

## Assessment and recommendations

*The major challenges for Luxembourg are adjusting to lower growth prospects while continuing to assimilate inflows of foreign workers*

The sharp slowdown in economic activity since 2000, which is mostly attributable to developments in the financial sector, appears to be partly structural. The exceptionally buoyant international equity market conditions that boosted growth in the 1990s are unlikely to return any time soon. Even so, trend growth is still likely to be high enough to require continued net inflows of foreign workers. This means that important issues related to high inflows of foreign labour remain in education, transport and housing policy while the authorities now also have the challenge of implementing policies that facilitate adjustment to lower growth than in the 1990s. In particular, growth in public expenditure needs to be reduced to stabilise it as a share of GDP and adjustments are required to the parameters of the pension scheme to make it sustainable. At the same time, a variety of reforms to increase participation rates and productivity growth are needed to attenuate the decline in national income growth.

*Growth has fallen sharply but is projected to recover modestly*

Economic growth fell from an average rate of 8¼ per cent over 1999-2000 to 1¼ per cent over 2001-02, which is lower than at any time since the mid-1980s. The severity of this slowdown is mostly attributable to the financial sector, which accounts for some one third of GDP. With equity prices stabilising and financial market volatility returning to more normal levels, a gradual recovery in the financial sector could get underway later this year. This, together with the revival of growth in the euro area should lift growth towards 3 per cent by 2004, which remains modest by historical standards. Given the significant amount of labour hoarding so far in the slowdown, employment growth is likely to be too low to stabilise the unemployment rate before late

in 2003, when it is likely to have reached 4 per cent. Underlying inflation is likely to come down broadly in line with that in the euro area.

***Cross-border workers make aggregate supply relatively elastic and buffer labour market shocks***

Such low growth rates by historical standards do not, however, imply that an enormous output gap is building up. Aggregate supply is relatively elastic owing to the potential for rapid growth in employment of cross-border workers (accounting for some 70 per cent of employment growth in the past decade). In these circumstances, factor supply adjusts to variations in demand for the goods and services produced in the Luxembourg economy without large changes in unemployment or real product wages.

***Trend growth is likely to be lower owing to less buoyant prospects for the financial sector***

The key to the medium-term outlook is growth in demand for the services of Luxembourg's financial sector. Along with the rest of the global financial industry, it is almost certainly set for a period of lower growth than in the past as the exceptional conditions of the 1990s, which witnessed increases in share price-earnings ratios to record levels, are unlikely to be repeated. This will weigh on earnings growth as management fees and commissions are partly based on asset values and because the volume of transactions tends to grow more slowly in such an environment. Even so, medium-term growth in the financial sector is likely to remain higher than in other sectors as progress continues to be made in moving towards a single European market for financial services, in developing private pension saving and in applying ICT. The EU Savings Directive is unlikely to have much effect on growth. Luxembourg's bank secrecy rules do not appear to be affected in the short term by the Directive. As the ultimate objective of the Directive is effective exchange of information, Luxembourg may however find itself under continued pressure to provide more complete access to information to foreign tax authorities. Given the dominant role of the financial sector in the Luxembourg economy, medium-term GDP growth may fall back to 3-4 per cent, well below the average (5½ per cent) in the 1990s but still significantly higher than can be sustained without recourse to foreign labour.

***Lower growth prospects need to be quickly integrated into public expenditure decisions***

The current slowdown has taken its toll on the budget surplus, which has fallen from 6 per cent of GDP in 2000 to 2½ per cent of GDP in 2002, mainly because the decline in medium term GDP growth was not anticipated when public expenditure decisions were taken. Consequently, government expenditure (notably, social security and investment) continued to grow rapidly, rising by 6 percentage points of GDP over 2000-02 to 45 per cent of GDP. The decline in the budget surplus would have been even greater had it not been for a surge in back taxes from corporations and other lags in the effect of the slowdown on tax revenues. With economic growth again much lower than when expenditure plans were finalised, the budget surplus seems likely to virtually vanish in 2003. The government plans to sharply reduce growth in expenditure in 2004-05, in keeping with its medium-term objectives of ensuring that expenditure does not rise as a share of GDP, that the general government budget balance remains in surplus and that the central government budget is balanced. Further consolidation efforts will be required if the government is to meet these objectives.

***To ensure sustainability of the general public pension scheme, the replacement rate should be reduced...***

Lower trend growth could have dramatic implications for the sustainability of the general public pension scheme. While current pension benefits already exceed contributions for residents, the system has nevertheless been kept in balance thanks to the rapid growth in employment, made possible by the availability of cross-border workers, and the associated contributions. Such employment growth in effect forestalls the maturation of the pension system, generating a comfortable cash-flow balance, but also creating ever-growing deferred pension liabilities. Under the current system of actuarial reviews every seven years that automatically adjust contribution rates to those consistent with the target reserves-benefit ratio, the contribution rate will rise sequentially by a small amount if growth is 4 per cent but by one-quarter if growth averages 3 per cent over the next fifty years. The average replacement rate should be reduced to one that is more consistent with long-term balance (*i.e.* in a mature system) so as to avert the risk that future generations will have to bear large increases in taxes. This could be done within current institutional arrangements, which provide for

indexing of pensions to consumer prices and discretionary increases based on real wage developments, by not fully passing on increases in real wages to pensions. In these circumstances, income adequacy could be ensured via the minimum pension. There is ample scope to make such changes as Luxembourg's general public pension scheme is extremely generous: following measures in 2001 that made it even more generous, the replacement rate for a worker earning the average wage over 40 years is 98 per cent.

**... and public subsidies for early retirement should be eliminated**

The required reduction in the pension replacement rate to restore long-term sustainability in the general public pension scheme would be smaller if there were less early retirement: the employment rate for older workers (aged 55-64) is just 25 per cent, one of the lowest in the OECD. Higher employment rates for older workers would also help to attenuate the slowdown in national income growth. One of the main routes to early retirement is the disability pension. A number of court rulings up to 1996 resulted in medical criteria for eligibility for disability pension being applied more severely. While this cut inflows in half, this success was offset by increased use of special early retirement programmes. Access to a general disability benefit was further tightened in late 2002 and a route was also provided for professional reintegration of partially disabled persons. These latest reforms look promising for reducing inactivity on disability pension, but success in rolling back premature withdrawal from the labour force will depend on ensuring that use of substitute routes does not grow correspondingly. A problem in this regard is that the early retirement pension (*pension de vieillesse anticipée*), which is the other main route to early retirement, gives virtually no incentive to continue working after becoming eligible for it. Early retirement pension should be reduced on an actuarial basis in relation to a pension taken at the official retirement age (65) to reflect the longer expected payment period. In addition, the ease with which imputed years of contributions can be obtained should be reduced. At the same time, the official retirement age (and the number of years of contributions required to qualify for a full pension) should be indexed to rising life expectancy. Public subsidies for early retirement through pre-retirement (*préretraite*)

pensions, which are available to workers aged 57 and over who are laid off in restructuring industries but not yet eligible for the early retirement pension, should also be ended.

***Benefit replacement rates and duration should be reduced to increase labour market resilience***

Lower overall employment growth than in the past is likely to reduce the shock-absorber role played by cross-border workers, increasing the proportion of adjustment to adverse labour market shocks that would fall on residents. High replacement rates for unemployment benefit and social assistance (*Revenu minimum garanti*, RMG) and unlimited duration of the latter increase the probability that adverse shocks result in increases in structural unemployment. Replacement rates should be reduced to limit this risk. RMG-related unemployment and poverty traps should also be reduced. In particular, the withdrawal rate for RMG as a low-income family's income rises – the marginal effective tax rate can exceed 100 per cent – should be lowered. It will also be important to maintain the current intensive enforcement of job search obligations and follow-up of the unemployed with Active Labour Market Policies (ALMPs) so as to reduce the risk that adverse labour-market shocks lead to lasting increases in unemployment.

***Improving the performance of the education system is needed to enhance integration of immigrants and boost economic growth***

Another priority for attenuating the decline in growth in national income as well as reducing unemployment risks in the long term is to improve the performance of the education system. According to the PISA study, achievement of Luxembourg students ranked 30th out of 32 countries. Moreover, the gap between achievement of nationals and immigrants was the largest in the study. The main problem seems to be the multi-lingual approach to education, whereby students are taught in both German and French, not a lack of resources – expenditure per student is high by international comparison. Vocational education, which starts at age 13, is being reformed to enable children to do their studies in German or French without having to achieve a high level of competence in the other language. This should be particularly helpful for children from Romance-language homes, who were formerly taught in German. Nevertheless, Romance-language children still have the challenge of learning to read and write in German. The authorities have proposed a project that would enable children to learn to

read and write in German or French, but could not find a municipality (responsible for running primary schools) willing to put it into effect. The government should take whatever steps are necessary to ensure that such programmes are offered while at the same time preserving *Lëtzebuergesch* as a tool for social integration. Other factors behind the poor PISA results seem to be that the system teaches too much material too superficially, that there are disadvantages in early selection and that students tend to have an inadequate mastery of the basics. To resolve these problems, more attention is to be paid to helping weaker students in primary school while A-level programmes are to be spread over three years instead of two. Another reform that could contribute to improved achievement would be to define performance standards nationally while giving schools greater management autonomy to achieve them and holding them accountable for outcomes.

***Increasing the efficiency with which government achieves its objectives would also support national income growth...***

Raising public sector efficiency, not only in education but also in other areas of public service, would also support national income growth. A starting point would be to make greater use of cost-benefit analysis, which is almost never undertaken, and of the results of cost-effectiveness analyses (which compare the costs of alternative means of achieving a given objective). Public sector management reforms that increase managerial independence and accountability are being implemented to increase efficiency, although for the time being they only concern a small part of government expenditure. The authorities are also introducing accrual accounting, which is important for holding public sector managers accountable for their actions, and are considering budgeting for programmes rather than by types of expenditures following the recent French reforms. These initiatives should be pursued. There is also scope to increase public sector efficiency by greater use of contracting out where enforceable contracts can be written relatively easily and by regulatory reform to increase competitive pressures on public sector market activities. One of the factors that would contribute to reduced costs for any given level of service would be to align public sector pay for relatively low-skilled labour more closely to comparable private sector rates.

***... including  
by reducing  
the administrative  
burden***

A number of projects are underway to reduce the administrative burden, which is relatively high in Luxembourg. These include audits of the effect of new regulation on the administrative burden for SMEs, the introduction of one-stop shops for business start-ups, simplification and harmonisation of official forms and organisational audits of public agencies. This process could be taken further by systematically subjecting new legislation to administrative burden impact assessments and assigning all firms and individuals identification numbers that could be used to centralise information in one databank to which all public sector agencies would have access. Greater use of e-government, which lags behind that in all other EU countries, would also help to reduce the administrative burden.

***Climate change  
objectives could  
be met more cost  
effectively***

Climate change policy is another field where government could achieve its objectives more efficiently by paying greater attention to the results of cost-effectiveness analysis. Despite reducing greenhouse gas emissions by around 30 per cent over the past decade, mainly due to the steel industry replacing coal blast furnaces with electric arc furnaces, trends in other sectors and new domestic gas-fired electricity capacity mean that more abatement efforts are required in order to meet Luxembourg's Kyoto Protocol related target. Yet climate change policies in place, while contributing to abatement, are highly variable in terms of the cost for each tonne of carbon abated and can reach extremely high levels of support. For example, support for renewable energy varies by a factor of 20 and schemes promoting energy efficiency in the residential sector can cost several thousand euros for each tonne of carbon abated compared with an estimated 18 euros for internationally tradable permits once such a scheme comes into effect. Climate change policy needs to be recast to achieve the Kyoto Protocol target at less cost to the economy. The introduction of an across-the-board carbon tax, as already envisaged by the authorities, would be a cost efficient way of promoting abatement. Participation in European and international emission trading schemes would also be an efficient means of achieving abatement. The authorities should also place greater emphasis on using flexible mechanisms to promote abatement in foreign countries, which could prove to be less expensive than pursuing domestic abatement alone.

***Reforms to increase the efficiency of development co-operation should be extended***

One area where there has been significant progress in improving the efficiency of government expenditure is the development aid programme, expenditure on which has increased to 0.7 per cent of GNI and is set to rise further to 1 per cent of GNI. This has been done by targeting priority countries and areas and by better monitoring of outcomes. But there is further to go in applying this approach. The government should continue to limit disbursements to a narrower set of target countries and programme areas. The movement to integrated and longer-term projects should be continued with better pre-evaluation of projects and within an enhanced monitoring framework. The authorities should also continue to move domestic assistance measures for agriculture to less trade-distorting measures. In this context the Luxembourg authorities support reforms to European systems of agricultural support.

***Barriers to competition in the provision of broadband Internet services should be removed so as to increase access***

Product market competition is an important part of an environment that stimulates productivity growth. In most cases, such competition is strong in Luxembourg given the openness of the economy. One area, however, where greater competition could pay dividends is in the provision of internet services. Broadband access, which opens up more possibilities for internet use, is one of the lowest in the OECD, while access prices are amongst the highest. The major problem seems to be a lack of competition both between DSL operators and between DSL operators and cable operators. The regulator should remove obstacles to competition among internet operators by imposing a reduction in access charges to the local loop and by considering the complete withdrawal of Luxembourg P&T, the incumbent operator, from the supply of cable internet services. This is necessary to ensure that cable Internet operators have clear incentives to develop their infrastructure to compete with DSL operators, which mainly means competing with Luxembourg P&T.

***Luxembourg residents are likely to continue to benefit from inflows of foreign labour***

Luxembourg has long been a magnet for foreign-owned capital and labour owing to regulatory and location advantages. This has benefited Luxembourg residents, notably through higher tax receipts, and has helped to finance very generous social benefits for residents and an expansion in well-paid public sector jobs, mostly taken by Luxembourg nationals. Even with the envisaged decline in growth relative to the average for the 1990s, continued substantial inflows of cross-border workers and immigrants are likely to be required.

***This calls for reforms to increase the efficiency with which transport services are provided...***

Transport infrastructure has not kept up with the associated increase in population and inflows of cross-border workers in recent years, resulting in substantial congestion problems at peak hours on trains and on the motorways that bring cross-border workers into Luxembourg. The government has reacted by stepping up investment in transport infrastructure to high levels, with a focus on encouraging sustainable mobility. An objective of almost doubling the proportion of public transport in total trips in Luxembourg by 2020 has been set in the strategy *mobilitéit.lu* and it has been decided to integrate transport and land use policies. None of these policies is subject to explicit cost-benefit analysis. This means that the authorities are not obliged to identify clearly the externalities associated with different transport choices or to adopt policy instruments best suited to internalising these externalities, as would be required for the efficient supply of transport services. The introduction of road pricing should be considered to internalise the most important external cost generated by the use of private motor cars, congestion costs. Provided that tax-deductibility of travel expenses is also abolished, road pricing would provide essential information on the social value of expanding road capacity – if the price needed to eliminate congestion on a motorway were high enough to be able to finance an additional lane, it would be efficient to construct such a lane – and reduce the need for public transport subsidies to achieve efficient relative prices for public and private transport. This would reduce the incentives for more mobility than is socially optimal provided by the current high level of public transport subsidies – ticket prices cover only 10-12 per cent of operating costs – and underpricing of the use of private motor cars, especially at peak hours.

***... and reforms to reduce the impact of immigration on housing costs***

High income growth associated with immigration has increased demand for housing services, pushing up prices sharply. This mainly reflects large increases in real land prices, which rose at an annual average rate of 6½ per cent during the past two decades, the highest rate of increase in the EU. While residential land owners are made better off by such price increases, this gain is at the expense of other current and future residents, who will have to pay higher rentals. It also undermines cost competitiveness, reducing the extent to which economic activity and its associated tax base can be attracted to Luxembourg. The large increase in residential land prices is indicative of a supply shortage, which the government considers to be partly caused by speculators who hold vacant sites back from the market. It has temporarily reduced capital gains tax to encourage speculators to sell such building sites. Such speculation could also be countered by introducing a land tax that rises over time on vacant building sites. Tenancy regulations, which have the effect that rents paid by sitting tenants decline rapidly relative to the market price for equivalent new rentals make the market highly illiquid and at the same time discourage landowners from developing vacant sites for rental accommodation. These regulations should be reformed so as to permit rentals for sitting tenants to be adjusted to market rates periodically. Municipalities also hold vacant land that could be subdivided but resist doing so because of the associated increase in infrastructure costs. They should increase land taxes to pay for such costs – with such high capital gains, there is ample scope to raise land taxes. Pressure could also be taken off the market for residential building sites by zoning changes that would permit more intensive development.

***Summing up***

The prospects for lower growth in the medium-long term will require far-reaching fiscal and structural adjustment. The authorities have made a start in reducing public expenditure growth in line with these more subdued prospects but more restraint will be necessary to meet their medium-term objectives. Adjustments to the general public pension scheme, preferably by reducing the high replacement rates, will be needed to make the scheme sustainable in the long term. The authorities have begun to tackle the

early retirement problem, which will help to reduce the scale of the required adjustments to make the general public pension scheme sustainable, but more needs to be done. The reforms to the disability pension, which is one of the major routes to premature withdrawal from the labour force, should be complemented by reducing the early-retirement pension on an actuarial basis in relation to a pension taken at the official retirement age and by reducing the ease with which imputed contributions can be obtained. Lower growth will also diminish the buffering role of cross-border employment on the national labour market, increasing the risk that adverse shocks increase structural unemployment. To counter this risk, the authorities should reduce the high replacement rates for unemployment and related benefits and ease employment protection regulation. Improving the performance of the education system would also reduce unemployment risks as well as attenuating the likely decline in national income growth. The most important reform in this regard is to ensure that children can follow a French or German language stream throughout their education without having to achieve a very high level of competency in the other language. This would also help reduce the gap between the educational achievement of immigrants and nationals. The government could also contribute to attenuating the slowdown in national income growth by achieving its objectives more efficiently, notably by making greater use of cost-benefit and cost-effectiveness analysis. This could yield large dividends in climate change policy and transport policy, where pressures from the relatively high economic growth associated with inflows of foreign labour need to be addressed. Barriers to the supply of building sites also need to be removed so that immigration does not result in excessive property price increases, undermining cost competitiveness. While growth prospects are less rosy than in the 1990s, they remain nevertheless favourable by international comparison. Provided that policies are adjusted rapidly to this outlook and that progress is made in the efficiency with which foreign labour is integrated into the economy, Luxembourg can expect to remain a very prosperous economy for many years to come.