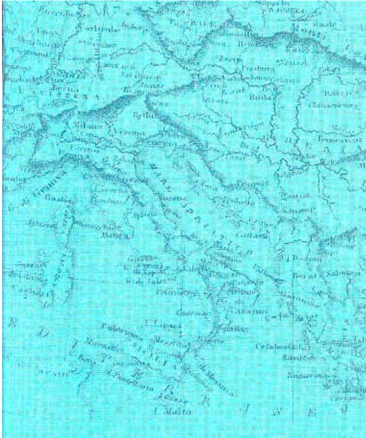

Ministero dell'Economia e delle Finanze

Italy's Stability Programme

Update November 2002

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THE WORLD ECONOMY

1. INTRODUCTION

The Update of Italy's Stability Programme is adopted pursuant to Article 4 of European Council Regulation 1466/97. This year's Update, here translated into English from its original version, is based on the *Forecasting and Planning Report (RPP)* for 2003, on the *Finance Bill* for 2003, and on the *Update to the Economic and Financial Planning Document (DPEF)* for 2003–2006. All three documents were presented to Parliament on 30 September 2002.

The Programme Update describes the macroeconomic framework for 2002 and the following four years and sets out the Government's public finance objectives for the years from 2003 to 2006. It also examines the budget for 2003 and its effects on the reduction of the deficit and of the debt/GDP ratio.

Since the above policy documents have been presented to Parliament, the uncertainties of the international situation have increased, leading to a further deterioration of the macroeconomic scenario. The main international organizations have recently revised growth forecasts downwards. The document shows how changes in the underlying macroeconomic assumptions affect public finance targets over the coming years.

The Update also shows how the budget measures fit into the broader structural reform programme designed to improve the quality of public intervention and to stimulate economic growth, thus ensuring the sustainability of the public finances in the medium term.

2. THE MACROECONOMIC FRAMEWORK

After the sharp slowdown recorded in 2001, the world economy has resumed growth at a slower-than-expected rate. The main international organizations have repeatedly revised their growth forecasts downward.

The uncertainty over the international situation impacts on the Italian economy. On the basis of the information available at the end of September 2002, when the *Forecasting and Planning Report (RPP)* was presented to Parliament, Italian GDP growth for this year is estimated at 0.6 percent, more than half a percentage point lower than the estimate released by the main international organizations before the summer and embodied in the *Economic and Financial Planning Document (DPEF)* of July (1.3 percent).

A significant factor in the economic slowdown has been investment, which decreased by 1.4 percent, in line with trends in the rest of Europe (Table 1). The downturn in capital goods has been especially sharp (2.7 percent).

Consumption has grown sluggishly (0.3 percent, compared with 1.1 percent in 2001). The stimulus provided by the tax relief enacted in 2001 and the continuation of favourable labour market conditions have been partly countered by the erosion of purchasing power due to inflation, which is still above 2 percent, even though declining compared with 2001. Households' confidence has weakened, in part because of the perception that the rise in consumer prices in connection with the euro changeover has been greater than that indicated by official statistics. On average, earnings are forecast to rise by 2.9 percent this year, 0.3 percent more than the rate of inflation. For the second consecutive year households' propensity to consume has decreased.

Given a modest growth in world trade (2.3 percent), the volume of Italy's exports is expected to remain constant. Imports should contract slightly (0.1 percent), owing to the slowdown in domestic demand, partly offset by a substantial increase in inventories. Thus, net exports should make a modest positive contribution to GDP growth, by 0.1 percentage points.

Table 1 MACROECONOMIC FRAMEWORK

	2001	2002	2003	2004	2005	2006
GDP growth at constant market prices	1,8	0,6	2,3	2,9	3,0	3,0
GDP level at current market prices (billions of euro)	1217	1253	1305	1366	1431	1501
Growth rate of GDP deflator	2,6	2,4	1,8	1,8	1,8	1,8
Inflation rate (1)	2,7	2,6	1,9	1,3	1,2	1,2
Growth rate of employment (2)	1,6	0,9	1,3	1,6	1,6	1,6
Unemployment rate	9,5	9,1	8,7	8,0	7,5	6,9
Growth rate of labour productivity(3)	0,2	-0,3	0,9	1,3	1,3	1,4
Composition of GDP growth (percentage change)						
Private consumption expediture	1,1	0,3	2,5	2,8	3,0	3,1
Government consumption and NPISH expenditure(4)	2,3	1,5	0,5	0,4	0,3	0,6
Gross fixed capital formation	2,4	-1,4	2,3	4,8	5,1	5,2
Exports of goods and services	0,8	0,1	7,0	7,7	7,7	7,6
Imports of goods and services	0,2	-0,1	7,1	8,1	8,1	8,0
Contribution to GDP growth (percentage of GDP)						
Final domestic demand	1,6	0,1	2,0	2,8	2,9	2,9
Change in inventories	0,0	0,4	0,1	0,1	0,1	0,1
External balance of goods and services	0,2	0,1	0,1	0,0	0,0	0,0

(1) Change in harmonized consumer price index (HICP).
(2) National accounts definition.
(3) GDP growth at constant prices per labour unit
(4) NPISH= non-profit institution serving households

The growth slowdown experienced in 2002 has not been entirely reflected in employment trends. The number of full-time equivalent workers (standard labour units) is expected to increase by 0.9 percent, outpacing GDP growth. Labour market reforms and tax incentives are exerting their effects. The unemployment rate continues to decline, to an expected average of 9.1 percent in 2002, compared with 9.5 in 2001.

Inflation is expected to ease to 2.6 percent, from 2.7 percent in 2001. Contributing factors are wage moderation, the containment of profit margins, the fall in the cost of raw materials (except oil products) and the appreciation of the euro.

For 2003 the Italian economy, like the rest of Europe, is expected to grow at a pace close to potential. The GDP is expected to grow at 2.3 percentage rate, basically in line with the main international organizations forecasts available at the end of September 2002. The pick-up should accelerate in the second half of the year, fuelled by the international upswing as well as the stimulus provided by the Government's *Finance Bill* for 2003.

The main contribution to economic recovery should be households' consumption, which is forecast to expand by 2.5 percent, thanks to the ongoing improvements in the labour market and the gains in purchasing power derived from lower inflation. Investment should resume expansion at a pace of 2.3 percent, and 2.5 for capital goods. A major impulse to investment should be imparted by public works, whose realization will be facilitated by the newly-created *Infrastrutture S.p.A.* corporation.

With the acceleration of world trade, estimated to grow by 8 percent, Italian exports should rise by 7 percent in 2003, following the stagnation of 2002. The recovery in domestic demand should also lead to faster import growth, in line with that of exports.

The employment growth experienced in the last few years is expected to continue in 2003, at a pace of 1.3 percent, especially in private services and in construction. The unemployment rate should come down to 8.7 percent. At the end of 2003 the unemployment rate should reach 8.5 percent, close to the euro area average (8.3 percent).

In 2003, the price level, measured by the harmonized European index, is expected to rise by 1.9 percent.

No external inflationary impulses are expected. If the euro's exchange rate were to hold at the level of September 2002, this would result in a year-on-year appreciation of 4.8 percent in 2003. The higher average value of the euro should offset any rise in the

dollar price of raw materials. Unit labour costs are expected to slow down, thanks to a sharp gain in productivity and continuing wage moderation.

From 2004 to 2006 Italy's GDP is expected to grow faster than its potential, at around 3 percent a year, so as to close the output gap accumulated in 2001 and 2002.

The upswing in investment, forecast to grow at an annual rate of nearly 5 percent, as in the late 1990s, will sustain the expansion of economic activity, together with the favourable development in private consumer spending and exports (at annual growth rates of 3 and 8 percent respectively). The contribution of net exports to growth should remain negligible for the entire forecast period.

Employment should continue to grow (at 1.6 percent per year), bringing the employment rate to 59.6 percent in 2006; the unemployment rate should fall to 6.9 percent. In the absence of exogenous shocks, the heightened competition spurred by reforms in the markets for goods and services and the continuation of wage behaviour consistent with productivity growth should allow inflation to stabilize at just over 1 percent.

The forecast assumes that growth potential remains roughly constant. This means that the slowdown in demand recorded in 2001 and 2002 is considered to be temporary, with no effect on the country's productive capacity. Also, the impact of the ongoing reforms, in particular of the labour market, on the economy's potential growth rate are not considered (Chapter 6).

On the basis of data available in September 2002, Italy's output gap, i.e. the percentage difference between actual and potential GDP, is calculated as being negative, by 2 percentage points in 2003, owing to the lower than potential growth experienced in 2001 and 2002. It is expected to narrow towards zero by 2006. The different methods of calculations used by the main international organizations show a similar pattern (see the box).

The forecasting scenario does involve elements of risk. On the external side, the main factor of uncertainty is the world political situation. An aggravation of international tensions could result in an abrupt rise in oil prices, with repercussions on world trade, inflation, and economic agents' expectations in general. Another factor of risk are equity prices, as a decline could depress households' purchasing power and

firms’ propensity to invest. If these risks were to materialize, they could further undermine households’ and firms’ confidence, reducing the effectiveness of the Government policy measures aimed at supporting low-income households and at stimulating investment.

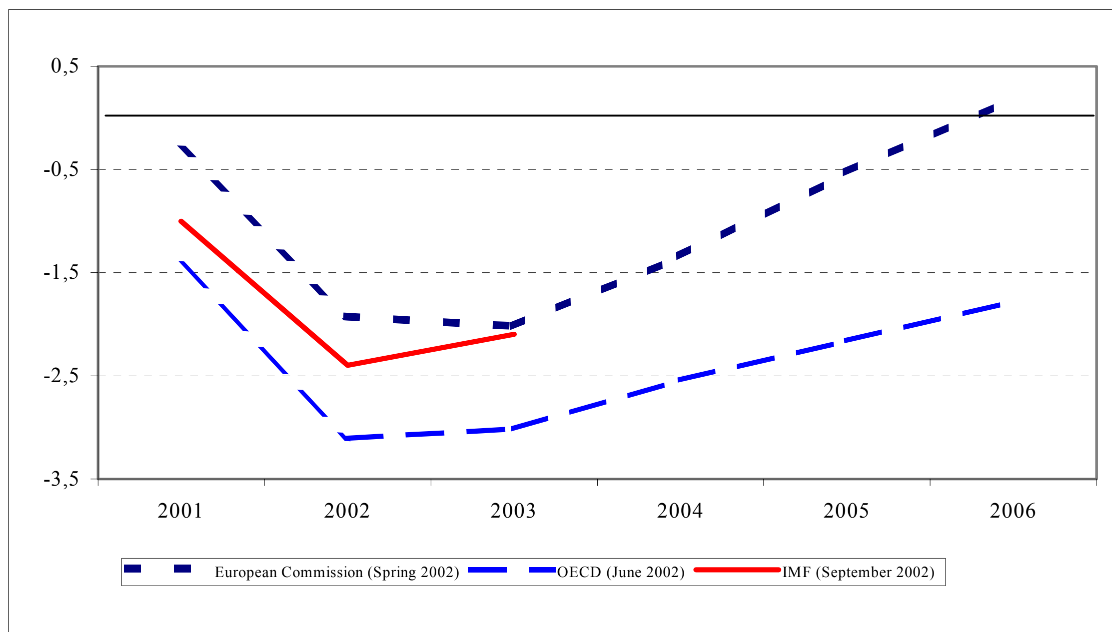
The effects of these risks on public finances are examined in Chapter 5.

BOX: ESTIMATES OF POTENTIAL GDP AND OUTPUT GAP

The main international organizations (European Commission, IMF, OECD) produce estimates of potential GDP and output gap. These estimates differ slightly. For instance, the 2001 rate of growth of Italy's potential output was estimated at 2.3 percent by the European Commission, 2.4 percent by the OECD and 1.8 percent by the IMF. The estimates of the output gap, i.e. the percentage difference between actual and potential GDP, also differ. According to the Commission, the gap for Italy was –0.3 percent, while the OECD put it at –1.4 percent and the IMF at –1.0 percent.

Notwithstanding these differences, the pattern is quite similar across measures, with a deterioration in 2001–2002 and a progressive recovery starting in 2004 (Figure 1).

Figure 1 **OUTPUT GAP***
(percentage values)



* Computed using the different estimation methods for potential output and the GDP projections of the *RPP*

The three methods for estimating potential output use statistical data and economic information available at the time the estimate is made. Data changes between one forecasting exercise and another may modify the estimate of potential output and output gap for the entire sample, including years preceding the forecasting period.

The different results depend on the methodologies used by the three organizations.

The common starting point is the assumption that a country's GDP can be described as a Cobb-Douglas-type production function with constant returns to scale on capital and labour. Analytically, the production function can be written as:

$$(1)\ Y = L^{\alpha} \cdot (K \cdot U_k)^{1-\alpha} \cdot f(TFP)$$

where Y is GDP, L labour, K capital, U_k capacity utilization and α is the elasticity of output with respect to labour. The factor f(TFP) represents the contribution of technical progress (or Total Factor Productivity) to economic growth.

Potential output is obtained by replacing, in equation (1), the actual values of the productive factors with an estimate of the values corresponding to their full or potential use. For capital, this means assuming 100 percent capacity utilization.

The three organizations use production functions that differ in some of their assumptions. Specifically:

1. *Elasticity of output with respect to labour. The European Commission, for Italy as for all other member states, uses the EU average of 0.65. The OECD and the IMF use the average for Italy itself (respectively 0.693 and 0.7).*
2. *Capital. The IMF method uses an indicator of capacity utilization in equation (1). The other two organizations assume that capital is fully utilized.*
3. *Reference sector. The OECD estimates potential output only for the private sector, while the Commission and the IMF apply the method to the entire economy.*
4. *Formulation of TFP. The OECD assumes that the contribution of technical progress to economic growth depends on the labour elasticity of output, i.e.:*

   $$(1a)\ f(TFP) = TFP^{\alpha}$$

   The IMF and the European Commission use a different formula for TFP:

   $$(1b)\ f(TFP) = TFP$$

In the first case (1a) technical progress is assumed to be propagated through qualitative improvements in the labour factor; in the other (1b), a more neutral view of the roles of the two factors in technical progress is taken. For a given estimation method, the different formulation of TFP should not have significant effects on the estimated level of potential output as much as on its volatility.

The methodologies of the three organizations also differ in the estimation of the stock of capital, potential labour, and the long-term component of TFP.

- *Potential labour. The estimate of potential labour is obtained by multiplying the trend component of the participation rate by the working-age population with the complement of the long-run unemployment rate. The latter variable*

is defined as NAWRU, the Non-Accelerating-Wage Rate of Unemployment. The European Commission and the OECD estimate the NAWRU by applying a Kalman's filter to the Phillips curve. The two estimates differ in the type of algorithm used, in some technical assumptions (such as the variance of the estimates) and in the specification of the Phillips curve. The IMF estimates the NAWRU through a preliminary estimation of a simple Phillips curve. Also, the IMF uses information on hours actually worked.

- *Capital stock. The estimate of the capital stock is derived from the investment equation for a given profile of productive investment and of the depreciation rate. The OECD method considers as "productive" only private non-residential investment. The other two organizations consider gross fixed investment of the entire economy. The methods also differ for the profile of the depreciation rate.*
- *The long-run component of TFP. The estimate of the long-run component of TFP is obtained by applying a statistical filter to the raw data. The unadjusted series coincides with the residual obtained by replacing, in equation (1), the observed value of GDP with the observed value of labour and the estimated value of the capital stock. The Commission and the IMF apply the statistical filter to the unadjusted series of TFP, lengthened by extrapolating the observed trend of the unadjusted series. The OECD only applies the statistical filter to the existing unadjusted series.*

3. NET BORROWING AND THE PUBLIC DEBT

3.1 General government net borrowing

The deterioration of the macroeconomic environment and the rising uncertainty over the prospects for world economic recovery in 2002 affected Italy's public finances.

In its *Economic and Financial Planning Document (DPEF)* for 2003–2006, released in July, the Government revised its projections for the 2002 net borrowing to take account of the weakening of economic expansion and of ISTAT's revised budget outturns for 2000 and 2001. The net borrowing target for 2002 was revised from the initial 0.5 percent of GDP to 1.1 percent to reflect slower economic growth. The revision is in line with the indications of the sensitivity analysis given in last year's Stability Programme Update, which highlighted that if growth were 1 percentage point lower than forecast in 2002, the deficit would be about half a point larger.

In September 2002, the *Forecasting and Planning Report (RPP)* incorporated further revisions to take into account developments over the summer months and their impact on the public finances. The new estimates of tax revenues, in the light of the results of the self-assessment in the second half of July, were also factored in. The estimate for the general Government net borrowing in 2002 was revised to 2.1 percent of GDP (Table 2). The difference with respect to the target set in last year's Stability Programme Update is due to three factors: slower economic growth (accounting for about 1 percentage point); lower-than-expected tax revenues (0.2 percent); and, for the remainder, higher spending projections, especially for health care, that emerged in ISTAT's revision of the deficit for 2001.

The resetting of the targets was accompanied by urgent decrees for stricter control on public expenditure. Decree-laws 63/2002 and 138/2002 introduced new rules to curb expenditures, above all those for health care. Subsequently, Decree-law 194/2002 modified spending procedures, tightening the ban on outlays lacking adequate financial coverage. Every spending authorization deriving from measures having force of law is made subject to an inviolable ceiling, namely the amount set forth in the budget. Any change in the initial expense, even if provided for in the law, must be

covered by new financing. The decree-law also shortens the period during which unspent appropriations may be kept in the budget, aligning the Italian rules with practice prevailing in the rest of Europe.

Finally, Decree-law 209/2002 rectifies distortions in the company tax system introduced in the previous legislature, with a positive expected impact on revenues.

Table 2 DIFFERENCES WITH THE PREVIOUS STABILITY PROGRAMME UPDATE

	2001	2002	2003	2004	2005
GDP growth					
Stability Programme 2001	2,0	2,3	3,0	3,0	3,1
Stability Programme 2002	1,8	0,6	2,3	2,9	3,0
Difference	-0,2	-1,7	-0,7	-0,1	-0,1
Net borrowing (% of GDP)					
Stability Programme 2001	-1,1	-0,5	0,0	0,0	0,2
Stability Programme 2002	-2,2	-2,1	-1,5	-0,6	-0,2
Difference	-1,1	-1,6	-1,5	-0,6	-0,4
Public debt (% of GDP)					
Stability Programme 2001	107,5	104,3	101,0	98,0	95,4
Stability Programme 2002	109,9	109,4	105,0	100,4	98,4
Difference	2,4	5,1	4,0	2,4	3,0

The ratio of total receipts to GDP is expected to remain about the same in 2002 as in 2001. Tax revenues are expected to decline by 0.2 percentage points in proportion to GDP.

The ratio of total expenditures to GDP should remain unchanged. A slight increase in primary expenditure will be offset by a reduction in interest outlays. The reduction in investment reflects the implementation of the plan for the sale of real estate assets. After holding constant for years, the ratio of current primary expenditure to potential GDP declines by 0.2 points.

The target for general Government net borrowing in 2003 has been revised to 1.5 percent of GDP, from 0.8 percent as indicated in the *DPEF* for 2003−2006. The revision reflects the lower projected growth in 2002 and 2003.

For 2004−2006, the general Government net borrowing targets have been set for progressive reduction in line with economic growth and the steady narrowing of the output gap. There should be a budget surplus in 2006.

In line with the legal requirements, the *DPEF* sets medium term objectives and indicate the broad policies for attaining them, while the detailed specification of the policy measures is demanded year-by-year to the successive Finance Laws. Attainment of the public finance objectives for the years after 2003 will be ensured by measures included in the Finance Laws for those years, for which detailed information is not yet available (Table 3).

Table 3 GENERAL GOVERNMENT BUDGETARY DEVELOPMENTS
(percentages of GDP) [1]

	2001	2002	2003	2004	2005	2006
Net lending by sector						
General government	-2,2	-2,1	-1,5	-0,6	-0,2	0,1
Future measures				1,6	1,4	0,8
Central government	-3,0	-3,5	-2,9	-3,1	-2,4	-1,5
Local government	0,4	0,5	0,5	0,5	0,5	0,4
Social security institutions	0,4	0,9	1,0	0,4	0,3	0,3
General government						
Total receipts	45,9	46,0	46,1	44,9	44,8	44,6
Total expenditure	48,1	48,1	47,6	47,1	46,3	45,4
Future measures				1,6	1,4	0,8
Net borrowing	-2,2	-2,1	-1,5	-0,6	-0,2	0,1
Net interest payments	6,2	5,8	5,8	5,5	5,4	5,3
Primary balance (2)	4,0	3,6	4,3	4,9	5,2	5,3
Components of revenues						
Tax revenues	29,7	29,5	29,1	28,6	28,7	28,7
Social security contributions	12,7	12,8	12,8	12,7	12,5	12,4
Interest income	0,2	0,2	0,2	0,2	0,2	0,2
Other receipts	3,3	3,5	4,0	3,4	3,3	3,3
Total receipts	45,9	46,0	46,1	44,9	44,8	44,6
Components of expenditures						
Collective consumption	6,9	6,8	6,7	6,7	6,7	6,6
Social transfers in kind	11,5	11,7	11,6	11,3	11,0	10,7
Social transfers other than in kind	16,7	17,2	17,2	17,0	16,6	16,4
Interest payments	6,3	6,0	6,0	5,6	5,5	5,4
Subsidies	1,1	1,1	1,1	1,1	1,1	1,1
Gross fixed capital formation	2,5	2,1	1,9	2,5	2,7	2,6
Other expenditure	2,9	3,3	3,1	2,9	2,7	2,6
Total expenditure	48,1	48,1	47,6	47,1	46,3	45,4

(1) Details may not add, due to rounding.
(2) Net borrowing less net interest payments.

As indicated previously, this document presents the budget targets submitted in September 2002 to Parliament. These targets are based on the macroeconomic scenario

available at that time. There are indications that this scenario might have deteriorated since then, leading the major international organizations to revise their forecasts downwards, especially for 2003. Chapter 5 shows how different growth forecasts impact on budgetary targets for the coming years.

3.2 The cyclically-adjusted budget

A proper assessment of budget targets and outcomes requires due accounting for the effects of the economic cycle. This approach is consistent with the recent statement of the Eurogroup on the implementation of the Stability and Growth Pact, which requires that countries that have not yet achieved budgetary positions close to balance or in surplus must carry out a reduction in the cyclically-adjusted deficit of at least 0.5 percent of GDP each year.

The cyclically-adjusted budget measures the position of the government accounts net of the effects of economic fluctuations. The cyclical component of the budget is calculated as the output gap multiplied by the elasticity of the budget with respect to economic growth.[1] For Italy, the Commission estimates an elasticity of the budget with respect to GDP growth at 0.45. That is, a widening of the output gap by 1 percentage point of GDP produces an increase of 0.45 points in the cyclical component of the budget deficit.

Using the potential GDP growth implied in the European Commission forecasts available in September 2002 and adopted in this Stability Programme, the 2002 cyclically-adjusted deficit is estimated at 1.2 percent. The difference with the actual budget (2.1 percent) corresponds to the cyclical component which, given the output gap of -1.9 percentage points, is equal to 0.9 percent of GDP. Compared to 2001, the cyclically adjusted deficit is reduced by about 0.9 percentage points.

The cyclically-adjusted budget deficit is expected to be reduced by a further 0.7 points in 2003 to 0.5 percent. Balance will be achieved in 2004 and maintained in the following years.

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[1] The method for estimating the output gap is described in Chapter 2.

In short, during the forecasting period the cyclically-adjusted budget deficit is expected to be reduced by 0.9 percentage points of GDP in 2002, 0.7 points in 2003, and 0.5 points in 2004, in line with the Eurogroup agreement for countries not yet recording budget balance.

Using the potential output profiles of the other leading international organizations (OECD and IMF), the cyclically adjusted balance for Italy shows a similar pattern (Table 4).

Table 4 CYCLICALLY-ADJUSTED PUBLIC FINANCE [(1)]
(percentages of GDP)

	2001	2002	2003	2004	2005	2006
GDP growth rate at constant prices	1,8	0,6	2,3	2,9	3,0	3,0
Net borrowing	-2,2	-2,1	-1,5	-0,6	-0,2	0,1
Interest payments	6,3	6,0	6,0	5,6	5,5	5,4
Potential output growth rate						
Commission method [(2)]	2,3	2,3	2,4	2,2	2,2	2,3
OECD method [(3)]	*2,4*	*2,4*	*2,2*	*2,4*	*2,6*	*2,6*
IMF method [(4)]	*1,8*	*2,0*	*2,0*	*na*	*na*	*na*
Output gap						
Commission method [(2)]	-0,3	-1,9	-2,0	-1,3	-0,5	0,2
OECD method [(3)]	*-1,4*	*-3,1*	*-3,0*	*-2,5*	*-2,2*	*-1,8*
IMF method [(4)]	*-1,0*	*-2,4*	*-2,1*	*na*	*na*	*na*
Cyclical budgetary component						
Commission method [(2)]	-0,1	-0,9	-0,9	-0,6	-0,2	0,1
OECD method [(3)]	*-0,6*	*-1,4*	*-1,4*	*-1,1*	*-1,0*	*-0,8*
IMF method [(4)]	*-0,5*	*-1,1*	*-0,9*	*na*	*na*	*na*
Cyclically adjusted budget balance						
Commission method [(2)]	-2,1	-1,2	-0,5	0,0	0,0	0,0
OECD method [(3)]	*-1,6*	*-0,7*	*-0,1*	*0,5*	*0,7*	0,9
IMF method [(4)]	*-1,8*	*-1,0*	*-0,6*	*na*	*na*	*na*
Cyclically adjusted primary balance						
Commission method [(2)]	4,3	4,7	5,4	5,6	5,5	5,4
OECD method [(3)]	*4,8*	*5,2*	*5,9*	*6,1*	*6,3*	*6,3*
IMF method [(4)]	*4,6*	*4,9*	*5,4*	*na*	*na*	*na*

(1) Details may not add, due to rounding.
(2) Under this scenario the estimated potential output growth rates correspond to those implicit in the Spring Forecasts 2002 of the European Commission.
(3) Under this scenario the estimated potential output growth rates correspond to those of the OECD (MTB 2002 and Economic Outlook June 2002).
(4) Under this scenario the estimated potential output growth rates correspond to those implicit in the last IMF forecasts (WEO September 2002).

3.3 The public debt

At the end of 2002 Italy's public debt is expected to be equal to 109.4 percent of GDP, slightly lower than the previous year. With respect to the target set in last year's Stability Programme Update, the shortfall is due to:

- a larger debt at the end of 2001 (2.4 percent of GDP), produced by a higher net borrowing (1.1 percentage points), postponement of the privatization programme (0.8 points) and accounting revisions decided by Eurostat (0.5 points);
- the slower GDP growth in 2002;
- the slowdown in the implementation of the privatization programme in 2002.

In 2003 and in the following years the debt/GDP ratio is expected to fall steadily (Table 5), albeit at a slower pace than indicated in last year's Stability Programme Update, due to the slower growth now forecast and a revision in the timetable for privatizations. This revision is called for by the sharp drop and extreme volatility of equity prices (the Milan Stock Exchange index fell 27 percent in the first eight months of 2002, while its volatility rose from 14.4 percent in January 2001 to 33 percent in September 2002).

The reduction in privatization proceeds will be partly offset by financial transactions amounting to about 1.7 percent of GDP, bringing the face value of the debt more in line with its market value. This transaction was not considered in the Stability Programme Update submitted last year.

Italy's debt/GDP ratio is forecast to come down to 96.4 percent in 2006.

Table 5 DEBT/GDP RATIO

	2001	2002	2003	2004	2005	2006
Public debt						
Level	109,9	109,4	105	100,4	98,4	96,4
Change	-0,7	-0,5	-4,4	-4,6	-2,0	-2,0
Factors influencing changes in debt/GDP ratio (% of GDP)						
Primary balance	-4,4	-3,8	-4,5	-5,0	-5,3	-5,5
Interest payments	6,3	6,0	6,0	5,6	5,5	5,4
Nominal GDP growth rate	4,4	3,0	4,1	4,7	4,8	4,8
Other factors	1,8	0,3	-1,8	-0,5	2,6	2,9
of which: privatization receipts	-1,1	-0,4	-1,7	-1,7	0,0	0,0
Implicit interest rate on debt	*5,73*	*5,48*	*5,71*	*5,58*	*5,59*	*5,60*

4. THE 2003 BUDGET

This chapter examines the *Finance Bill* for 2003 since, as previously noted, Italian budgetary procedures provide that the details of the Government's action are specified year-by-year in the Finance Law.

The 2003 budget aims to reduce the deficit in both nominal and structural terms, while creating the conditions for faster economic growth through structural reforms in public expenditures and in the tax system. The purpose is to reconcile rigorous public fiscal management with the freeing-up of resources for reducing the tax burden on households and firms. Given the unfavourable economic situation, the budget relies in part on extraordinary measures, whose effects are limited in time and thus contribute significantly to the attainment of the budgetary targets for 2003 but do not affect output or consumption.

4.1 Expenditures

The containment of current expenditures concentrates on areas where it has increased most in recent years. On the whole, the measures included in the *Finance Bill* for 2003 produce savings of about €8 billion in 2003, €9.8 billion in 2004 and €6.2 billion in 2005 (Table 6).

In the field of public employment, staffing requirements are recast in line with planned reform of the public administration, powers are transferred to regional and local governments, and rationalization and outsourcing will proceed. The *Finance Bill* also provides for measures on public hiring designed to curb outlays.

Intermediate consumption is rationalized by measures to strengthen the role of Consip as the central purchasing agent for the Government and to set consumption standards for the various categories of goods and types of agency. It is estimated that the centralization and reinforcement of the purchasing system through nationwide tender procedures will generate substantial savings, efficiency and transparency.

The entire set of measures affecting the Public Administration will produce savings estimated at €2 billion (Table 6).

As far as health care is considered, the *Finance Bill* modifies the provisions for patients' cost-sharing for specialist examinations, diagnostic equipment and thermal cures, revises the discount rate charged to pharmacies and reorders the list of reimbursed medicines. Here too, the impact on net borrowing is estimated at €2 billion.

In the area of regional and local government finances, the measures implementing the "Internal Stability Pact" to bring local government spending into line with the public finance targets will produce savings of €2.2 billion.

There are specific provisions reordering the utilization of the revolving funds for investment projects, public works, and firms, reducing the impact on net borrowing by about €1.6 billion. The transformation of capital grants for firms into loans is intended to provide incentives for investment in the most productive industries and to enhance the revolving nature of the fund, to foster its reutilization over time.

Additional measures involve the transformation of ANAS into a joint stock company. Together with the measures rationalizing financing to public corporations, the Post Office and the State Railways, the impact on net borrowing will approximate €3.8 billion.

The initiatives to stimulate the economy comprise the start-up of the new corporation *Infrastrutture S.p.A.*, which will act as a financial intermediary, favouring the more rapid realization of infrastructure thanks to more rigorous evaluation procedures and acting to complement and stimulate private sector involvement. With the injection of additional resources through the involvement of the private sector in the financing and management of infrastructural projects, the range of works eligible for project financing can be broadened, with incentives for a market approach in specific areas of investment that until now have been the exclusive competence of the public sector. The corporation's activity will produce medium and long-term budgetary benefits that for reasons of prudence are not considered in the budget for 2003.

To complement the measures to stimulate employment, in implementation of the Pact for Italy, the revision of the unemployment benefit programme has started, with a view to combining policies for labour market flexibility with instruments for greater social protection (see Chapter 6). Specifically, a new schedule for ordinary

unemployment benefits is introduced, lengthening the benefit period, increasing the amount, and strengthening the incentives for job search.

4.2 Revenues

On the revenue side, the key element of the programme is fiscal reform. This is part of the Government's commitments with the social partners contained in the Pact for Italy in favour of the South, school system reform and active labour market policies.

The first phase of the tax reduction programme will be launched in 2003, with the reduction of the individual income tax (IRPEF) for low-income persons, a 1-percentage-point cut in the company tax rate (IRPEG), and a narrowing of the tax base concerning the labour cost of the Regional Tax on Productive Activities (IRAP). The total loss of revenues will amount to €4.4 billion. Lower taxes have a twofold impact, stimulating labour demand and supply and also fostering the emersion of underground economic activity (see Chapter 6).

In the framework of the fiscal reform, the Government is engaged in countering tax elusion and tax evasion, one tool being the reduction of tax rates with a view to greater equity and a better balanced sharing of the tax burden. To this end a procedure will be introduced, the so-called mass tax concordat (*concordato fiscale di massa*), to reveal hidden taxable income and regularize taxpayers' individual positions by means of: 1) ex-ante determination of tax basis for business or self-employment incomes, with the application of uniform monitoring methods for the different categories; 2) the automatic setting of due taxes for the fiscal years prior to 31 December 2001; 3) the settlement of pending tax disputes. This set of measures will bring a revenue recovery of €5.8 billion. The experience of the 1994 concordat shows that an enlargement of the overall tax base and more effective and efficient controls are foreseeable.

On the same line, the *Finance Bill* also provides for a second round of capital repatriation, increasing the levy from 2.5 to 4 percent. Conservatively estimating the capital inflow at €50 billion, the measure is expected to generate revenue of €2 billion.

The budget does not consider the effects of the operations of *Patrimonio S.p.A.*, constituted in 2002, whose mission is to enhance and capitalize on the value of the

State’s assets, putting an end to the poor management of State assets, making it more transparent and efficient.

Table 6 THE 2003 BUDGET
(millions of euro)

	2003	2004	2005
Expenditure			
Savings	***12.479***	***14.248***	***15.094***
Reduction in staff	712	929	1.221
Rationalization of intermediate consumption	1.300	1.300	1.300
Internal Stability Pact	2.200	2.550	3.060
Pensions	516	516	516
Health care	1.957	3.093	3.093
Reduction in transfers to public corporations	1.316	1.307	1.307
Rationalization of revolving funds	1.550	1.500	1.500
Capital expenditure	650	700	700
Other	2.278	2.353	2.397
Additional outlays	***4.441***	***4.407***	***8.861***
Staff costs	1.700	1.800	2.165
Pensions and social assistance	390	377	379
Measures for local goverments	465	446	300
Investment	136	184	4.017
Other	1.750	1.600	2.000
Net impact	***8.038***	***9.841***	***6.233***
Revenues			
Increases	***8.855***	***2.936***	***1.362***
Tax concordat	5.759	1.865	
Capital repatriation	2.000		
Indirect effects and other measures	1.096	1.071	1.362
Decreases	***4.468***	***7.554***	***5.709***
Personal income tax (IRPEF)	3.490	3.548	3.800
Company tax (IRPEG)	194	2.603	607
Other tax relief	637	1.103	802
Indirect effects	147	300	500
Net impact	***4.387***	***-4.618***	***-4.347***
Total net impact on net borrowing reduction	***12.425***	***5.223***	***1.886***
% of GDP	*1,0*	*0,4*	*0,1*

5. SENSITIVITY ANALYSIS

The public finance targets set forth in Chapter 4 are based on the macroeconomic scenario presented in the *Forecasting and Planning Report (RPP)* released in September 2002, which is the basis of the present Update. As was noted in Chapter 2, these projections are subject to risks, whose materialization would affect budgetary developments. To evaluate the impact of alternative macroeconomic scenarios, we have performed simulation exercises for different assumptions on GDP growth rates (Section 5.1) and interest rates (Section 5.2).

5.1 Sensitivity to growth

We consider two alternatives to the baseline scenario set out in Chapter 2, assuming that for the entire period from 2003 through 2006 annual GDP growth is either lower or higher than baseline by 0.5 percentage points each year. It is also assumed that in both alternatives potential growth is the same as in the baseline scenario. This implies that the faster or slower output growth is due to transitory effects and is thus reflected entirely in the output gap.

It is further assumed that the different growth rates have an impact on the budget as a function of the elasticity of net borrowing with respect to GDP (0.45 as noted in Chapter 3). Hence, for every percentage point decrease or increase in growth, the budget balance worsens or improves by 0.45 percent of GDP. The cyclically-adjusted primary surplus is the same in all three scenarios.

In the slow-growth scenario, 0.5 percentage points per year below the baseline, the budget worsens by an average of almost 0.23 percent of GDP each year (Table 7). This means that if GDP growth in 2003 were 1.8 percent, rather than the 2.3 percent projected in the *Forecasting and Planning Report (RPP)*, the deficit would come to 1.7 percent of GDP instead of 1.5 percent as in the baseline scenario. In 2006 there would be a deficit of 1 percent of GDP instead of a small surplus. In the lower growth scenario, the adjustment of public finances would proceed for the entire period, although more slowly than in the baseline scenario (Figure 2).

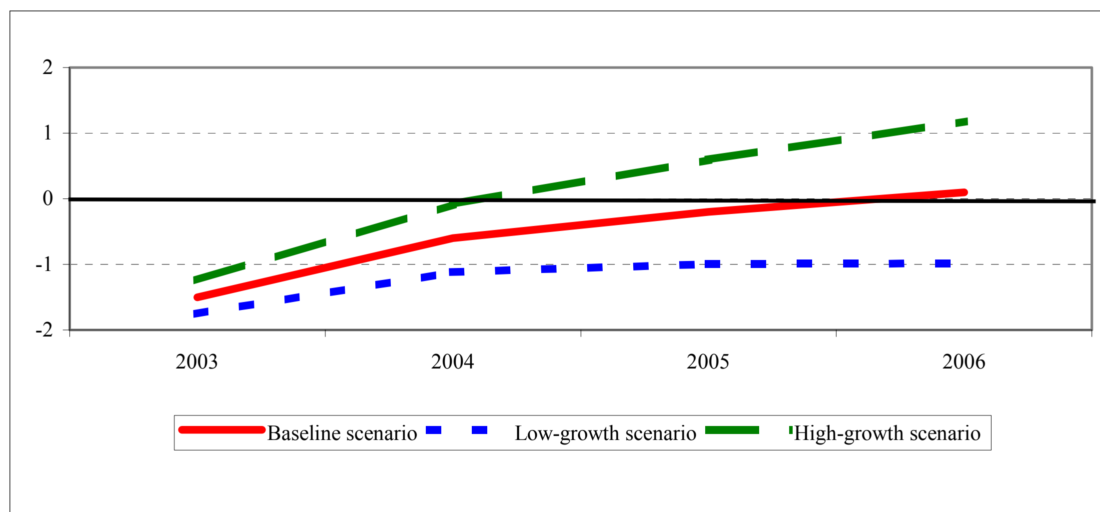
Table 7 **SENSITIVITY TO GDP GROWTH** [1]
(percentage values)

		2002	2003	2004	2005	2006
	High-growth scenario	*0,6*	*2,8*	*3,4*	*3,5*	*3,5*
GDP growth rate	Baseline scenario	0,6	2,3	2,9	3,0	3,0
	Low-growth scenario	*0,6*	*1,8*	*2,4*	*2,5*	*2,5*
	High-growth scenario	*-1,9*	*-1,5*	*-0,4*	*0,9*	*2,2*
Output gap	Baseline scenario	-1,9	-2,0	-1,3	-0,5	0,2
	Low-growth scenario	*-1,9*	*-2,5*	*-2,3*	*-2,0*	*-1,7*
	High-growth scenario	***-2,1***	***-1,2***	***-0,1***	***0,6***	***1,2***
Actual budget balance [2]	Baseline scenario	**-2,1**	**-1,5**	**-0,6**	**-0,2**	**0,1**
	Low-growth scenario	***-2,1***	***-1,7***	***-1,1***	***-1,0***	***-1,0***

(1) Details may not add, due to rounding.
(2) In percent of GDP.

In case of an even greater growth shortfall, if, for instance, the growth rate were a full point below baseline for the next two years (1.3 rather than the 2.3 percent projected for 2003 in the *Forecasting and Planning Report (RPP)* and 1.9 in 2004, rather than 2.9 percent), the deficit would come down to 2.0 percent in 2003 and 1.6 percent in 2004. The cyclically-adjusted net borrowing would remain broadly similar to the baseline scenario, thus recording a reduction of more than 0.5 percentage points per year.

Figure 2 **SENSITIVITY OF THE ACTUAL BUDGET BALANCE TO GDP GROWTH**
(percentages of GDP)



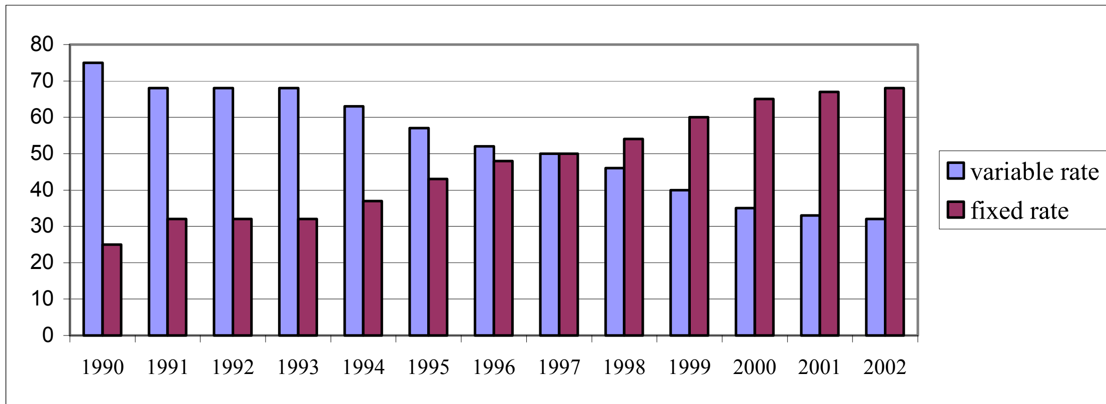
5.2 Sensitivity to interest rates

This section examines the effects of an alternative interest rate scenario. The key elements in the simulation are the maturity structure of the public debt and its average duration. At the end of September 2002, Italy's public debt mostly consists of fixed-rate securities, which accounts for 69 percent of the total (Figure 3), and has an average maturity of 5.94 years. Duration is 3.6 years, virtually unchanged from 2001.

The debt management policy is assumed to keep the share of variable-rate debt within a range of 25 to 30 percent of the total. Financial duration is projected to remain constant through 2006.

The estimates of interest expenditure given in this Stability Programme Update are based on the interest rates implicit in the yield curve for Italian government securities recorded by mid-September market values (Figure 4).

Figure 3 **COMPOSITION OF ITALY'S PUBLIC DEBT**
(percentage values)

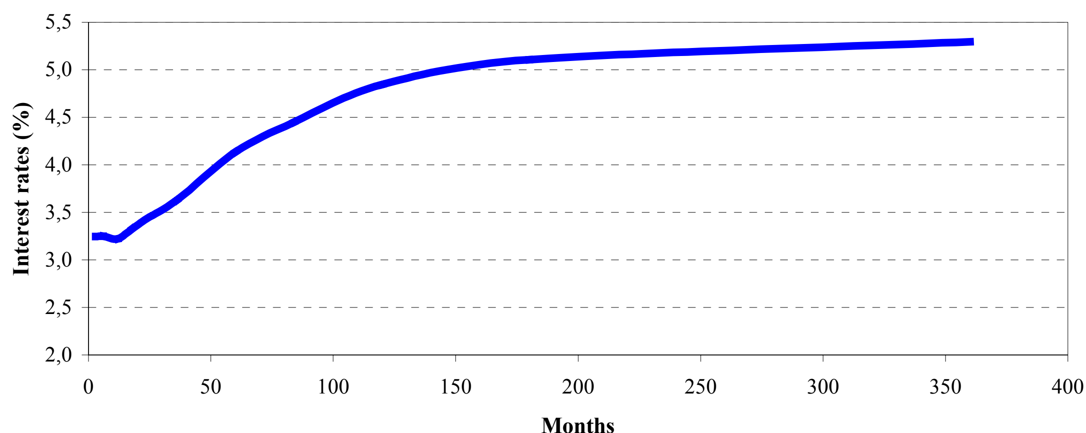


Assuming a 100-basis-points upward shift of the entire yield curve compared with the baseline scenario, the impact on interest outlays would be 0.22 percent of GDP in the first year, 0.41 in the second, 0.49 in the third, and 0.56 in the fourth.[2] The rise in interest rates is transferred entirely to the cost of the debt after 5.28 years.[3]

[2] It should be noted that this exercise focuses on interest spending gross of withholding tax. Specifically, we do not take account of the effects of rate changes either on economic activity or on tax revenues deriving from investment income (the tax on interest income from bonds and bank deposits, which is correlated with interest rates). Thus the above results do not automatically imply the sensitivity of the overall budget balance to interest-rate changes.

[3] This does not coincide with the average maturity of the debt owing to the features of floating-rate Treasury Credit Certificates, which have a semi-annual coupon.

Figure 4 **YIELD CURVE**
(at 12 September 2002)



By comparison with last year's Stability Programme Update, there is a slight increase in sensitivity, except for the third year, where it remains unchanged. This effect is mainly due to the downward revision of nominal GDP growth projections over the reference period.

6. THE QUALITY OF PUBLIC FINANCES

The reduction of the fiscal burden started with the *Finance Bill* for 2003 is the linchpin of the programme of structural reforms to improve the Italian economy and increase its growth potential in line with the objectives set by the March 2000 Lisbon European Council. The easing of the tax burden is complementary to measures aimed at expanding the tax base and bringing underground activity to the surface, fostering labour supply and enhancing market flexibility.

Together with the measures included in the mass concordat for the regularization of social security positions and the renewal of the capital-repatriation provisions (Chapter 4), tax reduction is a key factor to foster the permanent surfacing of significant parts of hidden economic activity.

Tax cuts for lower-income groups also stimulate labour-market participation and employment, in line with the European agenda (Section 6.1).

Finally, tax reduction is an integral part of a broader accord with the social partners, enshrined in the Pact for Italy, which aims to modernize and make more efficient goods and labour markets (Section 6.2).

6.1 Tax reduction and labour supply

Despite the progress made recently, Italy is still characterized by a particularly low labour-market participation, especially among women. Both husband and wife are employed only in 53 percent of couples with the spouse of the head of the household between 25 and 54 years old (Table 8).[4]

Increasing labour supply is a key objective of the labour market reform. Action concentrates on three critical elements: the South, where regular employment is endemically low; the older age groups, who despite recent progress still tend to leave the labour market too early; and social and demographic groups structurally characterized by low participation, most notably women.

[4] In a fifth of them, the non-head is employed part-time.

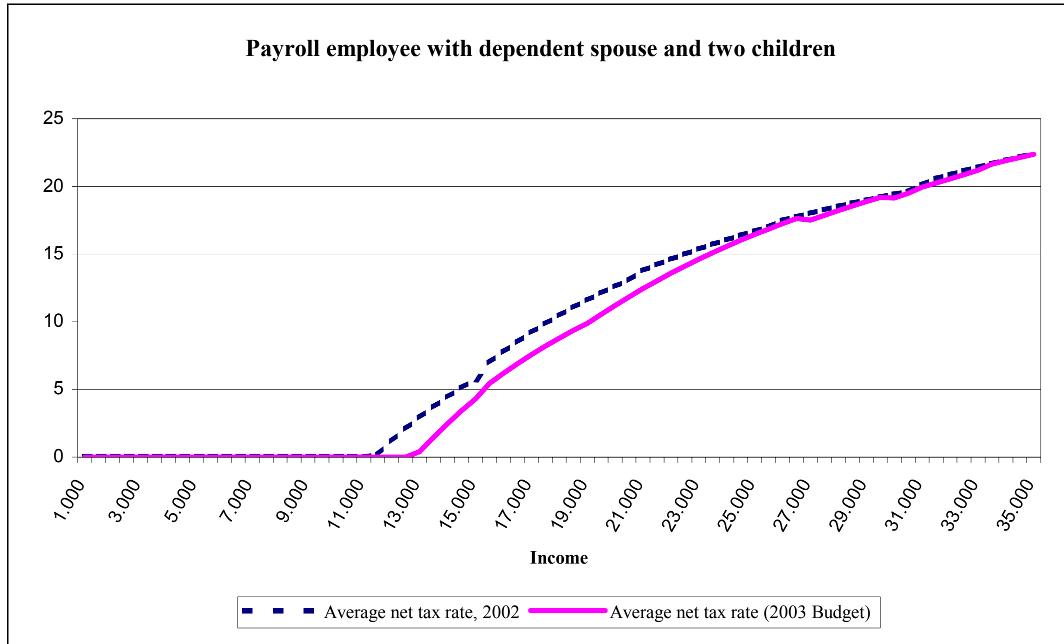
Table 8 EMPLOYMENT OF THE 25-54 YEAR-OLD BY FAMILY STATUS

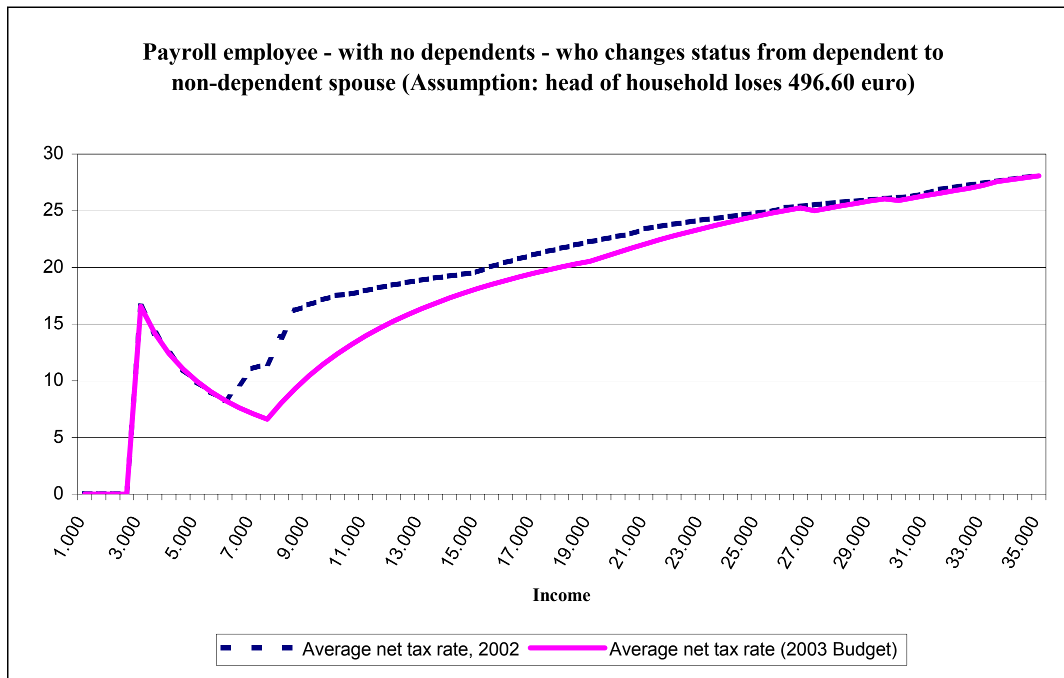
Family status	Employed (thousands)		Employment rate (%)		Part-time share (%)	
	April-95	April-02	April-95	April-02	April-95	April-02
Single	1573	2279	73,8	79,6	5,7	7,4
Head of household						
Working spouse	3360	3757	91,7	92,8	1,8	3,3
Non-working spouse	3906	3299	87,2	88,1	2,0	2,6
Spouse						
Working head of household	3515	3953	46,1	53,0	14,2	19,1
Non-working head of household	462	500	33,0	38,1	11,9	16,8
Children and others	2937	4042	61,9	66,3	6,5	7,6
Total	15752	17831	65,5	69,9	6,2	8,6

Source: based on ISTAT data.

A major stimulus to labour market participation comes from the reductions in personal income tax included in the *Finance Bill* for 2003, whose benefits are concentrated on the lower brackets. In particular, the reduction in the implicit tax rate is very substantial (about 10 percentage points) for spouses who start with a paid job with gross earnings of around €10,000 per year.

Figure 5 **AVERAGE TAX RATE BY INCOME LEVEL**
(percentage)





For those already participating in the labour market, the reduction of the tax burden has both a substitution and an income effect. The former favours labour supply,

in that a lower marginal tax rate raises the opportunity cost of activities other than paid employment, while the latter tends to reduce labour supply, in that lower taxes allow the same after-tax income with less work. The net effect for the already employed is therefore ambiguous in theory. For persons who are initially not participating in the labour force, assuming that the household only receives labour income (and ignoring the increase in after-tax earnings for the spouse who is already working), the tax reduction has only a substitution effect, thus increasing the probability of participating in the labour market.

Empirical analysis shows that for individuals already in the labour market, both the income effect and the substitution effect are quite small and tend to cancel each other out. Conversely, for married women outside the job market, the elasticity of participation with respect to wages appears to be much greater.[5] Available estimates indicate that the wage elasticity of female labour supply is greater than that of men (around 0.7, compared with at most 0.5). Moreover, this elasticity increases for lower-income groups, reaching values higher than 3 for women in the lowest-income households, compared with less than 1 for middle-income women and practically 0 for upper-income wives.

According to available estimates, the tax measures adopted with the *Finance Bill* for 2003 should induce greater labour supply, with positive effects on potential output over the medium term.

6.2 The Pact for Italy

The effects of the tax reform described above come on top of those of the policies agreed in the Pact for Italy between the Government and the social partners in July. The reforms contained in the Pact are designed to increase consumption, to improve labour market flexibility while at the same time providing broader and more effective safeguards consistent with the goal of greater flexibility, as well as to

[5] While the estimates of labour supply elasticity depend on the analytical details of the model used, the most reliable studies appear to be those that explicitly consider the existing constraints in terms of wages and hours worked, the state of the local labour market, the joint nature of decisions to work or not work, and the fertility of the couple.

strengthen programmes for the development of Southern Italy. This strategy takes shape through the fiscal reform just detailed and the enabling bill now before Parliament.

The reform of the labour market calls for the modernization of the job placement system (with co-existence and greater synergy between public and private structures), the strengthening of the welfare-to-work principle for income support programmes and employment incentives, widening the range of flexible forms of employment and an extension of possibilities for part-time work, and experimental measures to foster regular employment and the growth of small firms.

To improve the matching between labour demand and supply, the Pact calls for simplification and a pro-active reordering of public employment services, greater scope for private agencies, which will be able to offer a broader range of services, and greater synergy through the creation of a computerized "Employment services network".

As for income support programmes, the new system of "active protection" is based on the simultaneous presence of two pillars: a basic, universalistic programme and supplementary benefits depending on the decisions and funding by business and labour on an industry-by-industry basis. The former provides regular unemployment benefits that are both larger, in order to protect workers in a labour market that should become more flexible and dynamic, and more effective in providing incentives for the search for a new job. The benefit will be gradually reduced over time (from 60 to 40 to 30 percent of the last wage) and will last for at most twelve months, with a strict relation between benefits, and rights and obligations of the unemployed in terms of participation in training activities and acceptance of job offers with benefits being forfeited when these conditions are not fulfilled. There is provision for a reordering of the economic incentives for employment, focusing on the high-risk groups and preventing the deployment of resources in order to compensate for rigidity in the rules.

Along the lines of previously adopted measures, in particular the 1997 "Treu package", the range of flexible employment arrangements is to be extended and reordered. Special importance is attached to part-time work – which will be favoured as a flexible type of contract, first and foremost in terms of hourly work, with expected employment benefits for women, young people and older workers – as well as types of contracts covering the transition between school and work.

Experimental and temporary measures are also envisaged to promote new regular employment positions and to encourage the enlargement of small firms. These programmes will be monitored, and the experimentation will end with a joint assessment by the Government and the social partners on the effects in terms of job creation and increase in the size of small firms.

Finally, the Pact for Italy specifies the Government's commitment to enhance the infrastructural endowment of the South through qualified public investment, the rationalization of incentive programmes and measures to attract private investment that can improve the region's competitiveness. The Pact reaffirms the strategic objective of raising the South's share in government capital spending to 45 percent in the medium term. Consistent with the goal of improving quality, the system for monitoring public investment will be improved.

7. THE SUSTAINABILITY OF PUBLIC FINANCES

7.1 Pension and health care expenditure (2001–2050)

As throughout Europe, population ageing is proceeding in Italy and will have a significant impact on public finances. This chapter examines the medium and long-term effects, focusing on the evolution in pension and health care spending up to 2050.

The projections of pension and health care expenditures are based on the methodology agreed within the EU Economic Policy Committee's Working Group on Ageing (EPC-WGA). The key assumptions, agreed upon at European level, concern participation rates, employment rates, and productivity growth rates (Table 9).[6]

The labour force participation rate is projected to rise by 10 percentage points, from 64.2 percent in 2001 to 74 in 2050, thanks mainly to women's participation, which should rise by 18 percentage points. At the same time, the unemployment rate is projected to come down from 9.5 percent in 2001 to 7 in 2050.[7] Labour productivity is assumed to grow at an average annual rate of just under 2 percent from 2005 on. Real GDP is posited to grow by 2 percent per year in the first part of the projection period and then gradually subside to slower rates.

[6] The projections are by the State Accounting Office Department (Dipartimento della Ragioneria Generale dello Stato). For details of the working group's baseline scenario, updated to 2002, see "Year 2002 Update of the Italian pension and health care projections based on the EPC-WGA scenarios – An explanation of the differences from previous projections", submitted to the EPC-WGA, which also describes the assumptions of the so called Lisbon scenario.

[7] A prudential assumption if compared with the macroeconomic scenario presented in Chapter 2, where the unemployment rate decreases below 9 percentage rate in 2003 instead of 2010.

Table 9 **LONG-TERM SUSTAINABILITY OF PUBLIC FINANCES**
(percentage of GDP)

	2001	2005	2010	2020	2030	2040	2050
Pension expenditure[1]	13,8	13,9	13,8	14,5	15,7	15,6	14,1
Health care expenditure[1,2]	6,0	5,9	6,1	6,5	7,0	7,4	7,6
Assumptions							
Labour productivity growth	-0,3	1,9	1,9	1,8	1,8	1,8	1,8
Real GDP growth	1,8	2,4	1,9	1,4	0,7	1,0	1,2
Male participation rate (20-64)	78,5	80,0	80,9	80,9	79,3	79,0	79,0
Fermale participation rate (20-64)	50,0	53,7	55,0	56,4	59,7	65,8	68,7
Total participation rate (20-64)	64,2	66,9	68,0	68,8	69,7	72,6	74,0
Unemployment rate	9,5	9,3	8,9	8,4	7,9	7,3	7,0

(1) As percentage of GDP.
(2) Including public health care expenditure for the assistance of the elderly.

Under these assumptions, pension expenditure would increase gradually from 13.8 percent of the Italian GDP in 2001 to 15.7 in 2030, peak at 16.1 in 2034, and then decline to 14.1 in 2050 (Figure 6). Health care expenditure would rise from 6 percent of GDP in 2001 to 7.6 in 2050.

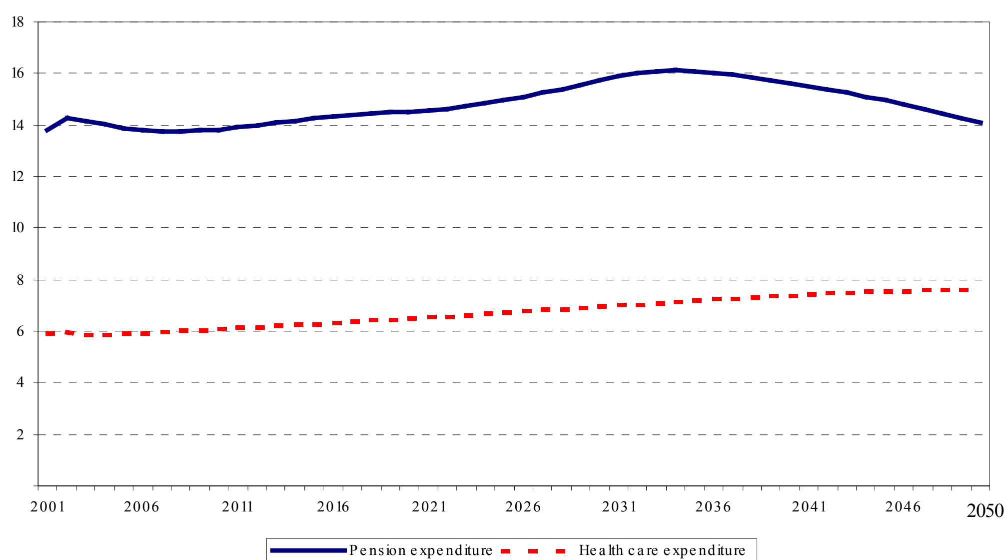
Compared with the projections presented in last year's Stability Programme Update,[8] there is a modest decrease in pension expenditure in proportion to GDP, owing largely to the review of "dormant" positions within the social security administration's data banks.[9] This more than offsets the combined effects of the increase in minimum

[8] This year's projections have been revised, by comparison with last year's, to take account of the measures embodied in the Finance Law for 2002 and the *Finance Bill* for 2003 as well as of more recent data on GDP and pension and health spending in 2001. On pension expenditure, the effect of the revision of the social security administration's data banks completed at the start of 2002 is incorporated. The new projections also take account of the revision of health expenditure in 2001 on the basis of updated data from the Regions, which were released by ISTAT at the start of the year. Finally, the GDP forecast for 2002 has been revised in the light of the *Forecasting and Planning Report* for 2003 issued in September.

[9] In 2001, INPS cross-checked its data banks to identify the "dormant" positions. That is it combined positions opened in different INPS schemes, to avoid counting as pensioners, individuals who are actually still contributing to the system. This update reduced the number of positions by nearly 500,000, concentrated mostly in the first decade of the projection period. For details, see Ministero dell'Economia e delle Finanze – Dipartimento della Ragioneria Generale dello Stato, *Le tendenze di medio-lungo periodo del sistema pensionistico obbligatorio: le previsioni del Dipartimento della Ragioneria Generale dello Stato aggiornate a maggio 2002 utilizzando le nuove basi assicurative dell'INPS.*

pensions included in the Finance Law for 2002 and the measures in the *Finance Bill* for 2003, the slower GDP growth in 2001 and 2002, and the revised assumption on productivity growth. The saving is greater in the early years of the period and smaller towards the end. There is thus a rise of a tenth of a point in the peak of pension expenditure.

Figure 6 **PENSION AND HEALTH CARE EXPENDITURE**
(percentage of GDP)



Health care spending is projected to be greater than in last year's Update,[10] owing to the revision of the starting values. The *Finance Bill* for 2003 contains measures to curb the growth of expenditure in future years, saving more than 0.2 percent of GDP each year (see Chapter 3). These measures involve the reinstatement of patient co-payments for specialist examinations and diagnostic visits, a restriction on the number of patients eligible for thermal bath treatments, an increase in the discount charged to pharmacies, and the reordering of the list of approved medicines.

[10] See note 6.

A second projection based on the scenario put forward in the *Forecasting and Planning Report for 2003* was carried out too. Compared with the previous scenario, the new assumptions involve: a slight worsening of the old-age dependency ratio in the later decades; a slight decline in the participation rate towards the end of the projection period; a better performance of unemployment; and slower productivity growth in the first few decades. This exercise projects pension expenditure trends similar to those of the EPC-WGA baseline scenario for the first part of the period, a 0.4 percentage point reduction in the peak, and a 0.7 percentage point decrease in the ratio of pension spending to GDP in 2050. Health care spending is slightly lower than in the baseline projection.

All in all the simulation results show that even under existing legislation population ageing does not threaten the sustainability of Italy's public finances. No significant additional resources will be required to fund the system in the long run (see Section 7.2).

Although the resources required to fund the pension system are broadly constant over time, by European standards they are currently quite large in percent of GDP and pose a constraint on the ability to reduce the tax burden on households and firms.

A lowering of pension expenditure in proportion to GDP can be attained through higher employment levels and a reshaping of social spending. Measures to this end are included in the fiscal and social security reforms, designed to enhance incentives to work and to lower the tax and social contribution burden, as well as in the measures to increase both flexibility and protection within the labour market. Following the guidelines laid down in the recent *National Strategy Report on the Pension System*, the Government intends to stimulate labour demand through a relief on social contribution, to foster the "surfacing" of underground employment and encourage people to prolong their working life and to develop supplementary private retirement provisions. To ensure effective control of health care spending, the Government will fully implement the State-Regions Agreement, which calls for the stabilization of health care expenditure at 6 percent of GDP. Measures to this end are included in the *Finance Bill for 2003*.

7.2 Sensitivity to the primary budget surplus

This section evaluates the effect of the projected rise in pension and health care expenditure on the adjustment of public finances and the reduction of the debt/GDP ratio by analysing two simulations (Figures 7 and 8). The baseline assumes that the primary budget surplus remains constant from 2007 to 2050 at its forecast value for 2006, i.e. 5.5 percent of GDP. This implies that the overall rise in the ratio of pension and health care spending to GDP, amounting to about 3 percentage points over the next 30 years, is accompanied by countervailing spending or revenue measures so as to keep the primary budget balance unchanged.

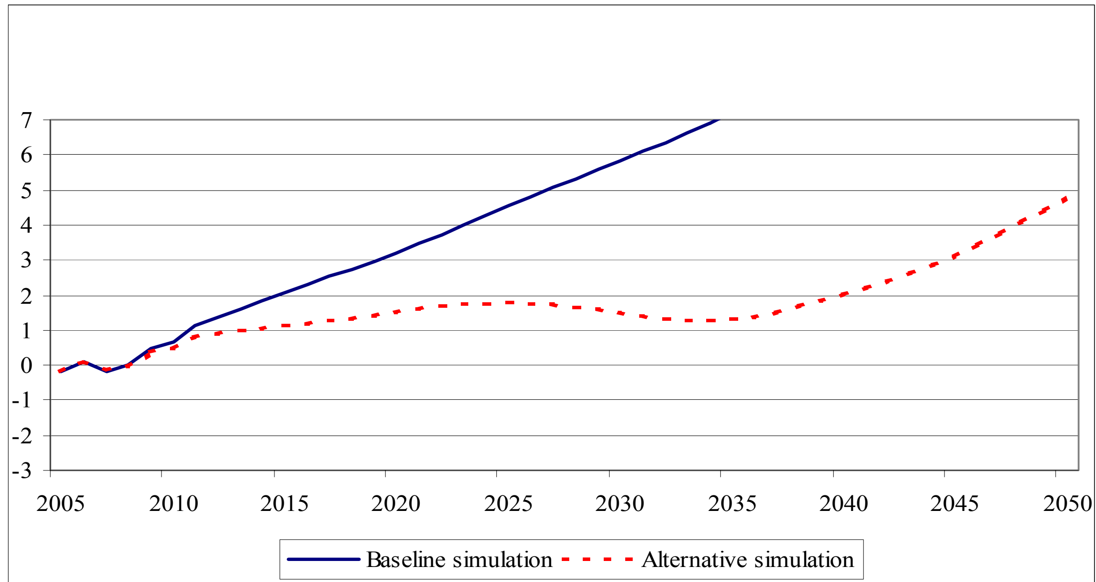
The alternative projection assumes that the primary surplus diminishes over time in line with the projected rise in pension and health care expenditure. Unlike the baseline scenario, this projection assumes no spending or revenue measures to offset the impact of rising pension and health care expenditure on the primary surplus.

The underlying assumptions are those of the baseline demographic and macroeconomic scenario agreed within the EPC-WGA, as described above (Table 9).[11] The nominal interest rate level assumed in both projections is equal to the nominal GDP growth rate plus 2 percentage points.

In the baseline projection, with a constant primary surplus of 5.5 percent of GDP, the overall budget balance improves steadily, with a growing surplus. The public debt drops below 60 percent of GDP in 2016.

[11] These projections, as mentioned in the previous section, incorporate the effects of the measures contained in the Finance Law for 2002 and the *Finance Bill* for 2003.

Figure 7 **ACTUAL BUDGET BALANCE**
(percentage of GDP)



In the alternative scenario, the overall balance improves but the surplus is significantly smaller than in the original baseline scenario. The debt ratio nevertheless drops below 60 percent in 2017, one year later than in the baseline projection, and continues to decline afterwards.

Additional exercises have been conducted to test the sensitivity of the alternative simulation to some assumptions. First, the level of interest rates was modified, narrowing the differential over GDP growth from 2 points to 1. With this modification, the debt ratio falls below 60 percent in 2015, two years earlier than on the other assumption.

Secondly, different assumptions have been made for the level of the primary surplus from 2007 onwards (Table 10). The results show that if the primary balance is reduced every year by 0.6 percentage points (i.e. 4.9 percentage in 2007 instead of 5.5), the debt ratio falls below 60 percent in 2020 instead of 2017.

All these exercises show that even if the additional pension and health care expenditure caused by population ageing were financed by net borrowing, the trajectory of debt reduction to the 60 percent threshold would not be compromised.

Figure 8 **PUBLIC DEBT**
(as percentage of GDP)

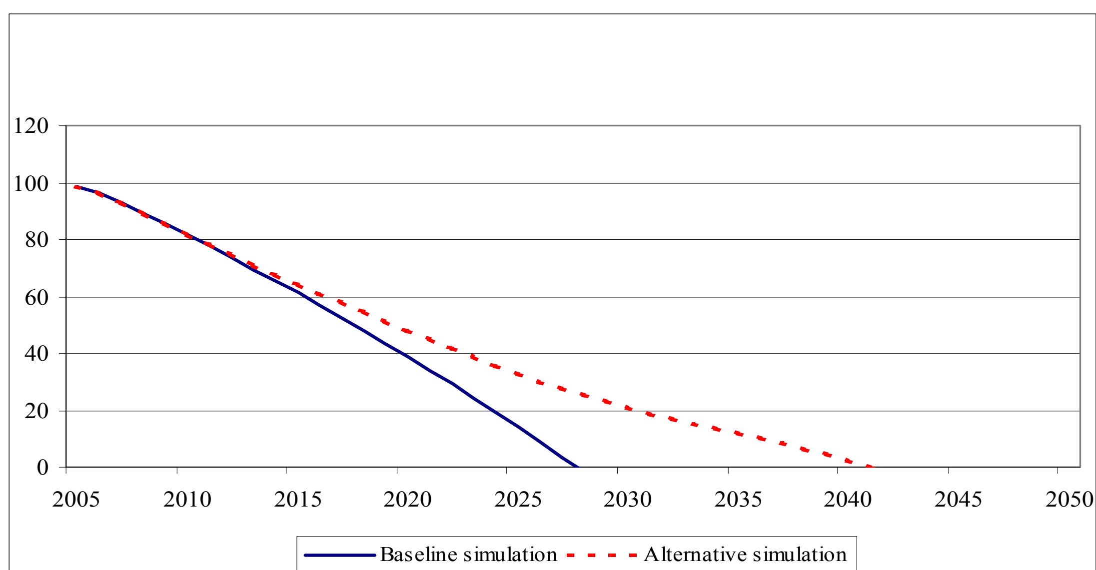


Table 10 **SENSITIVITY OF THE PRIMARY BALANCE – ALTERNATIVE SCENARIO**
(percentage of GDP)

Primary balance in 2007		2010	2015	2020	2030	2040	2050
5,5	Net borrowing	0,5	1,1	1,5	1,5	2,0	4,8
	Public debt	81,9	64,5	48,1	20,8	2,3	-28,3
5,3	Net borrowing	0,2	0,8	1,2	1,0	1,4	3,9
	Public debt	82,7	66,4	51,3	26,8	11,8	-14,6
5,1	Net borrowing	0,0	0,5	0,8	0,6	0,7	3,0
	Public debt	83,5	68,3	54,5	32,8	21,3	-0,9
4,9	Net borrowing	-0,2	0,3	0,4	0,1	0,1	2,2
	Public debt	84,4	70,3	57,7	38,9	30,8	12,8
4,7	Net borrowing	-0,5	0,0	0,1	-0,4	-0,5	1,3
	Public debt	85,2	72,2	60,8	44,9	40,3	26,5
4,5	Net borrowing	-0,7	-0,3	-0,3	-0,8	-1,2	0,4
	Public debt	86,0	74,2	64,0	50,9	49,8	40,2

ANNEX
THE WORLD ECONOMY

After the slowdown that marked the second half of last year, 2002 opened with encouraging signs of an upswing in the industrial economies. Starting in the second quarter, however, world economic activity experienced a new deceleration owing to a combination of factors: financial market turmoil as a consequence of corporate accounting scandals, declining confidence on the part of economic agents, and higher oil prices in view of the risk of renewed conflict in the Middle East.

The reference framework for this Stability Programme Update is the *Forecasting and Planning Report* for 2003 released at the end of September. Consequently it does not incorporate the further deterioration in the growth outlook that has taken place since. On the basis of the data available at the end of September, world economic growth in 2002 should come to 2.8 percent, compared with a forecast of 3.5 percent formulated in the autumn of 2001. Estimated world trade growth has come down from 6 to 2.3 percent. The US economy is now expected to grow by 2.2 percent this year, the European Union by 1.1.

An international upturn is forecast for 2003, although a less robust one than had been expected a year ago. The forecasts available in September put world GDP growth at 3.7 percent next year, with a steady strengthening in the second half of the year.

Demand should return to a path of expansion as a consequence of the control of inflation and the economic policy measures of the main industrial countries, and in conjunction with the improvement in business confidence. The improvement in the cyclical outlook should be supported by the positive effects of a series of structural factors, such as the flexibility of the US economy and Europe's sound fundamentals. An acceleration of growth in the advanced economies to 2.5 percent next year is thus forecast. In the United States the upturn should be sustained above all by productivity gains, higher profits and a recovery in investment. In the European Union it should also be fostered by the ebbing of the inflationary pressures that emerged at the start of 2002.

Table 11 ASSUMPTIONS ON INTERNATIONAL ECONOMIC VARIABLES*
(percentages unless otherwise specified)

	2002	2003	2004	2005	2006
Short-term interest rate, euro area	3,2	3,5	3,9	4,7	4,8
Long-term interest rate, euro area	4,8	5,0	5,3	5,4	5,5
Short-term interest rate, US (3-month money market)	1,6	1,9	2,7	3,4	3,9
Long-term interest rate, US (10-year government bonds)	4,7	4,4	4,8	5,1	5,4
USD/euro exchange rate[1]	0,95	0,99	0,99	0,99	0,99
World GDP growth rate	2,8	3,7	4,4	4,3	4,3
Industrialized countries GDP growth rate	1,7	2,5	3,2	3,1	3,1
World GDP growth rate excluding EU	2,6	3,2	3,8	3,7	3,7
US GDP growth rate	2,2	2,6	3,8	3,5	3,5
Japan GDP growth rate	-0,5	1,1	1,7	1,7	1,8
EU GDP growth rate	1,1	2,3	2,8	2,7	2,7
Growth rate of significant Italian export markets	1,2	7,3	7,6	7,8	7,8
World import volume growth rate (excluding EU)	6,0	7,5	8,8	8,6	8,6
World import price growth rate (goods, in USD)	3,0	4,8	1,0	1,0	1,0
Oil price (Brent USD/barrel)	23,9	24,4	23,0	23,0	23,0
Non-oil commodity price growth rate (in USD)	-0,9	4,5	2,5	2,5	2,5

* The assumptions on the international variables (extra-EU) are not significantly different from the last European Commission forecasts available at the end of September (*Spring Forecasts*).

GDP growth should thus come to 2.6 percent in the United States and 2.3 in Europe. Japan is expected to return to growth with an expansion rate of 1 percent, higher than last Spring forecast.

Given these developments, world trade is forecast to accelerate sharply to an expansion rate of 7.9 percent.

In the medium term a marked improvement in international growth prospects is expected. Both in the United States and in the European Union growth should approach its potential rate as early as 2004. The output gap would thus begin to narrow in that year and be completely closed by the end of the projection period in 2006.

This international forecasting scenario is subject to some risks, particularly relating to the geopolitical situation in the Middle East. The forecasting scenario posits

stable oil prices, with Brent crude holding at around $23 a barrel. An aggravation of the political situation might result in a negative supply shock for the world economy, leading to economic stagnation and rising inflation. Making a quantitative estimate of these effects is difficult because of the uncertainty related both to the level that energy prices could reach and the duration of a possible crisis.