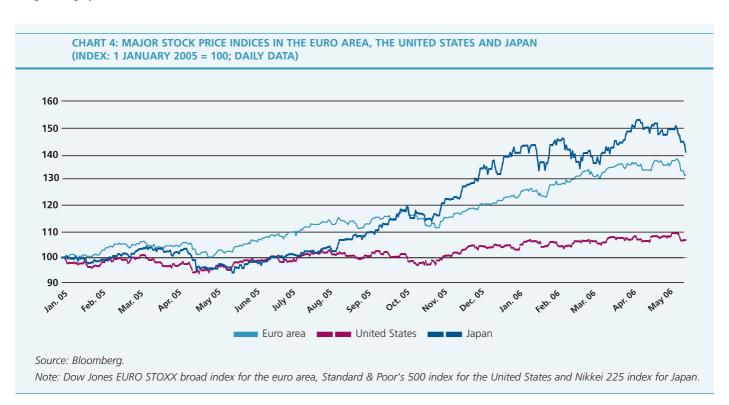
In the context of heightened demand from institutional investors, yields stood at very low levels from the beginning of the year under review. Following a brief rebound between mid-February and mid-March 2005, bond yields continued to fall in the United States and in the euro area, largely as a result of a downward revision in growth expectations, but also due to lower inflation expectations. When growth prospects began to hint at an improvement in the course of 2005, bond yields started to edge up again, only to reach historical lows (in the euro area) in September 2005 in the wake of the devastating hurricanes in the United States.

Growth prospects have continued to improve in 2006, though inflationary pressures have strengthened somewhat (especially in the United States) following new and continuous oil price hikes in early 2006. The upward drift in longer-term yields also reflects interest rate expectations in the euro area and in the United States, although market participants are beginning to wonder when the US tightening cycle will come to a halt.

1.1.3 Equity markets

Following a rather modest and sometimes negative performance by all the major equity indices between January and May 2005, markets recovered and progressed strongly, in particular in the euro area but even more so in Japan. The outstanding performance of the Nikkei 225 is by and large attributable to the ongoing economic recovery in Japan, which gathered pace in the course of 2005, and by plans to privatise the post office, while the weak performance of the Standard & Poor's 500 may in part be linked to the strengthening of the dollar with regard to the yen and the euro in 2005.

Between end-2004 and end-2005, the Nikkei 225 progressed by 40%, finishing at 16,111; the Standard & Poor's 500 and the Dow Jones EURO STOXX increased by 3% and 23% respectively, finishing the year under review at 1,248 and 329. Overall, in the first five months of 2006, the euro area and the US indices rose further, though only slightly, while the Japanese index lost some ground. The steep stock market declines in May 2006 are linked to a rekindling of inflation fears and the revision of policy rate expectations this generally entails, as well as to increased volatility in all major stock markets.

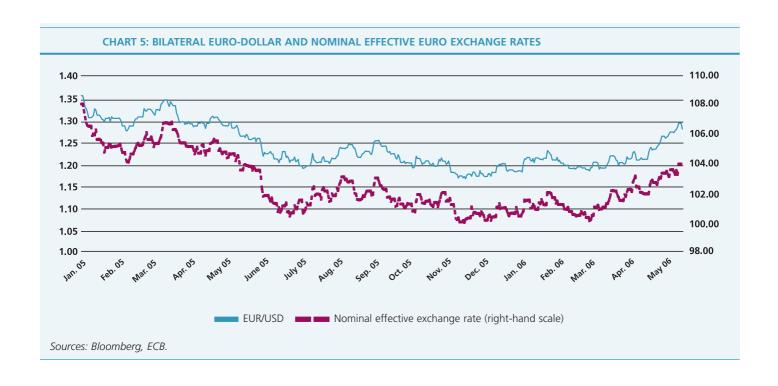


Perhaps somewhat surprisingly, the outstanding stock market rally occurred at a time when oil prices were peaking repeatedly. Rising oil prices generally entail bearish stock markets; however, stock markets have proved extraordinarily resilient to peaking commodity prices. Several explanations may be put forward for this resilience: first of all, major economies are much less oil-dependent than they used to be; second, the oil price hikes are mostly the result of higher demand, implying that economic growth was unlikely to be slowed down considerably by rising oil prices. These elements were, however, exacerbated by supply-side factors such as geopolitical tensions and insufficient investment. Overall, the demand-supply balance in oil markets remains tight, which implies high oil price sensitivity that may occasionally spill over into stock markets. Finally, several other factors, such as the absence of second-round effects on wage-setting and the low level of longer-term government bond yields, supported stock markets; actual and expected earnings per share were also very high.

These factors had a major impact on equity markets throughout the entire review period. As the uncertainty regarding the economic outlook gradually receded, Japanese and euro area markets embarked on an upward trend that gained pace considerably in the second half of 2005. The economic upswing and the outstanding performance of a large number of firms that operate at an international level continued to support the bullish stock market, mitigating the impact of other factors likely to have had a negative market impact. More recently, stock markets took a dive as fears of inflation resurged, leading market participants to revise their interest rate expectations.

1.1.4 Exchange rate developments

Overall, for most of the year under review, the euro depreciated against almost all major currencies that make up the nominal effective exchange rate (NEER), in particular against the US dollar, whose weight is of considerable importance in the computation of the NEER. In the course of 2005, the NEER depreciated by 7%, largely due to the single currency's depreciation against the dollar, which stood at 1.19 to the euro at end-2005.



The euro also depreciated against the pound sterling, while remaining broadly unchanged against the yen; these two currencies also have a significant weight in the calculation of the NEER. Between January and May 2006, the NEER appreciated by 4%; while the euro appreciated by 8% against the dollar, it dropped slightly against the pound.

Two major forces drove the bilateral euro-dollar exchange rate in the period under review. On the one hand, market participants were worried about the structural deficits in the United States, which put downward pressure on the dollar. On the other hand, rising interest rate differentials in the United States with regard to most other major economies, and the associated rise in portfolio inflows, often outweighed the effect of structural influences. The Homeland Investment Act has also supported the dollar. Bilateral euro-sterling and euro-yen exchange rates broadly followed the euro-dollar rate. The yen was further supported by the economic upswing in Japan and by large inflows into Japanese stock markets.

The rejection of the Treaty establishing a Constitution for Europe in France and in the Netherlands in May and June respectively led to a further depreciation of the euro.

After a short recovery, the bilateral euro-dollar exchange rate and the NEER trended down further for most of the year, although this trend was slowed down by increasing confidence in improving growth prospects in the euro area, and the upward revision of rate expectations this generally entails. These same elements eventually reversed the depreciative trend of the euro and the NEER.

The decision by the Chinese authorities, on 21 July 2005, to gradually introduce more flexibility into China's exchange rate regime only had a transitory impact on exchange rate markets

On 2 May 2005, Cyprus, Latvia and Malta joined the European Exchange Rate Mechanism (ERM) II; on 28 November, Slovakia also joined.

1.1.5 Consumer prices

HICP inflation in the euro area averaged 2.2% in 2005, 0.1 percentage point higher than in 2003 and 2004. The most significant upward impact was related to the oil price increase. Underlying domestic inflationary pressures remained subdued in 2005, reflecting continued wage moderation and a lower contribution from indirect taxes and administered prices.

TABLE 1: CONTRIBUTIONS TO HICP INFLATION IN THE EURO AREA FROM MAIN COMPONENTS (ANNUAL PERCENTAGE CHANGES)															
	2003	2004	2005	2004	2005	2005	2005	2005	2006	2005	2006	2006	2006	2006	2006
				Q4	Q1	Q2	Q3	Q4	Q1	Dec.	Jan.	Feb.	Mar.	Apr.	May
Overall HICP	2.1	2.1	2.2	2.3	2.0	2.0	2.3	2.3	2.3	2.3	2.4	2.4	2.2	2.4	2.5
of which:															
- Unprocessed food	2.1	0.6	0.8	-0.8	0.5	0.8	0.8	1.4	1.4	1.5	2.0	1.7	0.6	1.3	
- Processed food	3.3	3.4	2.0	2.8	2.4	1.5	1.8	2.2	2.0	1.8	1.9	1.9	2.3	2.2	
- Non-energy industrial goods	0.8	8.0	0.3	0.8	0.3	0.3	0.1	0.4	0.3	0.4	0.2	0.3	0.5	0.6	
- Energy	3.0	4.5	10.1	8.5	7.6	8.7	12.7	11.1	12.2	11.3	13.6	12.6	10.5	11.0	
- Services	2.5	2.6	2.3	2.7	2.4	2.3	2.2	2.1	1.9	2.1	2.0	2.0	1.9	2.1	
HICP excluding unprocessed food and energy	2.0	2.1	1.5	2.0	1.6	1.5	1.4	1.5	1.4	1.4	1.3	1.3	1.4	1.6	
Source: Eurostat.															

Turning to consumer price developments in early 2006, oil prices kept euro area HICP inflation well above 2% between January and April.

According to Eurostat's flash estimate, euro area HICP inflation was 2.5% in May. Although no detailed breakdown of the HICP components in May is available yet, the increase in the annual growth rate of the headline index is likely to have resulted from energy prices.

According to the recent Eurosystem staff projections, the average rate of increase in the overall euro area HICP is projected to be between 2.1% and 2.5% in 2006, and between 1.6% and 2.8% in 2007. These ranges imply an upward revision of HICP inflation in 2006, reflecting the increases in the oil price assumptions.

1.1.6 Output, demand and labour market developments

Real GDP growth in the euro area was 1.4% in 2005 and significantly below that observed in 2004 (1.8%). This deceleration was mainly due to a temporary slowdown in global demand in the first half of 2005, oil price strength persistence and the lagged effects of the appreciation of the euro. However, the available flash estimate suggests that the recovery gained momentum at the start of 2006 (0.6% annual growth for the first guarter of 2006), implying that the slowdown observed in the fourth guarter of last year was temporary. In terms of the composition of growth, the moderation in growth in 2005 can be attributed to lower contributions from both domestic demand and export growth. On the one hand, the smaller contribution from domestic demand reflects a more subdued private consumption contribution to GDP annual growth essentially because of low increases in real disposable income due to restrained growth in nominal income and the rise in energy prices. On the other hand, the negative net trade contribution in 2005 stems from a more pronounced deceleration in exports than in imports.

Labour market conditions gradually improved in the euro area in 2005. Employment growth strengthened during the year (by 0.8% in annual terms after 0.5% in 2004) and, at the same time, the unemployment rate has continuously fallen over the year, reaching 8.6% on average (after 8.9% in 2004). Improvements in employment expectations support this view, but only a more determined commitment to the structural labour market reforms embodied by the Lisbon agenda will allow unemployment rates to be significantly reduced in the years ahead.

1.1.7 External trade

In 2005 the euro area trade surplus fell to €22.7 billion, down from €71.5 billion in 2004, as import values grew more rapidly than exports. The higher price of oil resulted in a 12.6% increase in import prices while export prices increased by 4.8%. As a result, the euro area terms of trade deteriorated by 7.3% in 2005, further accelerating the drop in the euro area trade surplus. The euro area even recorded a trade deficit of €11.6 billion during the first guarter of 2006, compared with a surplus of €5.8 billion in the corresponding period of 2005. In 2005 as a whole, the geographical breakdown of trade shows that the euro area surplus with the United States increased by 8% (€65 billion), while the surplus vis-à-vis the United Kingdom declined by 14.2% (€52 billion). Large trade deficits were recorded with oil-exporting countries: OPEC members (€35.7 billion), Russia (€30 billion), Norway (€21.5 billion) and some African oil-exporting countries (€22 billion). Moreover, the usual heavy trade deficit with China broadened (from €52 billion in 2004 to €74 billion in 2005), while the deficit with Japan was down by 11.2%, reaching €18.7 billion in 2005.

1.1.8 Balance of payments

In 2005 the euro area current account recorded a deficit of €22.6 billion compared with a surplus of €49.7 billion in 2004. This deterioration reflected to a greater extent the drop in goods surplus and to a lesser extent the rise in the income and in the current transfers deficits, while the balance for services improved.

In the financial account, the euro area recorded net inflows of €90 billion in 2005 compared with net outflows of €11 billion in 2004. Driven by the stronger growth outlook for the "rest of world" economy, net outflows in direct investments increased to €145 billion in 2005 from €41 billion in 2004. However, in 2005, net outflows were largely offset by net inflows in portfolio investments of €162 billion as a result of net purchases of euro area equity securities and money market instruments by non-resident investors.

1.2 Economic situation in Luxembourg

1.2.1 Prices and costs

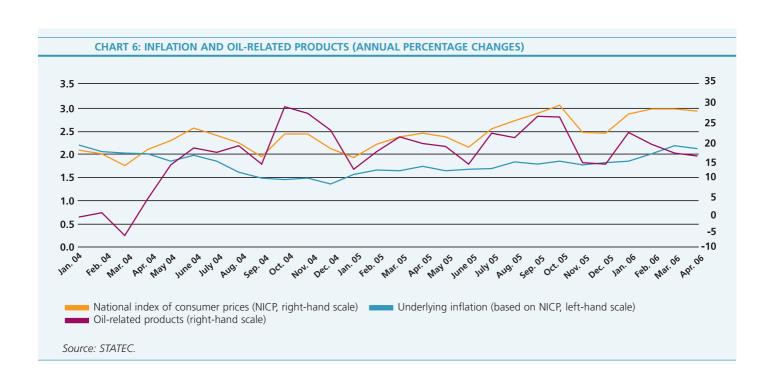
1.2.1.1 Consumer prices

HICP inflation in Luxembourg averaged 3.8% in 2005, which represents an increase of 0.6 percentage point compared with the previous year, while the national index of consumer prices (NICP), which better reflects consumption by Luxembourg residents, was at 2.5%, up from 2.2% in 2004. This rise in overall inflation reflected to a large extent the sharp oil price hike.

The easing of underlying inflationary pressures, observed between 2002 and 2004, reversed in early 2005, even though the 2005 average underlying inflation remained unchanged with respect to the previous year.

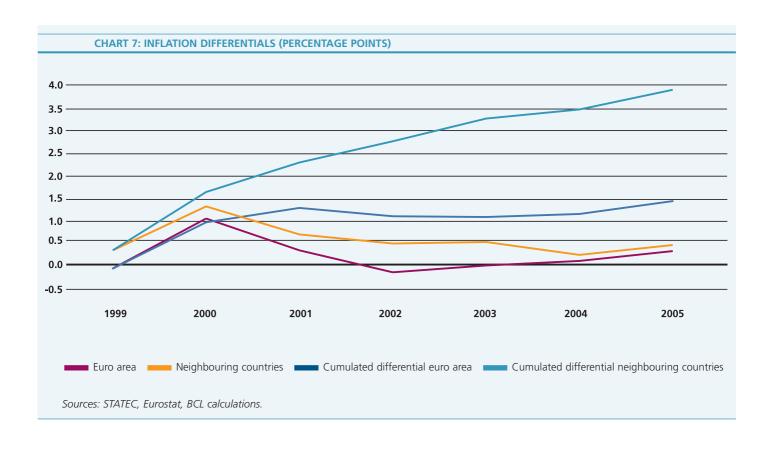
The annual growth rate of the services component moderated by 0.1 percentage point compared with 2004, while remaining high at 2.6% on average. Its contribution to overall inflation remained almost unchanged at 0.9 percentage point.

The direct impact of the fiscal policy on the NICP was 0.46 percentage point in 2005, 0.1 percentage point lower than in 2004.



Turning to developments in early 2006, inflation increased to around 3% between January and April. Oil prices have remained a key factor driving inflation, while underlying inflation pressures continued the upward trend observed since early 2005.

The inflation differentials between Luxembourg and the euro area and between Luxembourg and its neighbouring countries worsened markedly in 2005, as the chart below shows. In 2005 the cumulated inflation differentials between Luxembourg and the euro area and between Luxembourg and its neighbours stood at 1.4 and 3.9 percentage points respectively. The unfavourable trend of inflation differentials continued in early 2006.



Inflation projections

Assumptions

The underlying assumptions for the HICP energy projections follow the traditional scheme, i.e. a euro/dollar exchange rate kept constant over the forecast horizon and a pattern of oil prices as observed on the futures markets. In mid-May, the dollar stood at 1.27 to the euro, which represents an appreciation with respect to both the average for 2005 and the assumptions of the previous exercise. The price of oil fluctuated around the USD 73 per barrel level and markets were anticipating a marginal increase to a level close to USD 74 per barrel in June 2007, a significant upward revision compared with the previous exercise. Detailed assumptions are given in the following table.

TABLE 2: ASSUMPTIONS	UNDERLYING	THE	INFLATION
PROJECTIONS			

	2004	2005	2006	06-Q1	06-Q2	06-Q3	06-Q4	07-Q1	07-Q2
Price of oil in USD per barrel	38.3	54.4	70.3	62.1	71.5	73.3	74.2	74.4	74.1
Exchange rate USD/EUR	1.24	1.24	1.25	1.20	1.25	1.27	1.27	1.27	1.27
Price of oil in EUR (annual percentage changes)	20.7	42.3	28.1	42.3	38.9	14.7	22.3	13.7	2.7
Source: BCL.									

The government has decided to increase the level of excise duties on diesel and petrol by €12.5 and by €20 per 1,000 l respectively; these excise duties take effect in January 2007. According to our estimates, the additional impact of the two fiscal measures on the NICP corresponds to 0.07 percentage point in 2007. The impact on the HICP is slightly higher, around 0.2 percentage point.

The HICP excluding energy is usually driven by imported inflation and wage developments. Beyond this, specific measures such as indirect tax adjustments, public charges and administered prices may also influence inflation developments. Avian flu has not yet had an impact on HICP excluding energy inflation. However, the recently less favourable outcome can be traced, first, to a rise in tariffs for public services and, second, to an increased pass-through of the higher energy costs to consumer price inflation. In spite of the increasing oil price, economic growth in the euro area is continuing its recovery, which started in the third quarter of 2005. Attention is gradually shifting to the speed at which the output gap is closing and provoking inflation tensions. Imported inflation remains muted at the current juncture. Although Germany will raise its standard VAT rate by 3 percentage points from 1 January 2007 onwards, this measure is unlikely to have a direct or indirect effect on consumer prices in Luxembourg. While wage moderation is still a feature in several euro area countries, the risks of second-round effects from the persistently high oil price in the context of an improving labour market, and notably a fall in the unemployment rate, become more likely as the economic situation improves.

The assumptions for tobacco prices have remained unchanged compared with the previous exercise. In the absence of tax adjustments, it is assumed that tobacco prices will not be increased in 2007. For 2008 however, a price rise has again been incorporated into the projections.

<u>Results</u>

On the basis of the euro oil price assumptions, the energy component is expected to develop rather unfavourably over the forecast horizon, especially in the short term. The annual rate of change in HICP excluding energy is assumed to drop from 2.4% in 2005 to 2.1% in 2006 on the basis of an absence of a tax rise on tobacco products. However, the NICP excluding energy, which is less affected by the tobacco component, should accelerate from 1.7% in 2005 to 2.1% in 2006. Both projections have been significantly revised upwards. NICP inflation should gradually decline as the impact of the rise in the oil price on inflation rates gradually diminishes. It is projected to decline from 3.0% in the first quarter of 2006 to around 2.5% in the second half of 2006 and the first quarter of 2007 before dropping further to 2.0% in the second quarter of 2007.

TABLE 3: INFLATION PROJECTIONS AND REVISIONS COMPARED WITH THE PREVIOUS EXERCISE (ANNUAL PERCENTAGE CHANGES; PERCENTAGE POINTS)

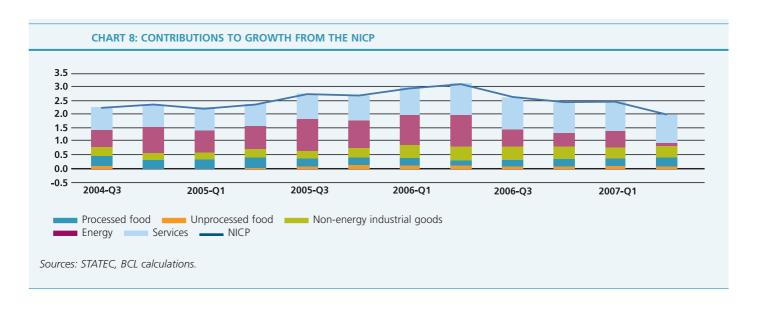
	2004	2005	2006	2006-first half	2006-second half	2007-first half
NICP	2.2	2.5	2.8 (0.6)	3.0 (0.4)	2.6 (0.8)	2.3
NICP excluding energy	1.8	1.7	2.1 (0.3)	2.1 (0.3)	2.1 (0.3)	2.0
HICP	3.2	3.8	2.9 (0.5)	3.7 (0.4)	2.2 (0.8)	2.6
HICP energy	11.8	14.9	9.5 (3.4)	14.6 (1.7)	5.0 (4.9)	4.9
HICP excluding energy	2.5	2.4	2.1 (0.3)	2.3 (0.3)	1.9 (0.3)	2.3
Impact of government measures¹ on the NICP, in percentage points	0.6	0.4	0.5 (0.2)			0.5
Impact of government measures on the HICP, in percentage points	1.5	1.4	0.6 (0.1)			0.9

¹ Impact of administered prices, indirect taxation and tobacco. For further details, please see BCL Bulletin No 2004/3, pp.76-81.

Source: BCL.

After a temporary decline in 2005, the impact of government measures on NICP inflation will accelerate again in 2006, mainly on the basis of the rise in administered prices that was observed at the beginning of 2006.

As announced by the government, the payout of the upcoming automatic wage indexation, projected for August 2006, has been postponed until December 2006. The same announcement foresees no automatic wage adjustment for 2007.



Risk analysis

The central scenario of a deceleration in headline inflation as explained above might cause surprise in light of the high oil price level. However, since the oil price is assumed to remain relatively flat over the projection horizon, it is normal that the inflation rates for the HICP including energy should gradually converge to zero. A more pronounced acceleration in headline inflation must therefore come either from another rise in the oil price level, additional indirect taxation measures, or a more pronounced acceleration in the annual rate of change of the HICP excluding energy.

The oil price developments probably pose the greatest risk to our central scenario. The expected spread of the oil price around the futures-based assumptions, as can be inferred from the implied volatility of options on the oil price, highlights two issues: first, the uncertainty surrounding the baseline assumptions is considerable and, second, the risks are tilted towards the upside.

Impact on competitiveness of the adjustment to the wage indexation mechanism

On 2 May 2006 the government announced an adjustment to the automatic wage indexation mechanism. Instead of the automatic increases in nominal wages whenever the consumer price index increases by 2.5%, only two increases will be made, at predetermined points in time (December 2006 and March 2008). This adjustment to the indexation mechanism aims to restrain the recent deterioration of Luxembourg's cost competitiveness. To assess the extent of this deterioration, this box provides an update of the different competitiveness indicators produced by the BCL. Three of these indicators are then extended to 2008 using the latest Eurosystem projections. Finally, to quantify the impact of the measures announced, the competitiveness indicator based on unit labour costs (ULCs) is extended through 2008 under the counterfactual hypothesis that wages are automatically indexed to prices (the adjustment is ignored).

The competitiveness indicators produced by the BCL are effective exchange rates that are deflated using different price or cost indices. These indicators compare prices or costs in Luxembourg with a weighted average of the same prices or costs in the main trading partners, prices and costs being expressed in a common currency and weighted according to the importance of the respective country in Luxembourg's international trade (see BCL Bulletin No 2003/3). Conditional on data availability, these indicators are calculated for a group of 35 countries (the 25 members of the European Union plus ten other trading partners, see BCL Bulletin No 2005/2).

The first figure presents Luxembourg's competitiveness indicators based on consumer price indices, producer price indices and unit labour costs in the manufacturing sector. An increase in the indicator represents a deterioration in Luxembourg's competitiveness (prices/costs rising faster in Luxembourg than abroad). Newly available data confirm the rising trend of the indicator based on consumer prices, already noted in previous BCL publications. According to the most recent observations (first quarter of 2006) this indicator exceeds its historical average (calculated since the first quarter of 1995) by 4.9%. The indicator based on producer prices peaked in the fourth quarter of 2004 (nearly 17% above its average), but in the first quarter of 2006 it still exceeded its average by 12.8%. These large fluctuations probably reflect the recent volatility of steel prices, as this sector still dominates Luxembourg's industry. Therefore, the indicator based on producer prices probably gives a distorted view of the changes in competitiveness in the overall economy. Finally, the competitiveness indicator based on unit labour costs in the manufacturing sector is still below its historical mean (-4.1% in the fourth quarter of 2004). However, manufacturing represents less than 10% of value added in the national economy and the development of this indicator in 2005 is not yet known, as some partner countries have not yet published the necessary data.



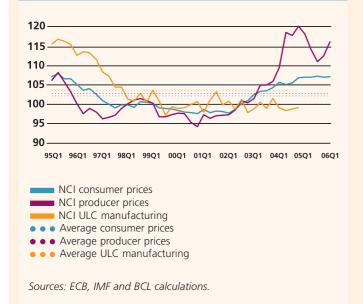
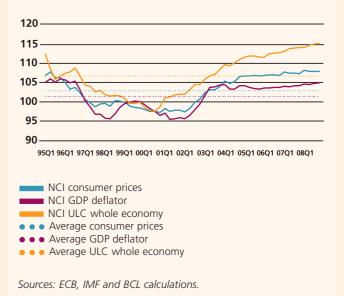


CHART 10: NATIONAL COMPETITIVENESS INDICATORS (NCIs) BASED ON THE CONSUMER PRICE INDEX, THE GDP DEFLATOR, AND UNIT LABOUR COSTS IN THE WHOLE ECONOMY



The recent Eurosystem projections make it possible to extend the three competitiveness indicators until 2008 (see Chart 10 above). These are: the indicator based on consumer prices, the one based on the GDP deflator, and the one based on unit labour costs in the whole economy. For these three indicators, newly available data confirm that Luxembourg's competitiveness continued to deteriorate, and that currently all three indicators are above their historical averages (since the first quarter of 1995). The indicator based on consumer prices increased by 9.5% between the first quarters of 2002 and 2006 respectively, the latest available observation. This accumulated deterioration over four years means that, on average, yearly inflation was 2.3 percentage points higher in Luxembourg than in a weighted average of trading partners (weights reflect each country's share in Luxembourg's foreign trade). For the other two competitiveness indicators, the latest available observation is the fourth quarter of 2005. Over the three years before this date, the accumulated deterioration of the indicator based on the GDP deflator reached 7.7% (on average, inflation was 1.9 percentage points higher in Luxembourg). For the indicator based on unit labour costs in the whole economy, the accumulated deterioration over four years was 9.0% (on average, inflation was 2.2 percentage points higher in Luxembourg).

According to the projections (which are based on the adjustment to wage indexation), the competitiveness deterioration should continue for all three indicators until the end of the projection horizon in the fourth quarter of 2008. The indicator based on consumer prices should deteriorate by an additional 0.7% between the fourth quarters of 2005 and 2008 respectively. These projections also imply that the indicator based on the GDP deflator should increase by 1.9% until the end of the projection. Finally, the indicator based on unit labour costs in the whole economy should deteriorate by an additional 3.1%.

To quantify the impact on competitiveness of the adjustment to automatic wage indexation, the future path of these indicators was calculated by abstracting from the government measures mentioned above. This analysis is limited to the impact on unit labour costs of an alternative trajectory of nominal wages, without considering the possible effects of the announced measures on labour productivity (effects on output or employment). The following table shows the contribution of wage indexation to growth in unit labour costs under the scenario with and without adjustment to the indexation mechanism.

	2006	2007	2008
ithout adjustment to the indexation mechanism			
(1) Real wage	1.6	1.2	1.6
(2) Contribution of indexation	2.9	1.7	2.3
(3) Compensation per employee (1)+(2)	4.6	2.9	3.9
(4) Labour productivity	1.8	1.0	1.4
(5) Unit labour costs (3)-(4)	2,8	1.9	2.5
mpact of adjustment (percentage points)	-0.8	0.6	-0.2
ith adjustment to indexation mechanism			
(1) Real wage	1.6	1.2	1.6
(2) Contribution of indexation	2.1	2.3	2.1
(3) Compensation per employee (1)+(2)	3.7	3.5	3.7
(4) Labour productivity	1.8	1.0	1.4
(5) Unit labour costs (3)-(4)	1,9	2.5	2.3

The contribution of wage indexation to growth in unit labour costs depends on the timing at which indexation is triggered. Without adjustment, the BCL expected the index mechanism to be triggered in August 2006 and again in December 2007 but not in 2008. The adjustment to the indexation mechanism envisages that the mechanism will be activated at fixed points in time, namely in December 2006 and in March 2008 (conditional on oil prices), but not in 2007. Thus, without adjustment, indexation would have contributed 2.9 percentage points to growth in unit labour costs in 2006 and 1.7 points in 2007. With adjustment, these contributions are 2.1 points in 2006 and 2.3 points in 2007. Thus the impact of adjustment to the indexation mechanism on the growth of unit labour costs, as measured by the difference between these numbers, is -0.8 point in 2006 and 0.6 point in 2007. The positive impact in 2006 reflects a base effect (the wage level in 2007 is relatively unchanged by the adjustment but the level in 2006 is lower). Finally, in 2008 the impact of adjustment on the growth of unit labour costs is weaker and negative (-0.2). Between 2005 and 2008 unit labour costs are projected to grow by 6.9% with adjustment to the indexation mechanism (annual average 2.3%) against 7.4% without adjustment (annual average 2.4%). Thus, the adjustment to the indexation mechanism should hold back growth in unit labour costs. However, competitiveness will not improve unless unit labour costs increase more slowly in Luxembourg than in its main trading partners.

It should be noted that these calculations could be strongly influenced by alternative hypotheses regarding the future level of oil prices. In fact, the BCL's inflation projections are relatively optimistic compared with those the government considered when presenting the adjustment to the indexation mechanism. Without adjustment, the government expects a hypothetical indexation in August 2007, while the BCL expected an indexation only in December 2007. This conservative assumption by the government implies that the wage level is higher in 2007 without adjustment, creating a negative impact this year as well. Similarly, without adjustment the government expected a third hypothetical indexation in August 2008, but in the BCL's projections this does not take place until 2009. By adopting the hypothetical indexations of the BCL or of the government, two counterfactual paths for unit labour costs can be calculated in the absence of adjustment to the indexation mechanism. For each of these two paths, the counterfactual evolution of the competitiveness indicator can be calculated to quantify the impact of the adjustment to the indexation mechanism. According to the latest available observations, this competitiveness indicator deteriorated by 1.5% in 2005. Adopting the government scenario without adjustment, competitiveness would deteriorate by 4.2% between the fourth quarters of 2005 and 2008 respectively (on average 1.4% at an annual rate). The adjustment to the indexation mechanism makes it possible to limit this additional deterioration of competitiveness over this period of only 3.4% (on average 1.1% at an annual rate).

In conclusion, the update of the competitiveness indicators confirms that the deterioration continued until end-2005. Extending some of these indicators using the Eurosystem projections suggests a further deterioration. The adjustment to the wage indexation mechanism could reduce this decline in competitiveness but will not be able to reverse the trend. According to the projections, the deterioration will continue to the end of 2008 at an annual rate of 1.0% on average, i.e. unit labour costs will continue rising faster in Luxembourg than abroad. Of course, these results are based on a very simple calculation that does not consider possible positive impacts on growth or productivity from the adjustment to the wage indexation mechanism. It must be acknowledged that the adjustment to the indexation mechanism has the advantage of reducing the uncertainty companies face regarding their future wage costs. The recent increase in Luxembourg's inflation was tied to unexpected rises in energy prices and administered prices, which were propagated through the indexation mechanism into wage costs. The announced adjustment to the wage indexation mechanism over the years to come will reduce the risk that companies will face new unexpected increases in wage costs and thus allow them to establish production plans on a more solid basis.

1.2.1.2 Producer prices in industry

Industrial producer prices increased on average by 8% in 2005 compared with 2004. While this represents a decline compared with the previous year, it remains considerable and it is also well above the price increases observed in the euro area. However, the average inflation figure can largely be traced to base effects and the sharp price increase that was observed in the course of 2004. The price level hardly changed throughout 2005.

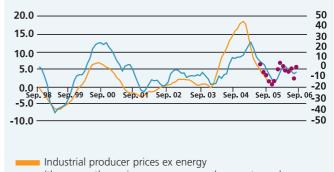
Two factors probably explain these price developments to a large extent. On the one hand, it is likely that the increase in the oil price, from USD 47.7 per barrel in the first quarter of 2005 to USD 56.9 per barrel in the fourth quarter of 2005, has been absorbed in profit margins. On the other hand, world growth has remained steady and is reflected in the volume growth, which has probably partially offset the slightly disappointing price developments.

TABLE 5: INDUSTRIAL PRODUCER PRICES
(CHANGES COMPARED WITH THE PREVIOUS PERIOD)

	Shares	2003	2004	2005	05-Q2	05-Q3	05-Q4
Total	1000	1.2	9.0	8.0	-1.0	0.5	1.1
Intermediate goods	675.9	0.8	12.8	10.2	-1.5	-0.6	2.0
Capital goods	109.9	0.7	5.6	0.1	-2.7	2.7	-1.6
Consumer goods	136.3	1.7	0.0	0.9	1.2	0.0	0.0
Energy	77.9	4.6	5.6	10.7	2.5	2.4	2.4

Sources: STATEC, BCL.

CHART 11: INDUSTRIAL PRODUCER PRICES, PAST AND EXPECTED DEVELOPMENTS



- (three-month moving average, annual percentage changes, left-hand scale)
- Selling price expectations (three-month moving average, lead of five months, right-hand scale)
- Selling price expectations (gross, right-hand scale)

Sources: Eurostat, BCL.

The outlook for industrial producer prices has turned more favourable in recent months. While inflation has steadily declined since the end of 2004, a trend inversion in the near future is very likely according to the results of the harmonised business surveys (see chart). These developments imply another increase in the price level after the relatively flat profile that was observed in 2005.

1.2.1.3 Construction prices

Prices of construction services increased by 3.1% in 2005, thus rising faster than the national index of consumer prices. While the contribution of the automatic wage indexation to the nominal wage increase can partly explain these developments, it is likely that these price dynamics also reflect the still vigorous demand for dwellings in a housing market characterised by a structural shortage.

1.2.2 Sectoral developments

1.2.2.1 Industry

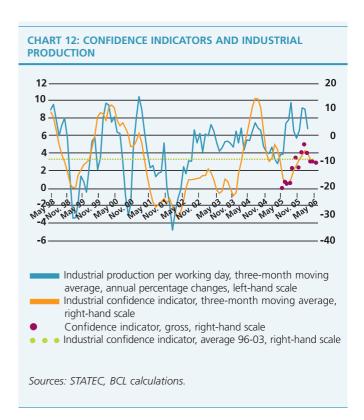
In the context of a favourable international environment, the industrial sector expanded for its third consecutive year, and growth was well above that seen in the euro area. Total production and turnover increased at a slower pace in 2005, but growth in production per working day, at 5.9%, was similar to the rate observed in 2004. Although production of intermediate goods has fallen in the context of a weaker steel sector, it remains at a high level. Total production was mainly driven by capital goods and energy components. These branches saw their production levels expand by 11.8% and 22.8% respectively.

TABLE 6: INDICATORS FOR THE INDUSTRIAL SECTOR (ANNUAL PERCENTAGE CHANGES)

	2003	2004	2005	Q2-05	Q3-05	Q4-05	Q1-06
Turnover	3.0	20.8	2.5	-2.9	4.8	5.3	12.7
Total production	4.9	6.8	3.7	1.5	6.4	5.4	9.5
Production per working day	5.4	5.9	5.9	4.1	10.0	6.8	8.7
Intermediate goods (ppwd)	4.6	6.1	-0.5	-4.6	4.5	3.3	5.7
Capital goods (ppwd)	-0.8	5.6	11.8	9.4	22.8	9.0	5.0
Energy (ppwd)	13.9	14.6	22.8	30.8	22.0	19.9	30.2

Source: STATEC.

On the back of the euro area recovery, the business surveys in the industrial sector point to relatively favourable developments in early 2006. The industrial confidence indicator has gone up compared with the second half of 2005 and remains close to its long-term average level.



1.2.2.2 Construction

The construction sector fared much less well than the industrial sector in 2005. Turnover barely increased and production per working day even fell compared with the year 2004. The decline is particularly severe in civil engineering, whereas the building industry, with a 1.7% increase in production per day, is still benefiting from a favourable environment. Most demand-related short-term indicators point to a continuation of this relatively favourable trend. The ECB raised short-term interest rates, but the latter remain at a low level and, at the current juncture, they do not yet seem to be an impediment to credit demands by households for house purchases.

TABLE 7: INDICATORS FOR THE CONSTRUCTION SECTOR (ANNUAL PERCENTAGE CHANGES)

	2003	2004	2005	Q2-05	Q3-05	Q4-05	Q1-06
Turnover - total	6.2	-1.1	1.8	3.0	2.4	6.5	-7.0
Production per working day - total	1.2	-1.2	-0.5	0.0	0.0	4.0	1.6
Production per working day - building industry	0.6	2.9	1.7	2.0	2.5	4.6	2.0
Production per working day - civil engineering	2.6	-14.2	-8.7	-6.7	-8.8	3.0	-0.4
Building permits ¹	11.5	18.2	21.3	34.8	-24.5	64.8	n.a.
Loans for house purchases ²	24.6	5.7	16.6	16.5	22.5	12.5	n.a.
Mortgage rates	3.8	3.4	3.5	3.5	3.5	3.6	3.7

¹ Number of dwellings.

Sources: STATEC, BCL.

1.2.2.3 Commerce and other sectors

The positive trends observed in 2004 partly continued into 2005. Turnover growth in the wholesale trade and in hotels and restaurants even accelerated when compared with 2004. The latter branch probably benefited to a large extent from the activities related to the European Presidency held by Luxembourg in the first half of 2005. However, expansion in the retail trade is derived mostly from price increases, and volume growth remains anaemic. Car registrations were flat in 2005, which is no surprise given the exceptional increase observed in 2004.

TABLE 8: TURNOVER AND CAR REGISTRATIONS (ANNUAL PERCENTAGE CHANGES)

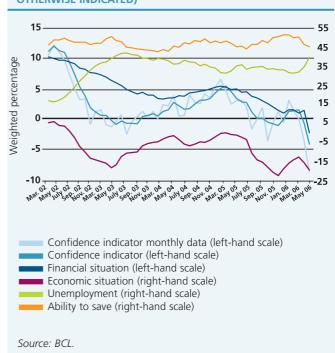
2003	2004	2005	05-Q2	05-Q3	05-Q4	06-Q1
0.2	10.0	1.6	-3.5	5.7	-3.2	-2.7
14.8	4.6	6.6	4.6	6.7	5.4	n.a.
5.1	4.3	2.7	2.1	4.3	0.3	n.a.
-4.8	0.9	6.0	5.8	4.2	5.0	n.a.
	0.2 14.8 5.1	0.2 10.0 14.8 4.6 5.1 4.3	0.2 10.0 1.6 14.8 4.6 6.6 5.1 4.3 2.7	0.2 10.0 1.6 -3.5 14.8 4.6 6.6 4.6 5.1 4.3 2.7 2.1	0.2 10.0 1.6 -3.5 5.7 14.8 4.6 6.6 4.6 6.7 5.1 4.3 2.7 2.1 4.3	14.8 4.6 6.6 4.6 6.7 5.4 5.1 4.3 2.7 2.1 4.3 0.3

Source: STATEC.

1.2.3 Consumer survey

Consumer confidence declined throughout 2005. Indeed, the three-month moving average of the confidence indicator declined to 0 for the period from October to December 2005, compared with +6 for the period from November 2004 to January 2005. This worsening largely reflected more negative expectations regarding the future development of the general economic situation and, to a lesser extent, less optimistic expectations concerning consumers' own financial situations.

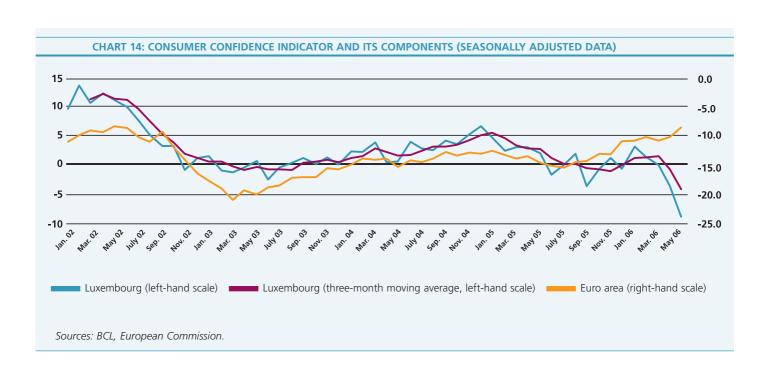
CHART 13: CONSUMER CONFIDENCE INDICATOR AND ITS COMPONENTS (THREE-MONTH MOVING AVERAGES UNLESS OTHERWISE INDICATED)



² Total of mortgage loans to residents.

The negative trend of consumer confidence continued in early 2006 to reach -9 in May (unsmoothed monthly data). This worsening reflected deteriorations in all of the confidence indicator's components with the exception of the expectations concerning consumers' own financial situations. The decline in consumer confidence in early 2006 could be a reaction to announcements of layoffs at several Luxembourg companies and entities. Uncertainty regarding the discussions on the content of the structural reforms is likely to have contributed to the negative trend in consumer confidence in autumn 2005 and in early 2006.

Luxembourg consumer confidence mirrored developments in euro area consumer confidence until mid-2005, but since then their respective trends have contrasted with each other. Indeed, euro area consumer confidence showed signs of improvement from the second half of 2005 onwards, while a downward trend has been observed for Luxembourg. Domestic factors like those mentioned above seem to have driven developments in Luxembourg consumer confidence since mid-2005, and to have had a greater impact than information originating from the neighbouring countries.

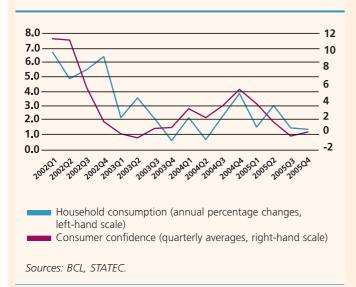


Usefulness of consumer surveys for analysing short-term developments in household consumption

Consumer survey data are likely to contribute to the analysis of short-term developments in household spending owing to their high frequency and timeliness. However, the value of such survey data depends on the extent to which they convey reliable information about household consumption. This box focuses on the usefulness of these surveys for assessing real household consumption growth developments in Luxembourg.

The chart below shows a substantial degree of co-movement between year-on-year real household consumption growth (calculated on the basis of the quarterly national accounts) and the consumer confidence indicator in Luxembourg.

CHART 15: CONSUMER CONFIDENCE INDICATOR AND YEAR-ON-YEAR REAL HOUSEHOLD CONSUMPTION GROWTH (SEASONALLY ADJUSTED DATA)



The correlation analysis presented below confirms the findings based on the visual inspection of the above graph. The table shows the correlation coefficients for different leads and lags (including contemporaneous correlations) between year-on-year real household consumption growth and the consumer survey data. The second (fourth) column indicates the correlations in cases where the consumer survey data lag (lead) the year-on-year real household consumption growth. The entries in this table that are shown in bold are significant at the 1% level, except for the ability to save, which is significant at the 5% (in t+1). All other entries are not significant.

This analysis indicates that the consumer confidence indicator can be seen as a leading indicator of year-on-year real household consumption growth as the maximum correlation is reached if consumer confidence leads consumption growth by one quarter (column 4). The same conclusion can be drawn for three of the components of the consumer confidence indicator, namely, households' financial situation, unemployment and ability to save.

TABLE 9: CORRELATION BETWEEN CONSUMER SURVEYS AND YEAR-ON-YEAR REAL HOUSEHOLD CONSUMPTION GROWTH

	Consumption in t-1 (lag)	Consumption in t	Consumption in t+1 (lead)
Consumer confidence	0.37	0.63	0.67
Components of the confidence indicator			
Financial situation	0.78	0.84	0.80
General economic situation	-0.04	0.32	0.31
Unemployment	0.44	0.65	0.67
Ability to save	0.25	0.11	0.52
Sources: BCL, STATEC.			

The next table shows that the consumer confidence indicator can at best be characterised as a coincident indicator of quarter-on-quarter real household consumption growth. The entries in the table that are in bold are significant at the 5% level, while all other entries are not significant.

TABLE 10: CORRELATION BETWEEN CONSUMER SURVEYS AND YEAR-ON-YEAR REAL HOUSEHOLD CONSUMPTION GROWTH

	Consumption in t-1 (lag)	Consumption in t	Consumption in t+1 (lead)
Consumer confidence	0.59	0.45	-0.05
Components of the confidence indicator			
Financial situation	0.56	0.38	-0.03
General economic situation	0.33	0.29	-0.15
Unemployment	0.56	0.48	-0.01
Ability to save	0.23	0.08	0.25

Sources: BCL, STATEC.

Overall, the above results show that the consumer surveys show a reasonable degree of correlation with real household consumption growth, especially when the latter is measured in year-on-year terms. Hence, consumer surveys convey useful information regarding movements in household spending as the survey results are published before national accounts. However, caution is warranted when trying to extrapolate future developments for household consumption on the basis of the Luxembourg consumer survey data as the latter are only available from 2002.

1.2.4 Financial sector

1.2.4.1 <u>Developments in the financial sector</u>

In 2005, the international financial market climate particularly boosted the mutual fund industry. Their net asset value (NAV) increased by €418,986 million (37.9%), to reach an outstanding amount of €1,525,208 million on 31 December 2005. In addition, the appreciation of the US dollar vis-à-vis the euro was advantageous for those investment funds that invested their assets, in part or completely, in US dollars. During the first quarter of 2006, these positive developments continued. Thus, over this period, the NAV of undertakings for collective investments (UCIs) showed a new surge of €150 million in assets (9.8%), to reach €1,675 million by 31 March 2006.

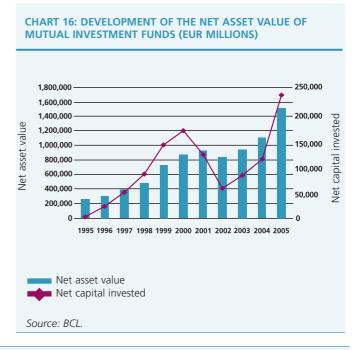


TABLE 11: DEVELOPMENT OF THE GLOBAL SITUATION OF UNDERTAKINGS FOR COLLECTIVE INVESTMENTS (EUR MILLIONS; OUTSTANDING AMOUNTS AT THE END OF THE PERIOD UNLESS OTHERWISE INDICATED)

	Number of UCIs	Number of sub funds	Net assets	Net capital invested in share/units 1,2	Variation of financial markets ^{2, 3}	Annual variation in gross terms	Annual change in %	Monthly variation in gross terms	Monthly change in %
2000	1,785	6,995	874,600	168,200	-28,118	140,082	19.1		
2001	1,908	7,519	928,447	121,700	-67,900	53,847	6.2		
2002	1,941	7,806	844,508	57,314	-141,206	-83,939	-9.0		
2003	1,870	7,509	953,302	82,609	26,185	108,794	12.9		
2004	1,968	7,876	1,106,222	10,081	5,299	152,920	16.0		
2005									
March	1,987	7,964	1,194,010	61,320	-3,968	161,238	15.6	14,805	1.3
June	2,025	8,207	1,289,787	36,772	27,220	242,967	23.2	42,380	3.4
Sep.	2,053	8,332	1,423,551	75,901	34,132	364,626	34.4	62,554	4.6
Dec.	2,060	8,497	1,525,208	62,284	27,133	418,986	37.9	50,657	3.4
2006									
Jan.	2,052	8,548	1,583,244	34,110	23,926	436,659	38.1	58,036	3.8
Feb.	2,080	8,626	1,638,106	36,018	18,844	458,901	38.9	54,862	3.5
March	2,091	8,724	1,675,260	36,441	713	481,250	40.3	37,154	2.3

¹ Net capital investment is defined as the difference between net proceeds from shares or units and net payments made in settlement of redemptions adjusted to take into consideration UCls in liquidation.

Source: CSSF.

² Accumulated annual or quarterly figures.

³ The column variation of financial markets reflects the monthly change in net assets, which is due to the fluctuation of financial markets.

At the level of money market funds, the surge in the aggregate balance sheet reached €18,624 million, or 11.5% in 2005. However, a slight withdrawal was observed during the first quarter of 2006; as at 31 March 2006 the balance sheet reached an outstanding amount of €178,949 million.

In addition, the improvement in the general economic climate as well as the return to a favourable stock market environment allowed credit institutions to increase the volume of their activities. Hence, with an outstanding amount of €792,420 million as at 31 December 2005, the aggregate balance sheet of credit institutions showed once again a historically high level.

TABLE 12: DEVELOPMENT OF THE AGGREGATE BALANCE SHEET OF LUXEMBOURG CREDIT INSTITUTIONS 1, 2

	Number of banks	Aggregate balance sheet	Annual change in EUR	Annual change in %	Quarterly change in EUR	Quarterly change in %	Monthly change in EUR	Monthly change in %	Yearly average
1000						/0	2011	/0	550,000
1999	210	598,459	57,571	10.6					550,008
2000	202	647,749	49,290	8.2					630,065
2001	189	721,000	73,251	11.3					685,944
2002	177	662,618	-58,382	-8.1					687,037
2003	169	655,971	-6,647	-1.0					660,730
2004	162	695,103	39,132	6.0					680,249
2005									
March	162	715,129	39,968	5.9	20,026	2.9	-1,836	-0.3	
June	159	746,480	61,839	9.0	31,351	4.4	12,559	1.7	
Sept.	157	758,314	79,283	11.7	11,834	1.6	5,728	0.8	
Dec.	155	792,420	97,317	14.0	34,106	4.5	5,065	0.6	746,623
2006									
Jan.	156	797,497	87,826	12.3			5,077	0.6	
Feb.	156	821,514	104,549	14.6			24,017	3.0	
March	155	823,028	107,899	15.1	30,608	3.9	1,514	0.2	

¹ Figures were revised to take the latest information into account. Discrepancies may be due to roundings.

Source: BCL.

² For the years 1999 to 2004 columns 2 and 3 report outstanding monthly December figures, but not yearly totals.

The growth dynamic which started in 2003 and 2004, and strengthened in 2005, continued in the first quarter of 2006. As a result, the aggregate balance sheet of Luxembourg banks increased by €30,608 million (3.9%) between 31 December 2005 and 31 March 2006.

On the asset side, interbank credit volume rose by 7.5% between the end of December 2004 and 2005. This increase seems to be rather low compared with annual growth rates generated by loans to non-MFIs¹ and by the securities portfolio. Loans to non-MFIs strongly improved, by 20.9%, rising from €121,307 million at the end of 2004 to €146,640 million one year later. During the first quarter of the current year, they increased by 3.9% to reach €152,291 million. The most important contribution to the increase on the asset side of the aggregate balance sheet was generated by the securities portfolio, which improved strongly by €40,917 million, or 23.4% between 31 December 2004 and 31 December 2005. This continued during the first three months of the current year with a progression of 6.8% or €14,595 million.

TABLE 13: KEY FIGURES RELATING TO VARIOUS ASSET POSITIONS OF THE AGGREGATE BALANCE SHEET AND THEIR DEVELOPMENT (AMOUNTS OUTSTANDING AT THE END OF THE PERIOD)

	Outstanding a	mounts in E	UR millions	Change	e in EUR n	nillions and in	%	Weight in % ¹		
Assets	2004/12	2005/12	2006/03	2004/12 - 2005/12		2005/12 - 2006/03		2006/03		
				in EUR millions	in %	in EUR millions	in %			
Interbank loans	377,666	405,891	415,888	28,224	7.5	9,998	2.5	50.5		
Loans to non-MFIs	121,307	146,640	152,291	25,333	20.9	5,651	3.9	18.5		
Securities portfolio	174,522	215,439	230,035	40,917	23.4	14,595	6.8	27.9		
Other assets	21,608	24,451	24,814	2,843	13.2	363	1.5	3.0		
Total assets	695,103	792,420	823,028	97,317	14.0	30,608	3.9	100.0		

¹ Weighting in % of total assets.

Source: BCL.

¹ MFI: monetary financial institutions.

On the liability side, most of the rise in the level of activity was due to activities stemming from interbank operations and from refinancing by issuing debt securities. These developments were mainly due to the placement of deposits from non-MFI customers. The latter reached an outstanding amount of €255,580 million as at 31 December 2005. During the first quarter of 2006, this tendency was reversed with respect to the growth of interbank loans insofar as debts towards non-MFI customers increased by 12.6%, or €32,306 million, to reach €287,886 million.

TABLE 14: KEY FIGURES RELATING TO VARIOUS LIABILITY POSITIONS OF THE AGGREGATE BALANCE SHEET AND THEIR DEVELOPMENT (AMOUNTS OUTSTANDING AT THE END OF THE PERIOD)

	Outstanding a	mounts in E	UR millions	Change	e in EUR n	Weight in % ¹		
Liabilities	2004/12	2005/12	2006/03	2004/12 - 2005/12		2005/12 - 2006/03		2006/03
				in EUR millions	in %	in EUR millions	in %	
Interbank deposits	329,761	386,031	387,060	56,270	17.1	1,029	0.3	47.0
Deposits from non-MFIs	230,903	255,580	287,886	24,677	10.7	32,306	12.6	35.0
Debt securities issued	76,902	89,535	86,198	12,633	16.4	-3,337	-3.7	10.5
Other liabilities	57,537	61,273	61,883	3,736	6.5	610	1.0	7.5
Total liabilities	695,103	792,420	823,028	97,317	14.0	30,608	3.9	100.0

¹ Weighting in % of total liabilities.

Source: BCL.

1.2.4.2 Profit and loss account

The solid performance of global financial markets combined with the global economic upswing as well as an outperforming investment fund industry allowed Luxembourg's credit institutions to obtain aggregated gross revenues before taxes and provisions in excess of €4,608 million in 2005. This represents a rise of 12.9% or €699 million compared with 2004. Global expenses (staff costs and other costs) rose by 6.9% during 2005. This increase in staff costs is due to a rise in wages and, in contrast to previous years, to new job creations.

First-guarter 2006 total gross income increased by 42.6% compared with the corresponding period of 2005 and reached €2,868 million. This, combined with strict cost controls, raised aggregated gross revenue before taxes and provisions to €1,862 million, resulting in an increase of 69.9% compared with the first guarter of 2005. This solid growth is due to the exceptional increase of 569%, or €495 million of other net income, from €87 million in the first guarter of 2005 to €582 million at the end of March 2006. Net interest income in the first quarter of 2006 (€1,076 million) rose by 14.2% or €134 million compared with the first guarter of 2004, mainly due to a rise in interest rates. Revenue from commission generated €1,005 million during the first quarter of 2006. This represents growth of 28% compared with the first guarter of 2005. Total expenses (staff costs and other costs) rose by 11.7% during the first guarter of 2006 in comparison with the first quarter of 2005. This is due to the creation of new jobs and a rise in wages resulting from an index tranche that became effective from October 2005.

TABLE 15: AGGREGATED PROFIT AND LOSS ACCOUNT OF THE LUXEMBOURG BANKS AS AT YEAR-END1 (in EUR millions) Debit and credit items 2000 2001 2002 2003 2004 2005 Interest receivable and income from securities 51,628 52,790 43,170 35,135 30,014 36,249 Interest payable 47,925 48,332 38,895 31,000 26,045 32,288 Interest margin (1-2) 3,703 4,458 4,275 4,135 3,969 3,961 Other income: from securities 322 174 173 288 419 386 from commission 3,216 2,830 2,654 2,552 2,828 3,253 312 317 279 356 from foreign exchange 290 282 475 399 949 429 458 other net income 7 Net income (4+5+6+7) 4,453 4,325 3,693 4,093 3,552 3,533 Gross income (3+8) 8,028 8,151 8,368 7,687 7,502 8,414 Staff costs 1,716 1,804 1,871 1,790 1,858 1,994 Other administrative expenditure 1,483 1,506 1,416 1,370 1,407 1,499 General administrative expenditure (10+11) 3,199 3,310 3,287 3,160 3,265 3,493 99 95 51 41 35 40 Taxes other than tax on income Write-downs of non-financial fixed assets 320 402 316 293 293 273 Results before provisions (9-12-13-14) 4,410 4,344 4,714 4,193 3,909 4,608 Provisions and write-downs of fixed financial assets 1,405 1,928 906 1,682 1,241 535 Write-back of provisions 794 686 526 590 616 615 888 719 1,402 651 -81 291 Net provisions Result after provisions (15-18) 3,522 3,625 3,312 3,542 3,990 4,317 742 771 Tax on income 969 833 636 665 Net result (19-20) 2,553 2,792 2,676 2,877 3,248 3,546

¹ Data has been revised in the light of new information. Discrepancies may arise from rounding. Source: BCL.

1.2.4.3 Employment in the financial sector

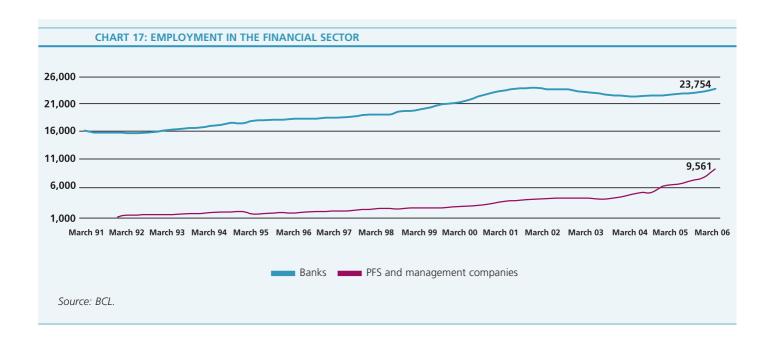
As at 31 December 2005, the Luxembourg financial sector employed 31,344 persons compared with 29,067, i.e. 2,277 new jobs (+7.8%) compared with the previous year-end. In spite of the extension of the statistical coverage during this period, the surge in financial sector employment is mainly related to the increase in activity in this sector. Initial figures for 2006 confirm that this dynamic development is continuing, since 1,954 jobs were created during the first quarter, a rise of 6.2%. On 31 March 2006, the financial sector employed 33,298 people.

Situation in the banking sector

On 31 December 2005, the Luxembourg banking sector employed 23,224 persons compared with 22,549 on 31 December 2004, an increase of 3.0%, which represents the strongest annual improvement since 2001 (+3.7%). During the first quarter of 2006, 530 new jobs were created, a rise of 2.3%, which brought the number of employees in the banking sector to 23,754 as at 31 March.

Situation in the PFS² sector and within management companies

Professionals of the financial sector employed 6,547 people as at 31 December 2005, compared with 6,059 one year earlier, i.e. 488 jobs were created during this period. Employment in the PFS sector has advanced fairly strongly since 2004 due to the expansion of the statistical coverage following the introduction of the law of 2 August 2003³. Despite this effect, the 488 new jobs in 2005 are mainly related to the growing volume of business in this sector. As at 31 March 2006, the PFS sector employed 7,799 people, an increase of no fewer than 1,252 jobs or of 19.1%. Management companies⁴ hired an extra 1,059 persons between December 2004 and December 2005, a rise of 206%, making a total headcount of 1,572. This increase in 2005 was primarily due to the creation of three entities of considerable size in the reporting population. In addition to this statistical phenomenon, the financial markets benefited from fairly strong economic growth in 2004 and 2005, which supported job creation. In the first quarter of 2006, a further 190 jobs were created, a rise of 12.1%, bringing the total number of employees in this sector to 1,762.



² PFS: Professionals of the financial sector.

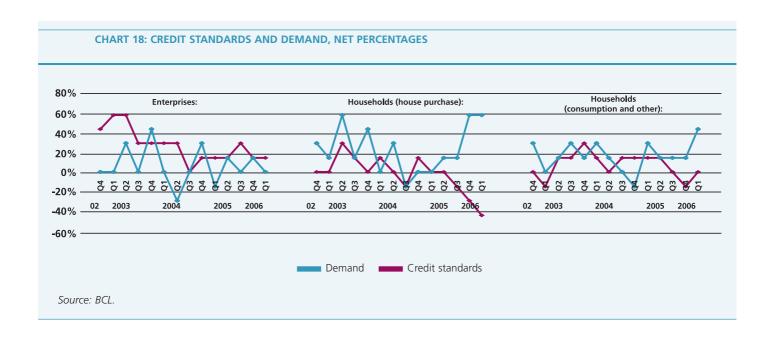
For more information, see page 42 of BCL Bulletin No 2004/4 (www.bcl.lu).

Sociétés de gestion.

1.2.4.4 The Bank Lending Survey

The Bank Lending Survey (BLS) carried out by the Eurosystem assesses credit conditions in the euro area. Every quarter, a questionnaire is sent out to the seven banks from the Luxembourg sample; the survey questionnaire contains a number of questions on the supply of and demand for credit by households and enterprises.

Results are generally expressed in terms of "net percentages". For the questions on credit standards, net percentages refer to the difference between those banks that reported a tightening and those that reported an easing of credit standards. For the questions on credit demand, net percentages refer to the difference between those banks that reported a fall in demand and those that reported a rise.



Overall, between early-2005 and the first quarter of 2006, Luxembourg's results were only partly in line with aggregate euro area results. Parallel developments and similar tendencies between the Luxembourg and the euro area samples exist in particular as regards the demand side. In the euro area, net demand from firms and households rose; in Luxembourg, net demand also generally increased, in particular as regards loans for house purchase. As for credit standards, euro area banks generally reported a net easing; in Luxembourg, the net percentages indicate that credit standards applied to loans to enterprises have tightened, while they have eased with regard to loans for house purchase and tightened only slightly with regard to household loans for consumption (and other lending).

In the last five surveys, it has emerged that the tightening of credit standards for loans to enterprises is largely attributable to risk perceptions linked to expectations regarding general economic activity and regarding the industry- or firm-specific outlook, while competition from other banks contributed to an easing of credit standards. The rise in net demand from enterprises was to a large extent due to higher fixed investment.

Credit standards applied to mortgage loans have, on the other hand, eased considerably in terms of net percentages; the latter have in fact become larger and larger over the last few quarters. Since the third quarter of 2005, this result has been attributable to increased competition from other banks, while reduced risks pertaining to housing market prospects have also contributed to a net easing of credit standards applied to mortgage loans. Net demand for loans for house purchase has surged, in particular in the last two surveys, and an upward trend has been discernible for some time now. Increased financing needs linked to housing market prospects have been cited in this regard.

On average, for the entire period under review, a slight net tightening of credit standards for household consumption (and other purposes) has been recorded. While bank competition has been cited as contributing to an easing, especially in the last two quarters, increased risk perceptions pertaining to the creditworthiness of consumers have generally more than outweighed this effect. Net demand for consumer loans (and other lending) has risen, in particular in the latest survey.

1.2.5 Labour market

Slightly contrasting with the acceleration observed throughout 2004 (averaging 2.5%), the annual growth rate of employment in Luxembourg in 2005 appears to have remained broadly stable, but at a higher level (3.2%), reflecting the stabilisation of economic activity. However, from a historical point of view, employment is not growing significantly.

To a large extent, employment growth is reflected in the inflow of non-residents. In 2005, most newly created jobs were still taken up by non-residents (67%). Average growth in cross-border employment reached 5.8% in 2005 after 4.7% in 2004. Among cross-border commuters, 51.6% come from France, 26.9% come from Belgium, and 21.5% from Germany. Despite the rise in employment, the unemployment rate continued to increase further throughout 2005 (4.2% on average after 3.9% in 2004). This development reveals that annual GDP growth has remained insufficient to stabilise the unemployment rate. Moreover, the recent wave of redundancy announcements are expected to affect the unemployment rate in the second and third quarters of 2006, thereby reducing the probability of a reduction

Impact of the Tripartite Coordination Committee's proposals on the labour market in Luxembourg

After decelerating during the downturn, employment growth has strengthened, whereas the unemployment rate has still been rising. Aware of this dilemma, the Tripartite Coordination Committee - a political forum consisting of government, employers' and trade union representatives - ended with all sides agreeing on a package of reforms that aims to implement an employment security policy, rather than a job security policy on the one hand, and to help tackle unemployment on the other hand. This box presents a summary of these reforms and analyses the relevancy and the feasibility of the proposed measures.

How relevant is the new policy to combat unemployment?

In order to fight the rise in unemployment, the Tripartite Coordination Committee has proposed to offer 1,000 extra apprenticeships and additional work experience opportunities for young people. This policy is expected to induce positive externalities and to reduce the number of young people unemployed. However, the cost and the concrete implementation of these additional apprenticeships are not clearly defined. As a consequence, it is difficult to say if this policy will have a short- or medium-term impact on unemployment. Moreover, the sectors in which the apprenticeships will be created are not mentioned in the agreement.

Another measure consists of a close collaboration between the *Administration de l'emploi (ADEM)*⁵ and interim recruitment companies so as to find temporary work for hard-to-place job seekers. Such temporary work arrangements would help to avoid prolonged periods of unemployment. Indeed, employers could interpret such periods as idleness. In this context, a temporary job might be a positive signal, reflecting the job seeker's determination to find work. However, a potential employer might be discouraged by a sequence of temporary jobs on a curriculum vitae, believing that such an applicant might easily resign. 80% of the temporary workers in Luxembourg are cross-border workers that have low-skill jobs and as a consequence receive the minimum wage. The minimum wage can be relatively attractive for lower-skilled non-residents given the fact that minimum wages in the neighbouring countries are lower or do not exist. As a result, non-resident job seekers are very competitive in terms of reservation salary on the temporary job market. Moreover, Luxembourg provides high levels of unemployment benefit when compared with the replacement rate in the neighbouring countries. This intensifies competition between unemployed residents and non-resident job applicants on the temporary job market.

With respect to unemployment benefits, the Tripartite Committee has decided that the relatively generous replacement rate will be maintained but that its duration should be adjusted proportionally to the effective employment period. This measure is in line with a recent OECD study which says that the duration of unemployment benefit plays a significant role in long-term unemployment in OECD countries. For example, if an unemployed person knows that unemployment benefit is to be paid only for a very short period with a high replacement rate, he/she might lower his/her reservation wage and accept a job corresponding to that reservation wage in order to avoid a decline in unemployment benefit.

In the past, the high replacement rate for unemployment benefits in Luxembourg has attracted so-called "social tourists". More specifically, in order to receive unemployment benefit from the Luxembourg employment agency, some former cross-border workers, after losing their jobs, "move" into Luxembourg (giving a false address), as the replacement income provided by unemployment benefit is higher in Luxembourg than in the neighbouring countries. The Tripartite Committee has also decided to fight abuse of the system, by checking whether or not an unemployed person was resident in the country when he/she received his/her notice of dismissal. However, this measure is clearly insufficient if the residence of the unemployed person is not checked.

Finally, the Tripartite Committee decided that young unemployed people have to be offered technical training at the latest after they have been registered as unemployed for six months. The success of this measure depends on *ADEM*'s ability to place young unemployed in private-sector, rather than public-sector, schemes. Past experience shows that placement in the private sector provides better results and a greater likelihood of young people finding a job after their period of training.

How pertinent is the employment security policy?

Over the past few months, the headlines in the Luxembourg press have been dominated by a wave of redundancy announcements. As a consequence, the government decided to adopt an "employment security" policy, which should allow the authorities to better anticipate the process of restructuring in resident firms. In the future, people will have to think in terms of "employment security" rather than "job security". In concrete terms, the social partners will aim to reallocate workers to other jobs - either within the same firm or in another firm - in order to ensure they remain employed instead of being dismissed. However, the success of this measure depends on how well the social partners can re-classify those wage earners affected by large-scale redundancies.

The early retirement scheme will be reformed so that firms have to contribute more to the financing of the scheme. This will help to reduce incentives for firms to replace older workers by lower-paid younger ones and as a consequence it might increase the participation rates for older people.

To conclude, all the measures agreed on by the Tripartite Coordination Committee aim to improve the situation on the labour market, but the success of the reforms depends on their being adapted to Luxembourg's labour market specificities.

5 A public employment service providing employment services to job seekers and employers in Luxembourg.

1.2.6 External trade

Overall, in the course of 2005, Luxembourg's external trade continued to improve as it did in 2004, ending two years (2002-2003) of consecutive decline. Exports of goods rose by 4.5%, reaching €10 billion. However, as imports of goods grew more rapidly (4.6%), the trade deficit increased by 4.9%, standing at €4 billion in 2005. The rise in imports of goods was driven by higher oil prices as well as by purchases of "machinery and transport equipment". Although exports of goods increased in 2005, steel sector sales, which represent almost one-third of Luxembourg's total exports, dropped by 3.1% as the demand from some trading partners was weaker.

1.2.7 Balance of payments

In 2005, Luxembourg's current account surplus remained stable at €2.85 billion (or 9.7% of GDP in 2005) compared with 2004 data. This stability, however, hides divergent developments in the main components of the current account. The strong rise (23.5%) in the services surplus was offset by a 38% increase in the combined deficit of the goods and income balance, while the current transfer deficit remained unchanged at its 2004 level. The improvement in net services receipts was for the most part driven by favourable developments in the financial sector. The performance of total services also benefited from freight transport by air. The deterioration of 22% in the goods balance was driven by net acquisitions of non-monetary gold and by a faster increase in the imports of general goods over exports. In the income balance, dividend payments abroad and compensations paid to cross-border workers turned the overall balance into a deficit in 2005, whereas there was a surplus in 2004.

In the financial account, Luxembourg's portfolio investments, like those in the rest of the euro area, registered higher net inflows in equity securities. These were largely offset by net outflows in debt securities, in other investments and to a lesser extent in direct investments.

1.2.8 Macroeconomic projections

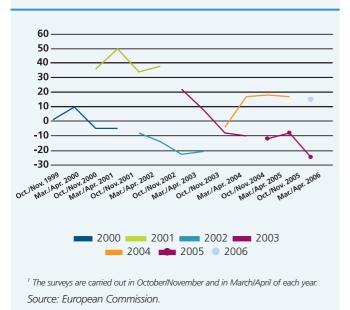
The current projection exercise is based on the revised set of national accounts. Methodological changes that have also been implemented in other countries, i.e. the allocation of the financial intermediation services indirectly measured to the final demand components, have entailed rather significant changes to the level and the growth profile of GDP. The level of nominal GDP has, for example, been revised upwards by 6.6% on average over the 1995-2004 period.

Since the finalisation of the previous projection exercise, the rebound in economic growth from the second quarter of 2005 onwards has been broadly confirmed. Real GDP growth in 2005 is currently estimated at 4.0%, hence slightly above what was expected in December 2005. Furthermore, economic growth at 5.7% on an annual basis was particularly vigorous in the fourth quarter of 2005 and the carry-over effect on annual real GDP growth in 2006 can be estimated at 2.6%.

Short-term indicators published since the end of 2005 broadly confirm our previous scenario and even suggest a slightly better outlook. In the first quarter of 2006, confidence in the industrial sector improved compared with that at the end of 2005 and points, broadly speaking, to trend growth. In the wake of the upward trending equity markets, reduced risk aversion and increased volumes, fees earned by banks other than the interest margin have increased by 28% on a year-on-year basis, compared with an average increase of 14% in 2005. This dynamism has however been tempered somewhat in the second quarter. The rise in the oil price to a level above USD 70 per barrel and an appreciation of the euro with respect to the dollar have probably led to a slight decline in industrial confidence. Furthermore, financial markets were hit in mid-May by increased volatility, followed by a sudden and violent downward correction in equity markets.

Economic growth in Luxembourg has stood up quite well in the recent past, and this in spite of increasing energy costs. It seems that the economy is benefiting more from the expansion of international trade and growth than it is suffering from the rise in oil prices. However, domestic demand, especially private consumption, was quite weak. But, in 2005, a first and significant pick-up in corporate investment was noted. Furthermore, the European Commission's bi-annual investment surveys in the industrial sector suggest that companies have deferred some of their investments planned for 2005 to 2006 (see chart). Companies plan to increase their capital expenditures at roughly the same rate as in 2004.





Overall, the outlook for the international environment has largely remained unchanged compared with the previous exercise. In the short term, world trade and world GDP should expand somewhat faster than previously expected. World trade is expected to accelerate in 2006 when compared with 2005, whereas world GDP growth should stabilise at a high level. For 2007 however, most international organisations agree on a mild economic slowdown, although growth should remain above its long-term average. The oil price is expected to remain at a level above USD 70 per barrel, a significant upward revision compared with the previous exercise.

As regards the euro area, the strengthening of economic growth that started in the second half of 2005 continued in the first quarter of 2006. Growth was estimated at 0.6% quarter on quarter, hence close to trend growth.

These favourable short-term developments are also reflected in the Eurosystem macroeconomic projections. In June 2006, the Eurosystem revised upwards its real GDP growth projections for 2006, from between 1.4% and 2.4% that prevailed in December 2005 to between 1.8% and 2.4%. In 2007, economic growth is expected to be between 1.3% and 2.3% before rebounding again in 2008. The euro area GDP growth profile might look somewhat volatile, but this is partly attributable to the 3-percentage-point rise in the standard VAT rate in Germany that will take effect on 1 January 2007. It is generally assumed that this measure will affect consumer habits, and bring forward into 2006 some of the consumption planned for 2007.

TABLE 16: PROJECTIONS OF INTERNATIONAL		

	2005	2006	2007	2008
World trade (EC)	7.1(+0.2)	8.5 (+1.1)	7.1 (-0.2)	-
World GDP (EC)	4.6 (+0.3)	4.6 (+0.3)	4.3 (+0.1)	-
Euro area GDP (EC)	1.3 ()	2.1 (+0.2)	1.8 (-0.3)	-
Euro area GDP (Eurosystem)	1.4	1.8 - 2.4	1.3 - 2.3	-
World demand for Luxembourg's				
goods and services	5.5 (+0.4)	7.0 (+1.2)	4.8 (-0.8)	5.5
Oil in USD per barrel ²	54.4 (-0.6)	70.3 (+10.3)	73.9 (+14.4)	71.9
Exchange rate USD/EUR ³	1.24 (-0.1)	1.26 (+0.6)	1.27 (0.8)	1.27
Short-term interest rate	2.2	3.1	3.9	4.1
Long-term interest rate	3.4	4.0	4.2	4.3

¹ Figures between brackets are revisions - expressed in percentage points - relative to the December 2005 projections.

Sources: European Central Bank, European Commission.

On the back of the changes to the international environment, growth in Luxembourg's export markets has been sharply revised upwards for 2006. World demand is now expected to accelerate from 5.5% in 2005 to 7.0% in 2006 before declining to 4.8% in 2008.

On the basis of this analysis and in the above-mentioned euro area context, it seems appropriate to revise upwards the real GDP growth projections for 2006 to between 4.4% and 5.0%. However, in line with the profile of the foreign demand assumptions, economic growth should decelerate somewhat in 2007. These projections are based on the assumptions that the classical business cycle that started with a rebound in exports in 2004, followed by a pick-up in investment in 2005, will broaden further and spill over into higher private consumption growth over the projection horizon.

Although the recently announced government measures will dent real household disposable income, it is estimated that they are insufficient to cause another slowdown in private consumption growth. Household disposable income will be supported by strong wage income developments. Economic growth has already spilt over into strong employment growth and real wages also increased quite sharply in 2004 and 2005. However, Luxembourg is an open economy, and its growth will largely remain dependent on exports as the main driving force.

² Revisions in USD per barrel

³ Revisions in USD per euro

TABLE 17: MACROECONOMIC PROJECTIONS AND REVISIONS COMPARED WITH DECEMBER 2005 (ANNUAL PERCENTAGE CHANGES: PERCENTAGE POINTS)

		June	2006			Revisions	
	2005	2006	2007	2008	2005	2006	2007
Real GDP	4.0	4.4 - 5.0	3.4 - 4.4	3.3 - 5.3	+0.2	+0.7	-0.1
HICP	3.8	2.9	2.5	2.1	-	0.5	0.4
HICP energy	14.9	9.5	3.0	-1.0	-0.4	3.4	3.4
HICP excluding energy	2.4	2.1	2.4	2.5	-	0.3	-
NICP	2.5	2.8	2.1	1.8	-	0.6	0.4
Sliding salary scale	2.5	2.1	2.3	2.1	-	0.2	-0.2
Compensation per employee	4.2	3.7	3.5	3.7	0.6	0.6	-0.1
Employees	2.9	3.0	3.0	2.9	-0.3	0.2	0.3
Unemployment rate	4.3	4.6	4.8	5.0	-0.3	-0.2	-0.1
Source: BCL.							

As regards wage developments, it seems that wage negotiations are still marked by cautious behaviour by the social partners, probably a consequence of the rising unemployment rate. However, wage moderation is less obvious in the national accounts, which point to a rather significant increase in compensation per employee in both 2004 and 2005. It is likely that any such increases are particularly driven by performance-related bonuses, wages and salaries in kind.

The government has recently announced a programme of corrective measures to address the continuous decline in the cost competitiveness of Luxembourg's economy. Among other measures, the automatic wage indexation mechanism will be temporarily modified. Furthermore, the negotiated wage levels in the government sector will be frozen for the years 2006-2007. This measure is unlikely to imply an improvement in the cost competitiveness of Luxembourg's economy since it is the private sector's cost developments that matter. However, if the measure leads to wage moderation that spills over into the private sector, then it can fulfil its objectives. Such dynamics cannot, at the moment, be observed. The minimum wage will be increased by around 2% from January 2007 onwards.

Stronger economic growth has already led to strong job creation on a fairly broad basis and this process is likely to continue. But as the share of non-residents in total employment increases further, the unemployment rate is unlikely to reverse its current trend soon and should even approach 5% by 2008. The downward revision of the unemployment projections is solely due to a backward adjustment to the historical series, itself motivated by a change in the definition of the narrow unemployment rate. However, due to the recent announcements of closures of firms and production sites, the scenario is bleaker than anticipated in December.

In the short run, inflation dynamics will be driven by increases in the oil price beyond the USD 70 per barrel level and the rises in administered prices observed in early 2006. The contribution of energy to headline inflation will remain positive in 2006 and 2007. The NICP excluding energy should accelerate from 1.7% in 2005 to around 2% over the projection horizon and remain above the HICP excluding energy inflation in the neighbouring countries. This acceleration is essentially due to high services inflation and a gradually increasing pass-through of higher energy costs to consumer price inflation. Compared with the previous exercise, the inflation projections have been adjusted upwards significantly.

Household indebtedness in Luxembourg

For some time now, resident banks have been proposing extended loan maturities of 25 and even 30 years for mortgage contracts, mainly in response to the steady increase in house prices. Moreover, in order to meet their mortgage repayments, it is often the case that both partners in a household need a job. Are these the first signs of excessive household indebtedness?

Indebtedness of resident households



From December 1999 to December 2005, indebtedness of resident households increased from €6,919 million to €12,673 million. This represents an increase of 83% in respect of total loans; loans for consumer credit rose by 46% and loans for house purchase⁶ by 109%, while other loans dropped by 3%. Throughout the first quarter of 2006, loans granted to resident households kept on rising and totalled €12,985 million by the end of March.

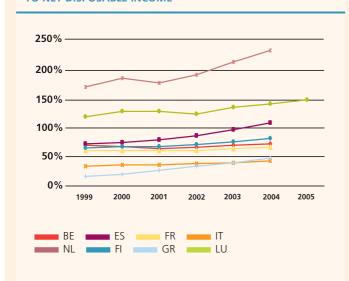
Demographic developments,⁷ rising house prices and an increase in households' disposable income contributed to this rapid accumulation of household debt. In addition, historically low interest rates have been a key driver of credit demand. From June 2003 to December 2005, the Governing Council of the ECB left the minimum bid rate on the main refinancing operations unchanged at 2%. In the categories "Loans for house purchase" (84%) and "Other loans" (98%), the share of variable interest rate loans was dominant.

Indebtedness of resident households to disposable income

The disposable income is an indicator which makes it possible to evaluate if the increased household debt is sustainable. However, in the Luxembourg national accounts, data on households' disposable income is not directly available. An approximation has been obtained by adding together the compensation paid to resident employees and social transfers to households, and by deducting from that amount social contributions and taxes on households' income.8 This estimate does not take into account the income of self-employed persons and income from capital.9 Thus, disposable income in the household sector is probably somewhat understated.

- 6 This amount includes loans for house purchase granted by the Caisse de pension des employés privés (CPEP).
- From 1994 to 2004, the population of Luxembourg increased by 50,700 inhabitants, which corresponds to an annual population growth of 4,610 people. From 1999 to 2004, the population grow by 22,400 people, reaching a total of 451,600 inhabitants. This development is explained by a positive difference between the number of births and the number of deaths, but most of all by positive net immigration flows during the entire period.
- In order to take account of the important share represented by cross-border commuters, the amounts of social contributions and taxes have to be adjusted on the basis of the assumption that the commuters' share in total compensation
- paid to employees is identical to their share in social contributions. The proportion of the social benefits that is paid to non-residents has also been subtracted. Also, the compensation received by residents working for the European institutions needs to be added due to the fact that they are treated as if they were working outside the national territory, given that the institutional units they are working for are considered to be non-resident. For Luxembourg, the application of the European System of Accounts (ESA 95) is important, given the significant number of these residents compared with the rest of the population as well as their high purchasing power.
- ⁹ According to the information contained in the PSELL panel, capital income amounted to 4.8% of total household income in 1999 and to 4.6% in 2000. (CEPS, Population & Emploi 4/2001 et 1/2002).

CHART 21: RESIDENT HOUSEHOLDS' DEBT (END OF PERIOD) TO NET DISPOSABLE INCOME



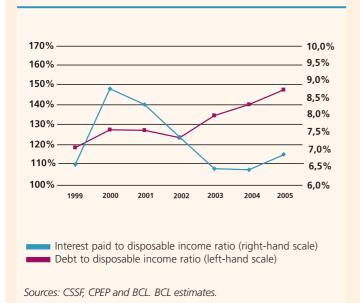
Sources: Eurostat, STATEC, CPEP and BCL. BCL estimates.

TABLE 18: ANNUAL VARIATIONS IN THE INDICATORS

2000	2001	2002	2003	2004	2005
15.16%	6.63%	4.66%	12.00%	8.61%	9.8%
6.95%	6.82%	7.93%	2.58%	4.24%	4.17%
7.600/	0.100/	2.020/	0.100/	4.100/	E 410/
7.68%	-0.18%	-3.03%	9.18%	4.19%	5.41%
	15.16% 6.95%	15.16% 6.63% 6.95% 6.82%	15.16% 6.63% 4.66% 6.95% 6.82% 7.93%	15.16% 6.63% 4.66% 12.00% 6.95% 6.82% 7.93% 2.58%	2000 2001 2002 2003 2004 15.16% 6.63% 4.66% 12.00% 8.61% 6.95% 6.82% 7.93% 2.58% 4.24% 7.68% -0.18% -3.03% 9.18% 4.19%

Sources: STATEC, CPEP and BCL. BCL calculations.

CHART 22: CHANGES IN RESIDENT HOUSEHOLDS' DEBT-TO-DISPOSABLE-INCOME RATIO AND INTEREST PAID BY HOUSEHOLDS AS A SHARE OF DISPOSABLE INCOME



In Bulletin No 144 of December 2005, the Banque de France published the results of a comparative study on household indebtedness in Europe. The survey was conducted by the Observatoire de l'épargne européenne (OEE). The household debt-to-disposable-income ratio reveals a rather high level of indebtedness, making households more vulnerable to economic shocks and affecting disposable income and interest rates. The annual variations in the specific indicators shown in Table 18 allow a comprehensive analysis for Luxembourg.

After a strong rise in 2000, the indebtedness of resident households slowed down in 2001 and 2002 before growing again at faster pace in the years thereafter. Reasons for this behaviour might have been the uncertainty of financial markets in the aftermath of the burst of the speculative bubble and the 9/11 terrorist attacks in 2001, both of which weighed on economic growth and on the general economic outlook.

In 2004, the annual rate of growth of loans to households¹⁰ increased on average by 8.7% in Europe, after 6.2% in 2003. By end-2004, per capita debt reached €16,337 in the European Union. At €25,313, 55% above the EU 15 average, Luxembourg ranked fourth, closely behind the United Kingdom.

In 2005, credit demand by households rose by 10.87%, compared with 9.41% in 2004, whereas the 5.18% increase in households' disposable income was roughly the same as in 2004 (5.01%). Consequently, interest payments by national households as a share of disposable income increased slightly, to 6.75%. This development also reflects an adaptation of credit conditions by resident banks for new business in anticipation of a rise in the minimum bid rate on the main refinancing operations by the ECB, which in fact occurred at end-2005.

In comparison with the tendency observed in the preceding periods, the increase in the indicator may reflect a possible reversal. In fact, in 2000, the household sector needed 8.79% of its disposable income to meet interest payments on total debt.¹¹

Thereafter, this share kept on decreasing and stabilised in 2003 and 2004 at a level of about 6.4%.¹² Despite the continuous growth of household indebtedness, this development was mainly due to the drop in the minimum bid rate on the main refinancing operations after May 2001. These monetary policy decisions impact directly on the ratio as the share of variable interest rate loans compared with total debt is considerable. From 1999 to 2000, the significant rise in the indicator may be explained by a sharp increase in household debt, by 16.8%, as well as by a rise in the minimum bid rate on the main refinancing operations of 1.75 percentage points, to 4.75%.

Conclusion

Two distinctive features of the indebtedness of resident households can be identified. In 2004, the debt-per-capita ratio of Luxembourg ranked second in the euro area, with an upward tendency. The share of disposable income used by households for interest payments progressed at relatively moderate levels; it appears however strongly dependent on the development of the minimum bid rate on the main refinancing operations. It is set to increase under the combined effect of an increase in household indebtedness – in terms of the level and relative to households' disposable income – and of the ongoing normalisation of interest rates in the euro area.

¹¹ The methodology used for the compilation of the relevant time series does not allow for an estimation of principal repayments.

Not all households are indebted. For those households that do have a loan, the interest payment burden is considerably higher than is implied by macroeconomic data.

1.2.9 Public finance

1.2.9.1 <u>Budgetary policy overview</u>

The period between October 2005 and May 2006 was marked by three fiscal policy milestones. First, the central government budget was presented in October and adopted by Luxembourg's Parliament, the Chamber of Deputies, in December 2006. The stance of this budget could be considered quite expansionary. Total expenditure by central government sensu stricto, irrespective of the expenditure of extra-budgetary funds, will indeed increase by close to 9% in 2006. According to the more exhaustive presentation of the central government accounts elaborated by the BCL in its opinion on the 2006 budget, central government expenditure would grow by more than 15% from 2004 to 2006, namely by close to 8% per year on average over this two-year period.

	2005 budget	2006 budget	Increase in nominal terms
Revenue	6,902.5	7,328.0	+6.2%
Current revenue	6,828.7	7,223.7	+5.8%
Capital revenue	73.8	104.3	+41.4%
Expenditure	7,009.2	7,629.3	+8.8%
Current expenditure	6,303.1	6,852.2	+8.7%
Capital expenditure	706.1	777.1	+10.1%
Balance	-106.7	-301.3	
of which current balance	525.6	371.5	
of which capital balance	-632.3	-672.8	

By contrast, the second and third milestones marked a shift towards a more rigorous stance. The second milestone was the seventh update of the Luxembourg Stability Programme, under which the government committed itself to bringing the general government deficit down to 1% of GDP in 2007 and to 0.2% of GDP in 2008. In addition, the medium-term budgetary objective targeted on this occasion was a deficit equal to 0.8% of GDP in cyclically adjusted terms. This gradual transition to a more balanced budgetary position would mark a reversal of the trend towards higher deficits observed from 2001 to 2005. However, the measures that would underpin such a break with the recent past were only outlined in the update.

The third milestone dispelled this uncertainty. New, specific consolidation measures were announced by the Prime Minister on 2 May 2006 in his address on the economic, social and financial situation of the country. As explained in the box below, these measures aim to improve the general government balance by about 1% of GDP from 2007 onwards. The government also renewed the commitments made in the update of the Stability Programme.

Impact of the consolidation measures announced by the Prime Minister on 2 May 2006

Several measures have been agreed between the social partners making up the Tripartite Coordination Committee (representatives of employers, employees and the government). The Prime Minister announced these measures as well as several additional measures on 2 May on the occasion of the traditional declaration on the social, economic and financial situation of the country.

Only clearly specified measures have been taken into account in the projections. For nearly all such measures, the BCL made a specific assessment of the budgetary impact, as illustrated in the table below. The effective impact could of course turn out to be different. For instance, the BCL's estimates rely on the assumption that the decision to increase excise duties on diesel and petrol will have no adverse volume effects. In addition, the budgetary impact of higher taxes on self-propelled vehicles was especially difficult to assess. Furthermore, the decision to freeze public sector wages in the next public sector agreement in 2007 and 2008 may be difficult to implement, as the major public sector trade union (*CGFP*¹³) has announced that it does not agree with this decision.

Several other measures were announced by the Prime Minister (e.g. the authorities will endeavour to curb tax fraud and to cap growth of central government expenditure to 4% a year in nominal terms in 2007 and 2008). They have not been considered in the projections because they are not precise enough at this stage.

All in all, sufficiently specific measures would contribute to improving the fiscal balance by about 1% of GDP from 2007 onwards, as indicated in the table

¹³ Confédération Générale de la Fonction Publique (CGFP).

TABLE 20: ESTIMATED FISCAL IMPACT OF THE QUANTIFIABLE CONSOLIDATION MEASURES ANNOUNCED ON 2 MAY 2006 (IMPACT ON THE RESPECTIVE BUDGETARY ITEM COMPARED WITH THE BASELINE SCENARIO; EUR MILLIONS UNLESS OTHERWISE INDICATED)

	2006	2007	2008
1. Measures on the revenue side	+0	+187	+224
Higher "solidarity" levy on households (3.5% on personal income tax instead of 2.5%)		+20	+22
Higher "solidarity" levy on enterprises (5% on <i>Impôt sur Ie revenu des collectivités instead</i> of 4% before)		+12	+13
Contribution assurance dépendance (long-term care) up from 1% of gross income to 1.4%		+67	+71
Higher excise duties on diesel and petrol in January 2007 and on diesel in January 2008		+36	+64
VAT rates for services provided by self-employed professionals up from 12% to 15%		+30	+31
Higher taxes on self-propelled vehicles		+22	+23
2. Measures on the expenditure side	-7	-139	-176
Pensions in the private sector regime: changes in the adjustment to the development of real wages ¹		-38	-13
Lower government investment		-58	-96
Real wages negotiated in the public sector: +0.0% in 2007 and 2008 ²		-21	-43
Suspension of the indexation of family allowances to prices from 2006 to early 2008 ³	-7	-22	-24
3. Impact on the budgetary balance (=12.)	+7	+326	+400
Impact on balance as a percentage of GDP	+0.02%	+0.97%	+1.12%

¹ Two adjustments in July 2007 (the first half) and July 2008 (the second half) instead of one single adjustment in January 2007, as initially planned.

Sources: State budgets, Prime Minister's declaration, IGSS, Groupement Pétrolier Luxembourgeois, STATEC, BCL calculations.

² Compared with a situation in which real wages would have been adjusted upwards by 0.8% in 2007 and 2008, in line with the situation observed in 2006.

³ On the assumption that indexation will restart in March 2008.

1.2.9.2 <u>General government revenue</u>

The revenue ratio went down in 2005 for the fourth consecutive year, by 0.6% of GDP. This was due to the conjunction of three factors. First, indirect taxes were subdued because of exceptionally large VAT refunds. Second, social contributions declined as a percentage of GDP as the tax base - basically the wage bill - grew at a slower pace than GDP. Third, interest receivable (in "other revenue") amounted to 0.7% of GDP in 2005 compared with 0.9% one year earlier due to the deteriorating general government asset position. These three factors were partly offset by strong direct taxes. Direct taxes on corporations went down as a percentage of GDP as a result of the lower collection of taxes related to previous exercises. However, direct taxes on households were particularly buoyant in 2005, as they increased by 15.7% in nominal terms compared with 2004. Very strong impôts sur les revenus de capitaux, collected inter alia on dividends, played a large role here. Direct taxes on households were also enhanced by the introduction in July 2005 of withholding taxes on interest incomes in connection with the EU Savings Directive 2003/48/EC.

According to BCL projections, the revenue ratio will go up in 2006 owing to the full-year impact of the withholding taxes on non-residents, to higher energy taxes, to the payment of an exceptionally high dividend by the Arcelor company and to exceptional payments in connection with corporate taxes. The revenue ratio will decline thereafter, however, as the impact of the tax-increasing discretionary measures described in the box above will be more than offset by three factors. First, the collection of corporate taxes relating to previous years ("back taxes") will decrease. Second, the tax bases of indirect taxes and – albeit to a lesser extent – of social contributions are expected to grow below GDP. Third, it is assumed in the projections that Arcelor will no longer pay exceptional dividends in 2007 and 2008.

TABLE 21: GENERAL	GOVERNMENT	REVENUE (AS A PERCENTAGE OF GDP.	UNLESS OTHERWISE INDICATED)

00 9	2001	2002	2003	2004	2005	2005	2007	
.9					2005	2006	2007	2008
	15.2	15.2	14.7	13.2	13.4	13.8	13.5	13.4
0	7.9	7.2	7.3	7.4	7.9	8.1	8.3	8.4
0	7.3	8.0	7.4	5.8	5.5	5.7	5.2	5.1
.0	13.5	12.8	12.6	13.8	13.5	13.4	13.5	13.3
.9	11.8	11.7	11.7	11.7	11.5	11.5	11.7	11.6
2	4.0	3.9	3.5	3.5	3.2	3.4	3.3	3.3
.0	44.5	43.6	42.5	42.2	41.6	42.1	41.9	41.7
.2	3.7	4.3	4.2	4.7	6.6	8.3	6.1	6.1
				42.2	41.8	41.6	41.2	41.4
	0 0 9 2	0 7.3 .0 13.5 .9 11.8 2 4.0 .0 44.5	0 7.3 8.0 .0 13.5 12.8 .9 11.8 11.7 2 4.0 3.9 .0 44.5 43.6	0 7.3 8.0 7.4 .0 13.5 12.8 12.6 .9 11.8 11.7 11.7 2 4.0 3.9 3.5 .0 44.5 43.6 42.5	0 7.3 8.0 7.4 5.8 .0 13.5 12.8 12.6 13.8 .9 11.8 11.7 11.7 11.7 2 4.0 3.9 3.5 3.5 .0 44.5 43.6 42.5 42.2 2.2 3.7 4.3 4.2 4.7	0 7.3 8.0 7.4 5.8 5.5 .0 13.5 12.8 12.6 13.8 13.5 .9 11.8 11.7 11.7 11.7 11.5 2 4.0 3.9 3.5 3.5 3.2 .0 44.5 43.6 42.5 42.2 41.6 .2 3.7 4.3 4.2 4.7 6.6	0 7.3 8.0 7.4 5.8 5.5 5.7 .0 13.5 12.8 12.6 13.8 13.5 13.4 .9 11.8 11.7 11.7 11.5 11.5 2 4.0 3.9 3.5 3.5 3.2 3.4 .0 44.5 43.6 42.5 42.2 41.6 42.1 .2 3.7 4.3 4.2 4.7 6.6 8.3	0 7.3 8.0 7.4 5.8 5.5 5.7 5.2 .0 13.5 12.8 12.6 13.8 13.5 13.4 13.5 .9 11.8 11.7 11.7 11.5 11.5 11.7 2 4.0 3.9 3.5 3.5 3.2 3.4 3.3 .0 44.5 43.6 42.5 42.2 41.6 42.1 41.9 2 3.7 4.3 4.2 4.7 6.6 8.3 6.1

Note: The revenue ratios in the seventh update of the Stability Programme are somewhat different from other revenue ratios displayed in the table. This discrepancy reflects different data vintages and the fact that the official ESA 95 data and corresponding BCL projections as they appear in the table include some transactions with European Union institutions, which is not the case in the Stability Programme.

Sources: IGF, IGSS, STATEC, UCM, seventh update of the Luxembourg Stability Programme 2004-2008, BCL calculations.

1.2.9.3 General government expenditure

The expenditure ratio increased steadily from 2000 to 2004. By contrast, it stabilised in 2005 due to high GDP growth rather than to expenditure restraint. The growth rate of total general government expenditure accelerated in 2005 (8.5% nominal growth in 2005, compared with 8.0% in 2004). The composition of expenditure hardly changed in 2005. Social transfers decreased somewhat as a percentage of GDP, but government investment rose.

The expenditure ratio will be broadly stable in 2006 but will decline thereafter as a percentage of GDP. Higher interest payments brought about by a rising debt ratio are expected and the Kyoto Protocol is likely to lead to additional costs in 2008. However, government investment is projected to grow below GDP over the projection period, in line with the consolidation package announced on 2 May 2006. The decision to freeze wages in the public sector should also contribute to this result.

In spite of the consolidation measures announced in May, total expenditure would exceed the level targeted in the seventh update of the Stability Programme by a wide margin in 2007 and 2008, which highlights the need for additional measures. The government announced on 2 May that the rate of growth of central government expenditure would not exceed 4% in nominal terms in 2007 and 2008. However, this decision was not included in the BCL's projections, because the underlying measures have not been spelled out so far. As illustrated in the next section, the strict implementation of this rule would improve the general government balance in a significant way.

TARLE 22: GENERAL	GOVERNMENT EXPENDITURE	(AS A	PERCENTAGE OF GDE	LIMITESS C	THERWISE INDICATED)
IADLE ZZ. GENERAL	GOVERNIVIENT EXPENDITORE	(M) F	A PERCEINIAGE OF GDI	, UNLESS C	TI HERWISE HIDICALED)

	Official data March 2006						BCL projections spring 2006			
	2000	2001	2002	2003	2004	2005		2006	2007	2008
Social transfers	18.2	19.6	20.4	20.9	21.3	21.1		21.0	21.0	20.9
Government investment	3.8	4.3	4.8	4.6	4.4	4.6		4.7	4.5	4.4
Consumption expenditure ¹	10.8	11.1	11.3	11.5	11.6	11.7		11.7	11.6	11.5
Subsidies ²	1.7	1.7	1.7	1.7	1.7	1.7		1.7	1.7	1.7
Other expenditure ³	3.7	1.9	3.4	3.6	4.4	4.3		4.4	4.4	4.6
Total expenditure	38.2	38.6	41.6	42.3	43.4	43.4		43.5	43.2	43.1
Nominal increase in total										
expenditure (%)	6.2	8.8	9.5	8.6	8.0	8.5		7.0	5.7	6.5
Expenditure ratio in the										
Stability Programme ⁴					43.3	43.9		43.3	42.2	41.6

Notes:

- ¹ Compensation of employees and intermediate consumption.
- ² Excluding capital transfers.
- The expenditure ratio recorded in 2001 was negatively affected by a one-off transaction, namely the sale of a licence to SES Global, a satellite company. This explains the marked decrease in the "Other expenditure" item in 2001. The nominal growth rates displayed in the penultimate line of the table do not allow for this transaction, which amounted to 1.9% of the 2001 GDP.
- ⁴ The expenditure ratios in the seventh update of the Stability Programme are somewhat different from the other ratios. The discrepancy reflects different data vintages and the fact that the STATEC ESA 95 data and the corresponding BCL projections as they are displayed in the table include some transactions with European Union institutions. A different presentation was adopted in the Stability Programme.

Sources: IGF, IGSS, STATEC, UCM, seventh update of the Luxembourg Stability Programme 2004-2008, BCL calculations.

1.2.9.4 <u>General government net lending or borrowing</u> and asset position

The general government deficit increased sharply from 1.1% of GDP in 2004 to 1.9% in 2005. The relatively favourable revenue developments (+6.6% in nominal terms) were outweighed by an even more significant increase on the expenditure side. The implementation of several large infrastructure projects together with strong intermediate consumption and higher social payments explain this development.

In spite of the new consolidation measures announced by the Prime Minister on 2 May, the general government deficit is projected to remain quite significant over the projection period. The balance will improve significantly in 2006 owing especially to high Arcelor dividends and exceptionally strong corporate tax payments by a few companies. It will further improve in 2007 due to the implementation of new consolidation measures, but will deteriorate in 2008, reflecting unfavourable developments in corporate "back" taxes, stagnating interest receivable and the additional costs related to the Kyoto Protocol.

TABLE 23: GENERAL GOVERNMENT	NET LENDING (+) OR NET BORRO \	NING (-) (AS A PERCENTAGE OF GDP)
-------------------------------------	---------------------------------------	--

	2000	2001	2002	2003	2004	2005	2006	2007	2008		
			Actual b	alances							
Official data March 2006								BCL projections spring 2006			
General government	5.9	5.9	2.0	0.2	-1.1	-1.9	-1.4	-1.2	-1.4		
of which central government	2.8	2.8	-0.4	-1.6	-2.6	-3.2	-2.7	-2.7	-2.8		
of which local governments	0.5	0.1	0.1	0.0	-0.1	-0.3	-0.2	-0.3	-0.4		
of which social security	2.6	2.9	2.3	1.8	1.6	1.6	1.5	1.8	1.8		
Stability Programme -1.2 -2.3					-1.8	-1.0	-0.2				
Cyclically adjusted balances											
Spring 2006 BCL estimate ¹	5.4	5.5	1.2	0.0	-1.1	-1.8	-1.3	-1.1	-1.4		
Stability Programme estimate ²					-1.0	-2.0	-1.6	-1.1	-0.6		

Notes: 1 These cyclically adjusted balances are estimated based on a disaggregated Hodrick-Prescott approach.

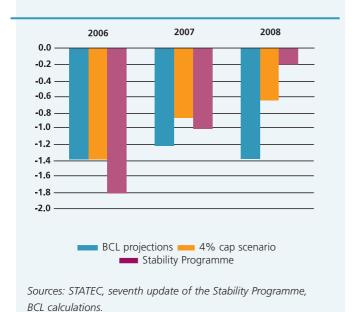
Sources: STATEC, seventh update of the Luxembourg Stability Programme 2004-2008, BCL calculations.

² Calculated on the basis of a production function approach.

The November 2005 update of the Stability Programme foresees a significant reduction in the general government deficit, from 1.8% of GDP in 2006 to 1% in 2007 and 0.2% in 2008. These objectives are compatible with those presented by the Prime Minister on 2 May, namely a 1% deficit in 2007 and a balanced situation in 2009. These targets are highly commendable and should be strictly adhered to. The consolidation package presented by the Prime Minister is a significant step in this direction, as it would improve the fiscal balance by about 1% of GDP according to BCL estimates. However, in spite of these measures, the budgetary situation projected by the BCL for 2007 and especially for 2008 is less favourable than the one envisaged in the November 2005 update of the Stability Programme. The main reason is that only well-defined policy measures have been taken into account in BCL projections. Several of the measures presented by the Prime Minister in May, in particular the decision to cap the nominal growth of central government expenditure at 4% in 2007 and 2008, are not yet fully spelled out at this stage and are therefore not considered in the projections. As illustrated in the chart below, a strict implementation of the 4% expenditure cap would result in a marked improvement of the general government balance, which would then be much closer to the targets embedded in the seventh update. This highlights the paramount importance of compliance with the 4% cap.

The seventh update of the Stability Programme also establishes a medium-term structural deficit objective of 0.8% of GDP. Nevertheless, several factors of fiscal instability should be taken into account; they make it advisable to set a target for a government surplus in the medium term, in order not to undermine compliance with the 3% of GDP reference value. First, the Luxembourg economy exhibits high cyclical volatility. Second, Luxembourg faces many non-cyclical sources of fiscal volatility, especially on the revenue side. Fiscal drag could easily occur with regard to direct taxes on corporations or VAT. Third, public finance statistics are frequently revised. In addition, further room for manoeuvre is required in order to deal with several challenges presented by the Prime Minister on 2 May (as regards research, education, child-care centres, housing, public transport, public safety and other matters) and to address long-term sustainability issues, in particular in the pension and healthcare systems. As explained in the box below, the sustainability of the pension system is indeed far from guaranteed at the current juncture.

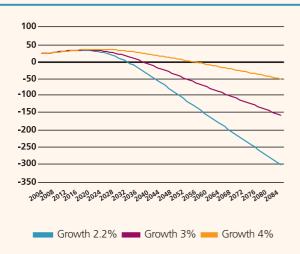
CHART 23: GENERAL GOVERNMENT BALANCE UNDER SEVERAL ASSUMPTIONS



Reflections on the possible transition from pay-as-you-go to funding in Luxembourg's private sector pension system

Luxembourg's private sector pension system (régime général de pension) is at the crossroads. On the one hand, the current budgetary situation of the system appears extremely favourable. On the other hand, projections based on reasonable assumptions suggest that the pension regime is not sustainable over the long term (see chart below). Pension benefits are bound to increase steeply when large groups of cross-border and immigrant employees retire. For the moment, these employees are contributing to substantial surpluses of about 2% of GDP.

CHART 24: NET RESERVES (+) OR LIABILITIES (-) OF THE PRIVATE SECTOR PENSION REGIME (UNCHANGED POLICY ASSUMPTION; AS A PERCENTAGE OF GDP)



Notes: the most salient underlying assumptions are: 2008-2085: 1.9% inflation, rate of growth of wages equal to productivity gains (i.e. 2% per year); 4,000 immigrants a year from 2008 to 2085; number of cross-border employees in line with GDP growth (residual variable); mortality rates in line with the ILO (2000) assumptions; labour force participation rates would increase in a gradual way for women and be stable for men.

Sources: IGSS, ILO, STATEC, BCL calculations.

As explained in Bouchet (2006), a solution proposed by Modigliani and Muralidhar (2004), where pensioners are gradually transferred from pay-as-you-go (PAYG) to a public fund in accordance with the "defined benefit" principle, would be suitable for Luxembourg's situation.

A baseline funding scenario designed in a stepwise manner and under reasonable return assumptions illustrates how fruitful such a solution could be in Luxembourg, provided that a significant pre-funding effort takes place at the beginning of the transition period. In the steady state, this scenario would lead to very comfortable reserves and budgetary surpluses with no cost in terms of long-term, equilibrium contribution rates. These very favourable results would be achieved in spite of a continuously increasing pension cost ratio induced by ageing and by the gradual retirement of large groups of cross-border workers. Another particularly attractive feature of the baseline funding scenario presented in the paper - especially in the context of a small and very open economy - is that it would mitigate in an effective way the impact on the pension regime of adverse GDP growth developments. By contrast, PAYG does not seem to provide a sound basis for a social security scheme, as contributions are very sensitive to small changes in the key macroeconomic variables. Finally, the baseline funding scenario is reasonably resilient to alternative return or demographic assumptions. However, even the funding system would have to be monitored in a rigorous way and at pre-set, regular intervals.

To sum up, the currently favourable situation of the private sector pension regime should be considered as a "window of opportunity" during which the pension system should set aside the large assets required in order to cover future pension liabilities. This would mark the onset of a virtuous circle, with increasing assets and the related property incomes offsetting the rising cost of pension benefits. At the same time, it would mitigate adverse macroeconomic developments.

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1.2.10 Luxembourg Stock Exchange

In 2005, the Luxembourg stock price index generally moved in tandem with other major international stock markets. However, following Mittal's takeover bid for the steelmaker Arcelor, the Luxembourg index has been outperforming most other indices since January 2006; Arcelor has a weighting coefficient of 20% in the Luxembourg index. ¹⁴ The LuxX progressed by 26.7% in 2005, finishing the year at 1,636.98, and by 8% between January and end-May 2006, finishing the review period at 1,767.01.



 $^{^{\}scriptscriptstyle{14}}$ The weightings date from 31 December 2005.

Most other equity members that form the Luxembourg stock price index made substantial progress in 2005. The composition of the index has also been reviewed: since Kredietbank SA Luxembourgeoise and Banque Degroof Luxembourg SA withdrew from the LuxX in July and December 2005 respectively, the index has consisted of Fortis, DEXIA, KBC Group and Audiolux.

Turnover (by volume) increased by 86.3% in 2005; bond turnover was especially vibrant and increased by 230%. The composition of turnover by volume changed considerably from 2004 to 2005, with the bond segment rising steeply at the expense of shares, warrants and UCIs. In fact, bond turnover represented almost 90% of total turnover in 2005, up from just under 50% in 2004.

At end-2005, the total number of listings stood at 36,054, up by over 9%; there is a strong bias towards bonds in terms of turnover and bonds make up almost three-quarters of total listings.

An alternative market called "Euro MTF" was created in July 2005 following the coming into force of Luxembourg's "Prospectus Law". This market is governed by the rules and regulations of the Luxembourg Stock Exchange, rather than by European directives, hence the requirements of the EU Prospectus and Transparency Directives are not applicable. Euro MTF is monitored by the CSSF.

The e-file application, which permits all the steps required for launching a UCI or for listing a security to be performed in a virtual environment, was also implemented in 2005.

