O F C E

GROWTH IS ELSEWHERE

A scenario for the world economy up to 2005

N° **M-97-02 MAY 1997**

Mimosa Team*

^{*} This paper is a translation of: « La croissance est ailleurs », *Lettre de l'OFCE*, n°163, May 1997, written by the MIMOSA team, common to the CEPII and the OFCE. In may 1997, this team, directed by Henri Sterdyniak includes Laurence Boone, Loïc Cadiou, Bruno Coquet, Philippine Cour, Stéphanie Guichard, Hervé Le Bihan and Frédéric Lerais.

CONTENTS

1. INTRODUCTION	4
2. EXCHANGE RATES AND INTEREST RATES HYPOTHESIS	6
2.1. EMU	6
2.2. The rise in the dollar	7
2.3. The interest rates	11
3. PUBLIC FINANCES: COSTLY REFORMS	11
4. OECD: A SOFT CYCLE?	13
4.1. HOUSEHOLDS SLUGGISH CONSUMPTION	13
4.2. PRODUCTIVE INVESTMENT: A POSITIVE DYNAMIC	14
4.4. LABOUR MARKET: CONTRASTED PATHS	14
4.5. PRICES: DEATH OF INFLATION	16
5. DEVELOPING WORLD: INCLUDED AND EXCLUDED	17
6. WORLD TRADE AND OIL MARKET	17
6.1. BUSINESS CYCLE SYNCHRONISATION AND INTENSIFIED REGIONAL TRADE	17
6.2. SUSTAINABLE DEFICITS	
6.3. OIL MARKET: CALM AFTER THE STORM	19
ANNEX 1. UNCERTAINTIES ABOUT EURO CREATION	21
Outs and Candidates	22
A larger EMU?	22
ANNEX 2. IMPACTS OF RESTRICTIVE FISCAL POLICIES	24
Why trimming fiscal policies?	24
Effects of fiscal measures in 1997-1998?	24

1. Introduction

Growth is elsewhere... That is the confused but dominating feeling in Europe. The fast developing countries (Asia, some of the Latin America countries) are far away: yet, their economic dynamism looks like a threat for our traditional industries. Over the last five years, the United States have enjoyed a remarkable recovery with a growth rate 5 per cent higher than Europe; they seem to have achieved full employment. Japan has gone through 4 years of deep recession, but unemployment remains low. Furthermore, recovery seems to have emerged in 1996. The depreciation of the yen for the last two years should counterbalance the tightening of fiscal policy announced for 1997. By contrast, Europe has not overcome the recession of 1991-1993. The areas surrounding the European continent have not done much better. Africa seems to be rooted in economic stagnation. Some (like Algeria, the Balkans or the CEI) are victim of their political instability. Others (Eastern Europe) are in a delicate stage of economic transition.

In the short run, the strength of the dollar combined to loose monetary policies should sustain growth in Europe. However, the restrictive fiscal policies might act the other way round. Hence, the 1997-98 recovery will be moderate. In Japan the restrictive fiscal policy slows the economy down in 1997, but recovery should take over in 1998. Finally, growth will remain strong in the States in 1997, but should be a bit weaker in 1998.

The fundamentals look good over the medium run. Inflation should remain low, companies are in a good financial shape, and external balances are positive. Yet, the underlying dynamic for growth appears weaker. The European economies have to face a very high level of unemployment. Real salary growth is subdued, constraining internal demand. Public deficits are relatively high despite restrictive budgetary policies. Economic policies are not very active: monetary policy is bound by the price stability objective; fiscal policy is bound by the Stability and Growth Pact. Europe suffers from a lack of political co-ordination. The States should go through a period

of moderate growth at the end of the nineties, which will be followed by a recovery, though not as strong as the current one, due to a more moderate rate of growth in investment. On the other hand, Japan should enjoy a period of healthy growth, though to a lesser extent than it used to.

As a result, the world economic dynamism rests on Asia. The NIC display less impressive growth rates because the catch up mechanism is about to be achieved. But they are now followed by the rest of Asia, whose economic activity should grow at annual rates around 8 per cent. Central and Eastern European countries should enjoy sustainable growth following the economic restructuring of the nineties. They will be helped by the progressive opening of European markets and by developing external trade. Latin American countries have steadily recovered over the last six years. Yet, the 1995 Mexican crisis and social unrest in several countries have highlighted the fragility of the path towards a healthy and sustainable growth. Economic activity will grow moderately over the next three years, but should carry on at a faster pace thereafter.



1. GDP growth

2. Exchange rates and interest rates hypothesis

2.1. EMU

It is not possible to tell today what decision will be taken in April 1998 by the European Council (annex 1). The scenario described here, called scenario 1, is that of a Euro reduced to a hard core of countries, which have been keeping a fixed parity with the DM for a long time: Germany, France, Benelux (Belgium, the Netherlands and Luxembourg), Austria and Ireland. Yet, the efforts implemented by the Southern countries (Italy, Spain, Portugal) have been huge. So it is likely that EMU will start with both the core and those countries. Another scenario, called scenario 2 (described in Annex 1), allows an assessment of the choice of this large EMU.

The currencies that have experienced massive devaluations since 1992, have followed different paths since then: some have remained at a low level (Finnish Mark, Escudo, Drachma, Peseta); others have strongly climbed up (Irish pound, Norwich Crown, British Pound and Italian Lira).

The British Pound reached 2.96 marks in 1991; it fell to 2.20 marks in 1995 (–26 per cent). It is worth 2.76 DM today (an appreciation of 25 per cent and a cumulated fall of 7 per cent). This rise should dampen British growth in 1998. We forecast a stable Sterling/dollar parity from 1997, which should imply a depreciation *vis-à-vis* the DM in 1998.

The DM/Lira exchange rate was 750 in 1991. It went up to 1 170 at the beginning of 1995 (a fall of 36 per cent). It is worth 1000 today (a rise of 17 per cent, a total cumulated fall of 25 per cent). This appreciation appears hardly compatible with persistent fiscal consolidation and high long term interest rates (should Italy be excluded of EMU at the beginning). Therefore, scenario 1 includes a depreciation by the Lira of 10 per cent in 1998-1999.

Growth is elsewhere

2.2. The rise in the dollar

In the course of the last months, the dollar has slowly, then more rapidly, appreciated: in April 1995 a dollar was worth 1.35 DM, it is now worth 1.71 DM. The dollar is supported by relatively high short term interest rates (5.5 per cent versus 3.2 in Germany), a strong economic activity. This attracts capital flows. Yet, the United States still exhibit a 2per cent of GDP current account deficit, while the EU has a 1 per cent surplus. Although the Purchasing Power Parity theory argues that the dollar is undervalued, it does not help identifying the "right" level of exchange rates. Beyond the speculative episodes, the accumulation of current account deficits should continue to weigh on the exchange rate of the dollar. Hence, the dollar should not remain at this unsustainable level. Yet, a more or less lasting speculative bubble cannot be excluded, especially if activity remains strong in the United States (contrary to our forecasts). In 1997-1998, the projection scenario outlines a stronger growth in Europe, a relative slow-down in the United States, the end of scepticism towards EMU and the progressive disappearing of interest rates spreads between Europe and the United States. Then, the dollar should stabilise at 1.55 marks and 5.27 French francs (table 1).

The yen has strongly climbed up relative to the dollar, to the level of 1 dollar for 81 yens (in April 1995); it fell back since then to the level of 1 dollar for 124 yens, because of the erosion of the Japanese current account and the low level of short term interest rates (0.4 per cent). In the medium run, we foresee a pick up in economic activity, and a rise in interest rates. This should push the yen up to 110 for a dollar in 1998. Sustainable growth and tight monetary policy should lead the yen to appreciate by 3 per cent per annum thereafter.

The impact of the dollar's appreciation are analysed in Box 1.

	1994	1995	1996	1997	1998	1999	2005
Exchange rates							
D-marks per Dollar	1.62	1.43	1.50	1.63	1.55	1.55	1.55
Yen per Dollar	102	94	109	117	110	108	90
Franc per DM	3.42	3.48	3.40	3.40	3.40	3.40	3.40
Lira per DM	994	1 137	1 028	995	1 047	1 103	1 103
DM per Sterling	2.49	2.26	2.34	2.70	2.57	2.57	2.57
Short term interest rate							
Germany	5.3	4.5	3.3	3.2	4.2	3.7	4.5
France	5.7	6.4	3.8	3.4	4.2	3.7	4.5
Italy	8.5	10.4	9.5	6.2	7.7	7.7	8.0
United Kingdom	5.5	6.7	5.9	6.0	6.7	6.2	6.0
United States	4.2	5.4	5.0	5.0	5.0	4.7	4.5
Japan	2.2	1.2	0.6	0.4	1.0	1.5	4.5
Annual percentage change	1986/90	1990/95	1996	1997	1998	1999	1999/2005
Real oil price*	3.3	- 6.3	23.6	- 8.4	- 2.3	2.0	2.5
Real raw materials price	5.8	- 0.9	8.3	- 0.6	- 2.1	2.4	2.1

1. Int	erest rates	, exchange	rates an	d commodity	prices
--------	-------------	------------	----------	-------------	--------

* Price in dollars 1987 deflated by the price of manufactured exports in the OECD.

Annual percentage growth	1995	1996	1997	1998	1999	2000-2005
Germany	1.9	1.4	2.3	2.9	1.5	2.0
France	2.2	1.2	2.4	2.8	1.9	1.8
Italy	3.1	0.8	1.1	3.0	2.4	1.8
United Kingdom	2.4	2.3	2.6	2.1	1.8	1.8
Northern EU	2.4	1.4	2.7	2.9	2.0	1.8
Southern EU	3.2	2.6	2.5	2.7	2.9	2.2
Other EU countries	3.3	2.5	2.5	3.1	3.0	2.5
EU	2.4	1.4	2.3	2.8	2.1	2.0
Other Europe	0.2	0.0	2.7	1.2	- 0.4	0.5
United States	2.0	2.4	2.2	2.1	1.4	1.7
Japan	1.0	3.6	1.7	2.3	1.8	2.7
Other OECD countries	2.7	2.6	- 0.1	1.2	0.7	1.2
OCDE	2.0	2.3	2.1	2.4	1.7	2.0
CIS	- 4.0	- 6.9	- 2.8	1.0	2.6	4.0
Eastern Europe	4.9	3.8	4.4	4.3	4.9	6.4
Middle-East/Maghreb	3.2	3.9	4.1	5.1	4.3	4.5
Sub-saharian Africa	3.0	4.8	4.5	4.3	4.1	3.9
Latin America	0.9	3.8	3.5	3.9	4.3	4.9
4 Asia NIC	7.4	6.8	3.0	4.3	4.3	3.6
Other Asian countries	9.2	8.0	8.3	8.6	8.8	9.1
World	2.5	2.7	2.7	3.2	2.7	3.2

2. World ouput growth

	1994	1995	1996	1997	1998	1999	2005**
Inflation (annual rate, per cent)							
Germany	2.9	1.9	1.7	1.6	1.8	1.7	1.7
France	2.1	1.6	1.7	1.4	1.3	1.6	1.6
Italy	4.6	5.7	4.0	3.1	2.9	3.6	2.8
United Kingdom	2.7	2.7	2.7	1.9	3.0	2.7	1.4
Northern EU	2.4	1.5	1.8	2.4	2.1	2.1	1.2
Southern EU	5.5	5.0	3.6	3.9	4.1	4.6	2.8
United States	2.4	2.4	2.1	1.8	2.5	2.7	2.8
Japan	0.8	- 0.5	0.0	0.5	- 0.3	0.0	0.3
Unemployment rates							
West Germany	8.3	8.1	9.0	9.4	9.0	9.0	8.2
Germany	9.6	9.5	10.4	10.8	10.6	11.0	8.9
France	12.4	11.7	12.4	12.7	12.7	12.7	11.9
Italy	11.3	12.1	12.2	12.3	12.0	12.0	11.7
United Kingdom	9.3	8.1	7.5	7.0	6.5	6.3	6.1
Northern EU	9.9	9.2	8.9	8.7	8.3	8.3	10.2
Southern EU	18.2	17.5	17.5	17.8	18.2	18.6	22.5
United States	6.0	5.5	5.2	5.4	5.2	5.3	6.4
Japan	2.9	3.2	3.3	3.2	3.1	3.1	1.9
Government balance (per cent of GDP)							
Germany	- 2.5	- 3.5	- 3.9	- 3.4	- 3.1	- 3.3	- 2.3
France***	- 6.0	- 5.3	- 4.1	- 3.8	- 3.5	- 3.2	- 2.4
Italy	- 9.0	- 7.2	- 6.9	- 3.5	- 3.2	- 3.0	- 1.6
United Kingdom	- 6.8	- 5.6	- 4.8	- 3.8	- 3.6	- 3.3	- 0.7
Northern EU	- 3.8	- 3.3	- 2.7	- 2.5	- 2.2	- 1.9	- 1.4
Southern EU	- 7.1	- 6.1	- 5.2	- 5.0	- 4.5	- 4.8	- 5.3
United States	- 3.6	- 2.6	- 1.7	- 1.8	- 1.9	- 2.0	- 1.8
Japan	- 2.1	- 3.3	- 4.1	- 2.8	- 2.6	- 2.5	- 1.2
Current account (per cent of GDP)							
Germany	- 1.0	- 0.9	- 0.8	- 0.7	- 0.4	- 0.6	0.3
France	0.5	1.3	1.2	1.1	1.3	1.4	2.4
Italy	1.5	2.7	3.6	3.7	3.8	4.1	3.0
United Kingdom	- 0.4	- 0.5	- 0.1	0.3	- 0.6	- 0.9	- 0.3
Northern EU	3.4	3.8	4.1	4.5	5.1	5.9	11.4
Southern EU	- 0.3	- 1.4	- 1.9	- 1.5	- 1.1	- 1.3	- 0.4
United States	- 2.3	- 2.0	- 2.0	- 1.9	- 2.1	- 2.1	- 2.7
Japan	2.8	1.8	1.1	1.7	1.9	1.8	1.8

3. Major industrial countries: summary of results

* Average growth rate, 1999-2005, ** National Accounts basis. In the Maastricht definition, the figures must be diminished by 0.4 per cent GDP in order to take the " coupons courus " into account. *Source*: MIMOSA model CEPII-OFCE.

Box 1: Dollar's appreciation impact on business cycle in 1997-98

In 1997, European monetary conditions have been characterised by low level of interest rates, coupled with the dollar's appreciation. Using the MIMOSA model, we assess the impact of these currencies movement. We make the following assumptions about financial markets expectations: in year 1, the dollar rises by 10 per cent against all European currencies. In year 2, the dollar depreciates by 5 per cent. The monetary authorities reaction function is simple: they raise interest rates by 1.5 points when inflation increases by 1 point, and by 1 point when the unemployment rate falls by 1 point.

Following the dollar's appreciation, American competitiveness deteriorates, which slows growth down. Subsequently, the Fed lowers short term interest rates. At the same time, US partners gain in competitiveness: their production increases and consumption prices rise. The Japanese and European monetary authorities raise interest rates. This, in turn, reduces the *ex ante* appreciation: *ex post*, the dollar appreciates by only 9 per cent relative to the European currencies, and by a little less than 8 per cent versus the yen (table 4).

American production is slightly lower in 1998 (0.3 per cent), but inflation is reduced by 0.4 per cent in 1997. Production is higher in Japan and Europe (by 0.6 and 0.5 per cent respectively), whereas inflation rises slightly (+ 0.4 in Europe). As expected, the dollar depreciation boosts European growth, though the magnitude of this movement is restrained by tightening of monetary conditions.

	United States	Japan	FU
	United States	Japan	EU
GDP*			
1997	- 0.1	0.3	0.5
1998	- 0.3	0.6	0.4
Current account **			
1997	0.0	- 0.1	0.0
1998	- 0.1	- 0.1	0.1
Consumer Price *			
1997	- 0.4	0.4	0.4
1998	- 0.4	0.6	0.8
Unemployment rate***			
1997	0.1	0.0	- 0.2
1998	0.2	- 0.1	- 0.2
Government balance**			
1997	0.0	0.1	0.2
1998	- 0.1	0.1	0.2
Interest rate***			
1997	- 0.6	0.6	0.5
1998	- 0.2	0.5	0.4
Exchange rate****			
1997	0.0	7.8	9.1
1998	0.0	4.1	4.2

4. Impact of the rise in dollar

* per cent deviation, ** deviation in percent of GDP, *** deviation in percentage points ,**** a positive sign indicates a depreciation *vis-à-vis* the dollar.

2.3. The interest rates

As said above, Central banks interest rates react to the evolution of both inflation and growth rates. Hence, a fall in American interest rates should occur in 1999, while Japanese monetary policies should tighten. In the longer run, interest rates are permanently higher than growth rates by about 2 points for all countries (table 5).

	1976/79	1980/87	1988/92	1993/96	1997/2005
United States	- 3.7	3.2	2.3	1.4	2.6
Germany	- 1.0	3.2	0.6	3.4	2.2
France	- 4.8	2.4	3.5	4.0	2.3

5. Spread between long term interest rate long and GDP growth rate

Average spreads per cent.

Source: MIMOSA model CEPII-OFCE.

3. Public Finances: costly reforms

In the United States, the fiscal position of the Government improved thanks to six years of steady growth and to loose monetary policy: the public deficit should be around 1.4 per cent of GDP for the 1996 fiscal year. In other OECD countries, the situation sharply contrasts. Japan government spending have increased for six years in a row, widening the public deficit to 4.1 per cent of GDP in 1996. In Europe, weak economic activity prevented public deficits from being sharply improved: in 1996 the European Union average public deficit was 4.6 per cent of GDP.

Fiscal conditions should remain tight in all the OECD. In Japan, the ageing population emphasises the necessity of structural reforms. In the United States, the objective is to reach a balanced budget by 2002, in order to face the consequences of an ageing population. In Europe, efforts to comply with the Maastricht criteria will be pursued, to respect the Stability and Growth Pact. Lastly, the UK, though not a candidate to EMU aims at balancing the budget by 2000-01. Therefore, our scenario assumes tight fiscal conditions for the short and medium run.

Mimosa team

Most countries try to avoid unpopular rises in direct taxes. Most of the effort bears on by public spending (particularly investment, social benefits and civil servant wages). For instance, in the US discretionary spending are frozen, whereas taxes do not increase significantly. In Germany the social benefits scheme is being tightened, and the solidarity tax reduction is postponed until 1998. The Italian government is raising an exceptional tax in 1997 in order to qualify for EMU. In the UK, excises duties on alcohol, tobacco, gasoline, are being raised. In Japan, public investment plans are not pursued, while consumption and income tax, as well as social contributions are increased from April 1997.

According to our forecasts, most European countries should not be able to meet Maastricht fiscal criteria in 1997: both Germany and France both have a budget deficit slightly over 3 per cent. Despite intensive efforts, the Italian deficit should also remain above the target. Southern European countries deficits are forecasted to be above 4 per cent of GDP. On the other hand, the Japanese deficit should significantly be reduced, whereas it would remain stable in the US (table 5).

In the medium term, our forecasts show a significant deficit reduction for the UK, Japan and Italy. US, France and Germany (in the latter case, due to the persisting burden of the Eastern Landers) should a more modest improvement. Overall, the share of public spending in GDP decrease; while the tax burden is flat or slightly increasing. Policies to improve fiscal balances slow down the economic activity, thus offsetting declining public expenditures by smaller tax receipts..

According to a simulation performed using Mimosa model (Annex 2), in 1997 fiscal policies would reduce growth by 0.9 per cent in Europe and by 1.5 per cent in Japan, and by 0.3 per cent in both areas in 1998 and 1999, despite a 0.9 fall in interest rates in both areas. The *ex-post* improvement in public balances would be 0.9 point of GDP in Japan, but only slightly above zero in Europe (except in Italy).

Growth is elsewhere

4. OECD: a soft cycle?

For the two coming years we do not forecast an acceleration of growth in the OECD (2.1 in 1997 and 2.4 in 1998 following 2.3 per cent in 1996). Yet in the European Union growth should be boosted by low interest rates and the high dollar, reaching 2.3 per cent in 1997 (versus 1.5 in 1996).

1999 should see the return of a business cycle, though of small magnitude (with a trough of 1.2 per cent in 2001, and a peak of 2.5 per cent in 2004). This cyclical dynamic is impulsed by investment and consumption, both variables experiencing a high growth rate in 1998 before a marked decrease. Despite strong fluctuations in investment, growth lacks momentum. Real wage growth remains weak, public expenditures are low. Income tax cuts are offset by benefits reductions. Public employment and wages are subdued. Household consumption remains feable and does not boost growth. Finally, OECD export shares are trending downwards so that world trade cannot help growth.

The US should experience a moderate growth at the beginning of our forecast period (2.2 per cent) followed by a slowdown. Europe and Japan should slow down a bit later. The subsequent recovery should resume with a synchronisation of the cycles.

Japan is to suffer from weak internal demand due to a harsh fiscal tightening in 1997. Thus growth is weak in 1997 (1.7 per cent), but it increases thereafter, and reaches an average of 2.7 per cent per annum between 2000 and 2005. Growth is strong in Europe in 1997, except in Italy which undergoes a severe budgetary adjustment. European growth is still healthy in 1998, but slowly decreases thereafter and only achieves 2.4 per cent at the end of our forecast period.

4.1. Households sluggish consumption

In OECD countries, real wages rises slightly, and even tends to decelerate in the United States. Although real wage growth is more vigorous in Germany and the United Kingdom, the trend remains sluggish in France and Italy, which depresses demand. Between 1997 and 2005, the annual growth of real wage per worker would only reach 0.1 per cent in France, 0.4 per cent in Italy, 0.7 per cent in the United States, 1.0 per cent in Japan, 1.1 per cent in the United Kingdom and 1.2 per cent in Germany, thus being much lower than labour productivity growth (except in the United States). This suggests that unemployment rates are above equilibrium. Real disposal income growth is stronger: 1.9 per cent in Japan, 1.8 per cent in the United States, 1.7 per cent in Germany, 1.4 per cent in France, 1.2 per cent in the United Kingdom and just 1.1 per cent in Italy (due to tax increases).

This weak growth of income is partly offset by the persistent decline in households saving ratio. This trend is explained by the low level of inflation, reduced real interest rates, and subdued income, but could vanish should pension schemes become threatened

4.2. Productive investment: a positive dynamic

In 1996, the financial situation of firms was very favourable. Firms even recorded a surplus of saving over investment in France and Italy. Thus, the contribution of investment to the 1997-98 recovery is high. Yet, the past lack of investment leads very quickly to tensions on production capacities in France and Germany. In Europe, investment growth slows down in 1999-2000 as demand decelerates, thus reinforcing the cyclical downturn. In the United States, investment begins to slow down in 1998, and decelerates more sharply in 1999. In Japan, productive investment continues to improve, after four years of downward adjustment, though at a lower trend than in previous recoveries. In the medium run, investment growth slows down and the investment to GDP ratio goes back to its early eighties value.

4.4. Labour market: contrasted paths

Labour productivity growth is moderate in Europe: 1.4 per cent per annum on average. This results from weak growth, the spread of part-time work, services sector expansion, and the deceleration of labour productivity partly due to employment policies aiming at reducing employment-costs for low-qualified workers. Labour productivity remains more dynamic in Japan (2.4 per cent a year), but particularly subdued in the United States (0.9 per cent a year). This movement of European economies towards the American standard should help lower unemployment in the short term, but it would also restrain potential growth and wage increase opportunities, thus threatening longer term growth.



2. Unemployment rates in Europe

In Japan, the unemployment rate decreases below 3 per cent as soon as 2001, following the moderate growth of labour force (just below 0.5 per cent per annum on average). In the United States, labour force continues to increase by 1 per cent a year. In the short run, the unemployment ratio remains close the its current low level; later, it increases regularly with the slowing down of economic activity, and rises to 6 per cent in 2001 before stabilising to 6.4 per cent. In Europe, labour force stagnates in West Germany, increases only slightly in Italy (0.2 per cent a year), and decelerates in France (from 0.8 per cent per annual in 1985-1996 to 0.2 per cent in 2005) and in the United Kingdom. The 1997-1998 recovery only leads to a temporary break in the rising unemployment trend in France and Germany. After having reached records in the trough of the economic cycle (13 per cent in France, 11.4 per

cent in Germany in 2001), unemployment falls down rather sharply at the end of the forecasting period under the combined effects of decelerating labour force and accelerating economic activity. In Italy, the unemployment ratio is stabilised at around 12 per cent over the whole period. Finally, Southern Europe faces an unemployment ratio above 20 per cent in 2005.

4.5. Prices: death of inflation

The sluggish growth combined to the unemployment level prevents any surge of inflation, despite an upward trend in energy prices and indirect tax increases in some countries. In the United States, one would indeed expect inflationary pressures in 1997, with respect to the level of unemployment compared to the usual NAIRU estimates. But these tensions are already cooled down by the rise of the dollar. Two scenarios can be thought of: either a tough action from monetary policy (which would reinforce the rise of the dollar), or, the one assumed here, a decelerating demand in 1998 following the end of the investment cycle, inventories adjustment and the high level of the dollar. Inflation would be around 2.9 per cent in 1999, before stabilising at 2.7 per cent. In Japan, prices are almost unchanged until 2002. Then, the recovery and the swift fall of unemployment bring inflation above 1.5 per cent in 2005. In Europe, inflation rates remain close to 1.6 per cent in Germany, France and Northern Europe. However, at the end of the forecasting period, Germany faces a higher inflation rate than France (2.1 per cent compared to 1.5 per cent) because of a lower and decreasing unemployment ratio. Inflation in the United Kingdom rises to 2.9 per cent in 1998-1999 due to the fall in unemployment combined to the return of a more balanced trend for wages. The depreciation of the Italian and Southern countries currencies in 1998-1999 (assumed in our scenario 1) fuels inflation which approaches 4 per cent in 1998. But this movement is temporary, and inflation is down to 1.9 per cent by the end of the period.

5. Developing world: included and excluded...

Entering the 3rd millennium should stir up world geopolitics. In Asia, emerging countries foster and benefit from globalisation process. Those countries annual growth rate should reach 8 per cent or more by 2005. By contrast, the Asian dragoons will go ahead toward their economic normalisation, registering lower growth rates, around 5 per cent a year on average. Latin America recovery should continue thanks to the reforms undertaken since the early eighties, yielding growth rate at or above 5 per cent during the next decade. Middle East countries would better perform than in recent years, to the extent that political instability calms down. We have forecasted a progressive recovery in these countries, which would reach a 4 to 5 per cent annual growth rate in the beginning of the next century, if they the can reclaim their growth potential. Africa would stay outside of this world-wide growth process: the basic conditions required for a modern economic activity have disappeared from most of these countries, and the raw material markets are unlikely to give increased profits to producers. As a consequence the weakness of the per capita growth rate would persist, around 1 per cent a year, that is about 3,5 per cent taking the huge demographic trend into account.

The increased openness of Western European markets will play a major role for Eastern Europe, creating a favourable environment for the undergoing reform process: we expect a 6 per cent annual growth on average in the medium term in the CEECs. In Russia and the CIS the recovering energy market should boost economic growth to 4 per cent a year between 2000 and 2005.

6. World Trade and oil market

6.1. Business cycle synchronisation and intensified regional trade

A world-wide economic cycle is clearly appearing in forthcoming years: European recovery in 1997 and 1998, and a continuing growth process in the United States and

Japan, are cancelling the gap observed since the early nineties between economic cycles.

Growth slowdown of the OECD countries in 1999 and their recovery after 2002 shape world trade evolution during our forecasting period. Despite weak economic activity in the OECD region and the slowdown of Asian emerging countries, world trade growth should reach 5.4 per cent on average from 1996 to 2005, less than over the previous 10 years. As European economies will be less dynamic than other areas, European trade will not grow more than an average of 4.5 per cent a year, which is stable compared to the previous period. Excluding intra-European trade, external demand for European products will grow by 7.5 per cent. The OECD trade balance remains stable around 0.6 point of GDP over the whole period. The Japanese surplus is growing slowly before flattening around 2.9 points of GDP. The growth rate gap between the US and Europe allows a stabilisation of US trade deficit in 1997.

At the end of our forecasting period economic recovery worsens US trade deficit up to 3.7 points of GDP in 2005. The European countries take advantage of this situation by improving their trade balance up to 4 points of GDP in 2005. The Italian Lira depreciation in 1998 and 1999 leads Italy to an improved trade balance in the medium term, while French and German surplus are both substantially growing over the period.

6.2. Sustainable deficits

During the next 3 years American and Japanese current balances should stabilise around, respectively, 2 and 1.7 points of GDP. Then the United States should experience a deterioration of their external account, which would lead to a deficit of 2.7 points of GDP by the end of our forecasting period. Germany reaches equilibrium, while other European countries also improve their external position. Overall, Europe would register a growing surplus up to 2 per cent of GDP in 2005, while the external position of OECD countries remains stable (table 6). On the other hand, developing countries net borrowing requirement persist. This situation appears to be normal and sustainable since developing economies experiment higher growth rates than industrialised countries, a trend which is likely to persist considering their lower initial development level and most dynamic demographic trends.

6.3. Oil market: calm after the storm

Despite the fears raised by its recent increase, the price of oil should moderate in the forthcoming years. Instability in 1996 resulted from speculative behaviours and political uncertainties. We do not expect either of these to persist over the very next years: the first months of 1997 have already seen a significant decrease in oil price. The end of Iraq embargo, the stability of OECD demand (a decrease in the US balancing an increase in Europe), and the demand of the dynamic developing areas, should finally leave a small surplus in world oil supply. As the production capacity is satisfactory¹, the situation is approximately balanced which should prevent a huge shock on the world energy market in the medium term. As a consequence we expect the barrel to slowly increase up to \$22 by 2005.

¹ Indeed, world resources do not raise any problem before 2010, beyond the end of this simulation.

6. Current accounts

Billion \$ and per cent of GDP

	1996	1998	2005
Germany	- 18.9	- 9.2	9.3
	- 0.8	- 0.4	0.3
France	18.2	20.6	47.9
	1.2	1.3	2.4
Italy	44.2	46.9	46.1
	3.6	3.8	3.0
United Kingdom	- 1.5	- 8.6	- 5.0
	- 0.1	- 0.6	- 0.3
Northern EU	35.0	46.1	134.5
	4.1	5.1	11.4
Southern EU	- 17.2	- 10.2	- 4.5
	- 1.9	- 1.1	- 0.4
Other EU	19.0	12.8	4.3
	2.5	1.6	0.4
European Union	78.7	<i>98.2</i>	232.7
	0.9	1.1	2.0
Other Europe	18.4	22.6	36.7
	5.9	7.2	8.2
United States	- 146.0	- 169.5	- 292.5
	- 2.0	- 2.1	- 2.7
Japan	50.3	89.0	124.2
	1.1	1.9	1.8
Other OCDE	- 18.3	- 37.3	- 64.2
	- 1.8	- 3.3	- 4.6
OCDE	- 16.8	2.9	37.0
	- 0.1	0.0	0.1
Latin America	- 14.7	- 12.0	- 59.9
	- 0.8	- 0.6	- 1.8
Middle-East/Maghreb	- 57.8	- 49.3	88.3
	- 7.5	- 5.7	6.6
Sub-saharian Africa	- 13.9	- 17.2	- 28.1
	- 4.4	- 4.9	- 5.0
4 Asia NIC	- 19.6	- 49.3	- 87.9
	- 1.9	- 4.1	- 4.6
Other Asia	- 36.1	- 55.4	- 84.9
	- 1.9	- 2.5	- 1.8
CIS	18.4	11.4	- 14.1
Ender Ender	3.8	2.4	- 2.0
Eastern Europe	- 26.8	- 24.6	- 37.6
117.11	- 1.0	- 5.8	- 5.1
vvorid	- 167.4	- 193.3	- 187.2
	– U.B	- 0.6	- U.4

Annex 1. Uncertainties about Euro creation

It is not easy to predict what decision will be taken in 1998 about the creation and the extend of EMU⁽²⁾. Most countries, including the more virtuous ones, those having succeeded in fixing their exchange rate parities against the D-mark for a very long time, will not perfectly meet the Maastricht criteria. The German public debt amounts to more than 60 per cent of GDP since 1996, and should reach 62 per cent in 1997; in Austria, the public debt ratio should increase from 65 per cent in 1994 to 72 per cent in 1997; the Belgian debt should represent 127 per cent of GDP in 1997. In many countries, public deficits will settle under 3 per cent of GDP in 1997, owing to non-recurrent receipts. The decision will not result from an automatic process. It will be a political matter, therefore the European Council will have to weigh carefully the pros and the cons. On the one hand, the wish expressed by Southern European countries not to be left apart, the efforts these countries have made to be able to join the EMU, and also the political unity of Europe plead to include most countries at the beginning. On the other hand, the reserve of the German public opinion, and the fear of the core countries Central Banks about their credibility could lead to limit EMU to a core of virtuous countries. In fact, five scenarios can be analysed:

a tough scenario: Germany would deny the creation of the Single Currency in 1999, arguing that no main country, including itself, strictly matches the criteria. This delay would imply risks of financial markets crises. Yet, it would be dangerous, with respect to the construction of Europe, to stick to a discretionary level of public debt ratio. Further, there is no certainty that public finances will improve in the two coming years. Finally, who would think that European countries, as a group, are able to make decisions, if EMU is postponed? *a core scenario*: EMU would be reserved for low inflation countries which remained pegged to the DM since 1997: Germany, France, Benelux countries, Austria, Ireland. This scenario is favoured by financial markets: the short-term interest rates are at present identical in these countries while they are above by 3 points in Spain, Italy, Portugal and UK.

— *a confrontation scenario:* Southern countries, being excluded, would refuse the entrance of Northern countries which do not strictly meet the criteria. There are 87 votes as a whole. The core countries represent 39 votes, Southern countries (Spain, Italy and Portugal) 23, the others (countries with derogation: the UK, Denmark, Greece, Sweden and Finland) 25. The qualified majority, 62 votes, is not granted. A scenario excluding some of the candidate countries is anyhow critical for European unity.

² Cf.: Equipe MIMOSA: « UEM: élus, exclus and prétendants », Lettre du CEPII, n°152, December 1996.

— *a scenario of larger EMU:* Italy, Spain and Portugal would join the Union in 1999. This scenario, the better from a European construction point of view, may encounter a strong opposition in Germany (and even in France, where some fear that it would lead the ECB to implement a more restrictive monetary policy). In this scenario, we assume that the Council will not take into account the debt criteria and that it will look with flexibility at the deficit.

— *a compromise scenario:* the core countries would be accepted and the situations of other candidates would be re-examined one year later, with a guarantee of a favourable *a priori*. But the problem would be to find a way to conciliate the German requirements (no obligation to intervene for the ECB, no guarantee without strict conditions) and the Italian and Spanish concerns (quasi-certainty to be accepted in a very close future, denial of a Community supervision on economic policy decisions)? How could an increase of the risk premium on Italian bonds be avoided?

Currently, none of these scenarios seems more likely than another to happen. Hence, we chose the core scenario as our scenario 1. However, the scenario 2 examines the consequences of a larger EMU.

Outs and Candidates

What will do the countries which will not be accepted in 1999? They will have three possibilities: to be candidates in 2002, once they have cut domestic inflation, public deficit, and fixed their exchange rates with the Euro; to maintain their exchange rates with the Euro, without explicitly being candidates (this could be the choice of the UK and Sweden); to significantly devaluate, be it chosen or imposed by the markets. The point is to assess the credibility of each of these strategies and the reactions of financial markets. An exclusion from the first circle could induce an increase in interest rates, which could lead to the third strategy. When a country implements a strong restrictive fiscal policy, it cannot easily bear, at the same time, a strong appreciation of its currency and high interest rates. Markets know it, and they learnt it again in 1992. Then, in the scenario 1, we have made the assumption that in Italy, Spain and Portugal, currencies would depreciate by 10 per cent in 1998-1999.

A larger EMU?

Let us suppose that Italy, Spain and Portugal are accepted as soon as 1998 in a large EMU. In that case, these countries would maintain fixed exchange rates with the core countries, but would then enjoy a fall in their interest rates. We have supposed that the participation of these countries would neither affect the interest rate on the Euro, nor the Euro/dollar exchange rate. In spite of the lower level of interest rates, competitiveness losses would imply a lower growth rate of 1.1 point each year, from 1998 to 2000, in Italy, and of 0.6 point each year in the other Southern European countries (table A1.1). The stability of their

currencies would allow a decrease in their inflation rates (around 0,8 point a year). But the unemployment rate would be higher. The Italian public deficit would not be affected because the reduction in debt interest payments would compensate for the decrease in fiscal receipts induced by the fall of activity; the public accounts of the less indebted Southern countries would deteriorate. Finally, the public debt/GDP ratio would be higher (9 points in Italy, 8 points in Southern Europe in 2005) according to a lower GDP in value. On the other hand, Northern countries would not be affected, because competitiveness gains would compensate for the weakness of demand in Southern countries. So, it would be difficult for Italy to pursue a restrictive fiscal policy, while keeping the lira at its current level.

	Scenario 1	Scenario 2
GDP*		
Germany	1.9	1.9
France	2.0	1.9
Italy	2.4	1.3
Southern EU	2.4	1.8
Consumer price*		
Germany	1.2	1.2
France	1.6	1.7
Italy	3.5	3.2
Southern EU	4.3	3.2
Unemployment rate **		
Germany	9.4	9.5
France	12.8	13.0
Italy	12.1	12.9
Southern EU	19.1	19.7
Government balance**		
Italy	- 2.4	- 2.4
Southern EU	- 5.4	- 6.6
Short term interest rate **		
Italy	6.5	3.5
Long term interest rate **		
Italy	8.8	5.8

A1.1. Effects of a narrow (scenario 1) or large EMU (scenario 2)

*Average growth rate, 1998 to 2000. ** in 2000.

Annex 2. Impacts of restrictive fiscal policies

Why trimming fiscal policies?

After widening fiscal deficits due to the 1991-1993s recession, European countries commit themselves to trimming public expenditures. To offset four years of active fiscal policy, Japan began to restructure public finance in 1997. It will carry on watching carefully its budget deficit in order to cope with the consequences of an ageing population. Similarly, the US is undertaking fiscal reforms: the idea is to balance the budget by 2002 in order to face the same demographic problems. Underpinning these programmes stands the idea that excessive public deficit and debt implies overheating and therefore inflation. This situation is not that of Europe which suffers from a lack of demand. Nevertheless if this thesis is broadly shared by financial markets, then a rise in public deficit drives a rise in long term interest rates. Accordingly, narrowing public deficit now will allow fiscal policy to sustain economic growth when face to a temporary slowdown. Finally, the expected increase in the number of retired people emphasises the need to accumulate fiscal surplus.

Effects of fiscal measures in 1997-1998?

To assess the impact of fiscal policies on growth, it is necessary to compute real fiscal efforts, aside from business cycles and interest payments. This gives us a structural primary deficit. The year to year variations reflects the fiscal effort actually implemented (table A2.1). The computed real efforts appear slightly different from the announced level. In Japan, the announced effort is about 2% of GDP whereas it is only 1.3%. In The United-States, fiscal policy seems neutral. Europe is undertaking a large effort, especially Italy and the United-Kingdom.

Using the MIMOSA model we simulate the impact of such a fiscal effort. Activity slackens, which triggers a decrease in inflation and an increase in the unemployment rate. The Central banks decrease their short-term interest rates. This leads to a depreciation of the currency and tempers the slowdown for countries undertaking restrictive policies.

	1997	1998	1999	2005
United States	- 0.1	- 0.1	- 0.2	0.0
Japan	1.3	0.4	0.2	0.3
Germany	0.6	0.6	- 0.1	0.2
France	0.3	0.3	0.4	0.3
Italy	2.0	- 0.1	- 0.2	0.1
United Kingdom	0.9	0.4	0.4	0.5

A2.1. Budget impulses

The budget impulse is measured as the variation in the structural primary balance from one year to another.

Overall, the simultaneous implementation of fiscal tightening turns out to be costly for economic growth (table A2.2). In Europe, GDP decreases (by 0.9 per cent in 1997 and 0.3 per cent in 1998 and 1999), despite lower interest rates (-0.8 point). The larger the efforts the bigger the slowdown. This is costly for unemployment (+0.5 point). Japanese output is also lowered by 1.9 per cent of GDP in 1998 despite a large yen depreciation *vis-à-vis* the dollar. Fiscal policy being neutral, the United States only suffer from the appreciation of the dollar and from the slowdown of their OECD partners.

Ex post, the results on public deficit are disappointing. Only Japan and the United-Kingdom clearly narrow their public account. But the gain is thin compared to the undertaken efforts: it is only 0.7 and 0.8 GDP point while the *ex ante* effort is 1.3 to 0.9 GDP point³. Italy realise huge efforts (about 2 GDP points) but only reduces its deficit by 0.9 GDP point. Germany and France, whose efforts are modest (around 0.5 per cent) register a small improvement (0.2 GDP point). The cost in economic growth is large: the decrease in activity due to these fiscal measures is disproportionate. The magnitude of public deficit improvement is largely inferior to the undertaken effort.

³ It must be borne in mind that we have only taken account of 1997-1998 measures and not the previous ones. Moreover, we have ignored any "creative" accounting measures.

	GDP*		GDP* Consumer Price *			rice *	Unemployment rate ***			Government balance**			Interest rate***			Exchange rates****		
	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999	1997	1998	1999
United States	- 0.3	- 0.2	0.0	- 0.2	- 0.4	- 0.6	0.1	0.2	0.1	- 0.2	- 0.3	- 0.4	- 0.3	- 0.4	- 0.4	0.0	0.0	0.0
Japan	- 1.5	- 1.9	- 2.5	0.0	- 0.4	- 0.7	0.3	0.4	0.6	0.9	0.9	0.9	- 0.1	- 0.9	- 0.7	5.5	7.6	8.9
Germany	- 0.8	- 1.2	- 1.4	0.0	- 0.3	- 0.7	0.3	0.6	0.8	0.1	0.2	0.3	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4
France	- 0.5	- 0.8	- 1.2	0.3	0.5	0.4	0.2	0.3	0.5	0.0	0.2	0.4	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4
Italy	- 2.5	- 3.0	- 3.5	0.6	0.9	0.6	0.7	1.1	1.5	0.9	0.8	0.5	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4
UK	- 1.0	- 1.4	- 1.8	0.0	- 0.3	- 0.7	0.2	0.5	0.7	0.5	0.7	0.9	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4
Northern EU	- 0.7	- 0.9	- 0.8	- 0.1	- 0.3	- 0.7	0.1	0.2	0.3	0.0	0.0	0.0	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4
Southern EU	- 0.7	- 0.4	- 0.2	0.0	- 0.3	- 0.5	0.2	0.2	0.2	- 0.1	0.1	0.7	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4
Other EU	- 0.7	- 1.0	- 0.9	- 0.1	- 0.8	- 1.8	0.2	0.4	0.5	0.0	0.1	0.0	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4
EU	- 0.9	- 1.2	- 1.5	0.1	- 0.1	- 0.5	0.3	0.5	0.6	0.2	0.3	0.4	- 0.2	- 0.8	- 0.9	2.7	3.1	3.4

A2.2. Effects of fiscal policy measures for 1997-98

Note: * per cent deviation, ** deviation in percent of GDP, *** deviation in percentage points ,**** a positive sign indicates a depreciation *vis-à-vis* the dollar.