

# The Eurozone marking time

*The deterioration of the economic situation in the Eurozone was perceptible in summer 2011, and has been confirmed in autumn. It has come hand in hand with growing tensions surrounding the financing of government debt, particularly in Italy. These tensions then spread to the financial system, despite the recent interventions of the central banks to provide the banking system with cash.*

*This turmoil should in turn affect the real economy. Financing conditions for businesses and households have started to tighten in the Eurozone. The expectations of business leaders are gloomy, as shown by the latest business tendency surveys. The Eurozone is therefore likely to experience a short period of recession this winter, which will vary in intensity from one country to the next - more marked and longer-lasting in Spain and Italy, where domestic demand is very weak, than in Germany and France.*

*In France, activity is set to contract somewhat in Q4 2011 (-0.2%) and Q1 2012 (-0.1%) before rising slightly in Q2 2012 (+0.1%). Corporate demand, which has been driving the recovery for two years, should end up sagging: faced with sluggish activity and a tightening of credit award terms, businesses are likely to reduce their investment expenditure. In parallel, employment should slip back in the market*

*sectors through to mid-2012, while unemployment is set to rise over the same period. Faced with a deteriorating labour market and stagnating purchasing power, households will probably maintain a high level of savings: consumption is therefore unlikely to sustain strongly French growth over the forecasting period.*

*The weak level of activity in the Eurozone should only have a limited effect on the rest of the world economy. American household consumption should hold firm; activity in Japan should be sustained by the needs of reconstruction; and the emerging economies, particularly China, are likely to use their monetary and budgetary leeway to stimulate activity. World trade should therefore provide modest support for the European economy through to the summer of 2012.*

*This forecast involves an unusually high degree of uncertainty and may be affected by many factors. In particular, against a backdrop of extremely jittery markets, the financial tensions in the Eurozone could grow and seize up the world financial system. Conversely, the implementation of measures to restore confidence among economic agents could lead to an upswing in expectations and bring about a more marked rebound in activity in the Eurozone, and thus France. ■*

### In Q3 2011, activity accelerated strongly in the advanced economies

*In Q3, the Japanese economy rebounded and activity accelerated in the United States*

In the advanced economies as a whole, activity progressed in Q3 2011 at a much higher rate than in Q2 (+0.5% after +0.2%). The rapid start up of Japanese production systems largely contributed to this upturn: after falling back by 0.3% in Q2, the Japanese economy progressed by 1.5% in Q3. This start up also allowed American household consumption to catch up, especially on automobiles, and activity in the United States accelerated slightly in Q3 (+0.5% after 0.3%).

*Activity progressed in France and Germany, but stalled in Italy and Spain*

In the Eurozone, activity progressed in Q3 at the same rate as in the previous quarter (+0.2%). The French (+0.4% after -0.1%) and German (+0.5% after +0.3%) economies accelerated, buoyed by a marked upturn in household consumption. Activity stagnated in Spain (0.0% after 0.1%), however, and would seem to have fallen back in Italy (-0.2% after +0.3%), due to the slide in domestic demand.

### The Eurozone set to enter recession in Q4

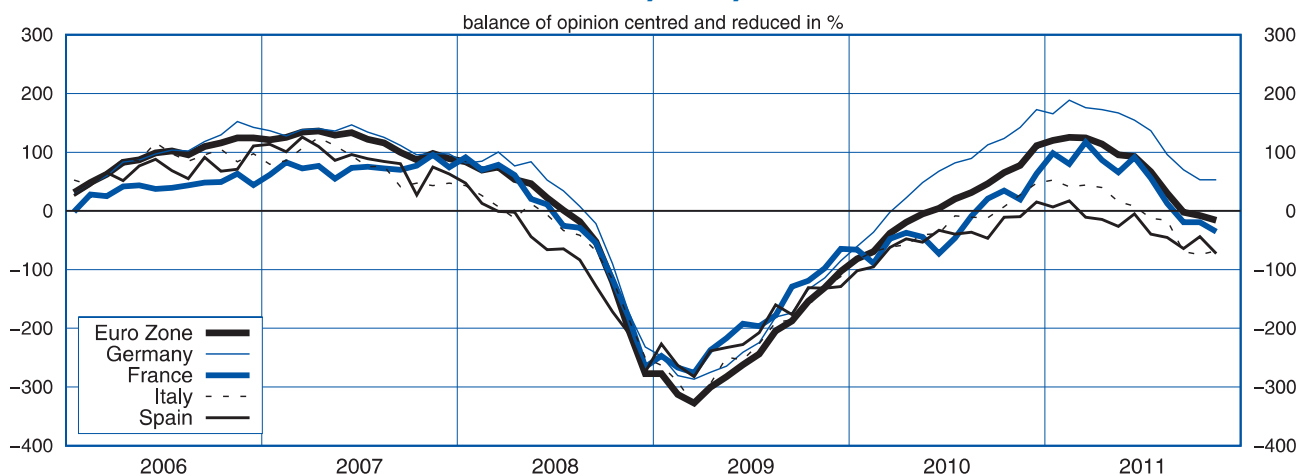
*Since July 2011, the business climate has deteriorated markedly in the Eurozone*

The business climate in the Eurozone has deteriorated markedly since the summer (see graph 1). In the manufacturing sector in November, it stood well below its long-term average for the main economies in the zone, suggesting a contraction in activity in Q4.

*Financial turmoil weighing down on activity prospects*

The financial turmoil observed since the summer are weighing down on the outlook in the Eurozone. The sharp increase in uncertainty is leading to deterioration in the financing terms for several States, rising tensions on inter-bank markets and a global progression in risk aversion. Faced with these turbulences, the central banks of the advanced countries have increased their use of non-conventional instruments, but uncertainty on financial markets is affecting consumer and investor confidence and access to credit.

**1 - Business tendency surveys in Eurozone**



*Fiscal policies continue to tighten in the Eurozone*

In addition, the measures taken in the Eurozone to reduce public deficits are likely to weigh down on household income and consumption. They are also likely to slow down public expenditure.

*Contraction of variable intensity according to the country*

However, the Eurozone countries should not all be affected to the same extent by the contraction in activity. In Spain, the fall in foreign demand should be combined with already very weak domestic demand and activity should fall back sharply in Q4 (-0.5%). In Germany and France, meanwhile, a certain amount of buoyancy in domestic demand should soften the consequences of the slowdown underway within the Eurozone: activity should fall there less sharply in Q4 (-0.2% in both countries).

**In Q4, domestic demand set to remain dynamic in the United States and Japan, but the emerging economies should slow down further**

*American private consumption set to remain dynamic*

In the United States, the business climate has been slightly above the expansion threshold for several months (see graph 2). The American economy should progress in Q4 at a rate close to that observed in Q3 (+0.5%). Thanks to the continued improvement in the labour market and the fall in inflation, American households should benefit from purchasing power gains that should buoy up their consumer spending. If it is transmitted only via trade channels, European turbulence looks likely to have limited consequences in the United States.

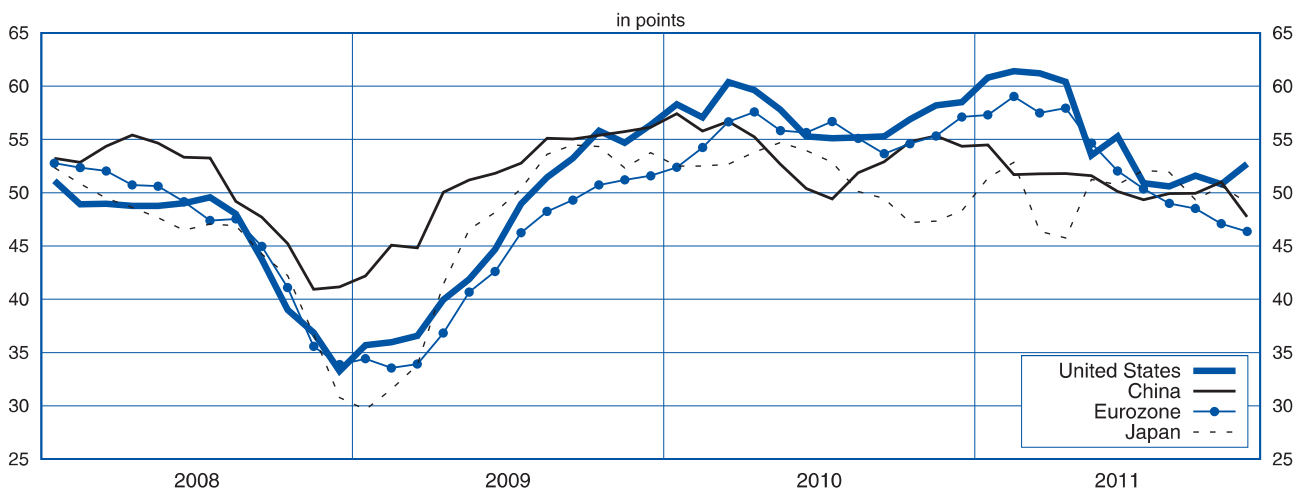
*Japanese activity should be buoyed by the reconstruction effort*

The same should apply to Japan, where the business climate has improved distinctly since the shock caused by the earthquake on 11 March 2011 (see graph 2). After the exceptional catch-up effect observed in Q3, growth in the Japanese economy should remain at a robust rate in Q4 (+0.4%), buoyed up by implementation of the reconstruction plans voted in May, July and November.

*Slowdown in the emerging economies*

Faced with progressing inflation, the emerging countries continually tightened their monetary policies throughout 2011. These measures did ease inflationary tensions, but at the price of a slowdown in their activity (see graph 2). This slowdown is likely to continue in Q4 and should contribute to the stagnation in world trade at the end of the year.

**2 - PMI indices of manufacturing output**



Source: Markit

### Acceleration in world trade should provide slight support to the Eurozone in H1 2012

*Domestic demand set to remain dynamic in the United States and Japan in early 2012*

In H1 2012, the United States and Japan should continue to be little affected by the turbulence in the Eurozone. In the United States, activity (+0.3% in Q1 2012 then +0.4% in Q2 2012) should continue to be supported by household consumption, despite the end of some income support measures. In Japan, the reconstruction effort should continue to buoy up activity, which is set to progress at a robust rate (0.4% per quarter).

*Demand in emerging countries and world trade show an upturn*

With the fall in commodity prices and slowdown in activity underway at the end of 2011, inflationary pressures should fade considerably in emerging countries. Faced with weakening demand in the Eurozone, the emerging economies are likely to put what budget and monetary leeway they have into stimulating their domestic demand. Therefore, world trade should accelerate distinctly in H1 2012.

*Activity at a standstill in the Eurozone until mid-2012*

In the Eurozone, domestic growth drivers are likely to remain weak in H1 2012. However, resilient activity in the United States and Japan and the rebound in the emerging countries should buoy up foreign demand somewhat. Activity should therefore fall back again in the Eurozone in Q1 2012 (-0.1%), but less sharply than in Q4, before levelling out in Q2 (0.0%). In Germany, activity should level out from Q1 2012. In Italy and Spain, meanwhile, it is set to continue falling throughout H1.

### In France, a chill in activity from Q4

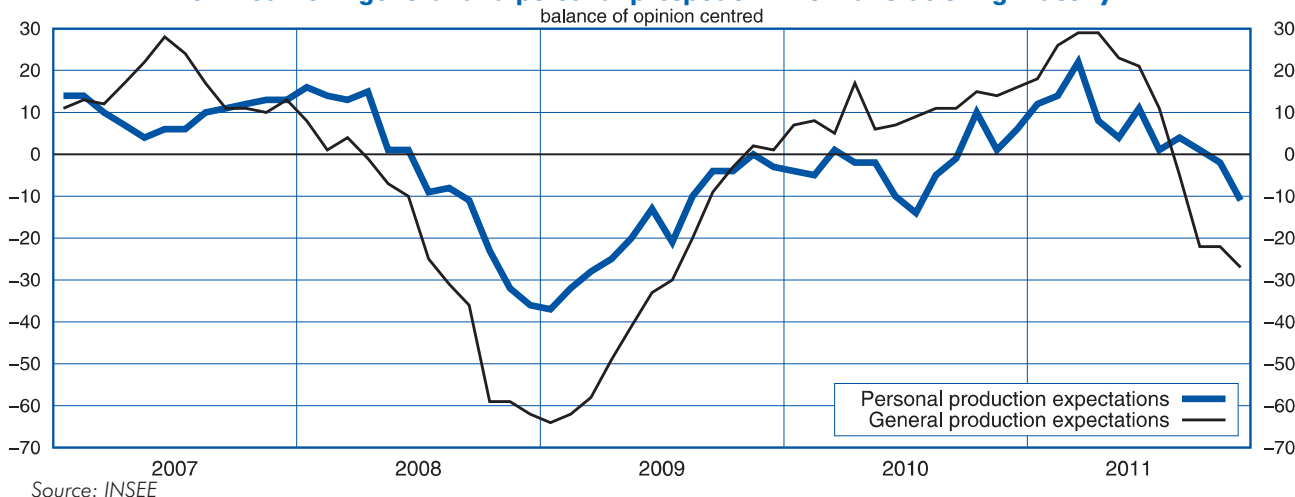
*Activity rebounded in France in Q3 2011...*

Activity rebounded in France in Q3 2011 (+0.4% after -0.1% in Q2 2011). Energy production saw a pronounced upturn (+2.6%) after falling sharply in the previous quarter (-1.6%) and activity in services accelerated slightly (+0.5% after +0.3%). Conversely, manufacturing output continued to fall (-0.2%), although less sharply than in the previous quarter (-0.7%).

*... but the impetus from domestic demand weakened*

On the demand side, activity has been buoyed up by exports (+0.7%) and by the upturn in household consumption (+0.3% after -0.8%). The latter has remained limited, however, and household expenditure on non-energy industrial goods has continued to fall (-0.1% after -1.9%). Also, for the first time since Q1 2010, investment by non-financial enterprises has fallen (-0.3%). The impetus from domestic demand therefore seems to have ground to a halt.

### 3 - Decline in general and personal prospects in the manufacturing industry



*The business tendency surveys continue to worsen*

In services as in industry, the business climate as shown in the business tendency surveys has been worsening since the summer. In November, it stood well below its long-term average. In manufacturing industry, entrepreneurs' views of general prospects in the sector had already fallen sharply in September (see graph 3). Personal production prospects, which in October were still close to their long-term average, fell sharply below their long-term average in November.

*Activity should fall back at the end of 2011*

Overall, activity should fall back somewhat in Q4 2011 (-0.2%) and in Q1 2012 (-0.1%). It should then be more dynamic in Q2 2012 (+0.1%). Manufacturing output should drop distinctly in Q4 2011 (-1.1%) and in Q1 2012 (-0.7%) before stabilising in Q2 2012. The domestic drivers of recovery, notably investment and employment, are likely to remain weak through to the time horizon of the forecast. The activity profile should therefore largely follow that in exports (see graph 4).

*The recession in the Eurozone should hold back exports considerably*

The trend in exports is likely to reflect the distinct deterioration in the outlook in the Eurozone. In Q4 2011, foreign demand for French products (-0.4% after 1.0% in Q3 2011) should therefore slow down more than world trade (0.0% after 0.9% in Q3 2011). It should then improve slightly in H1 2012. Exports should therefore fall in Q4 (-0.5%) before growing again in H1 2012 (+0.2% in Q1 2012 and +0.4% in Q2).

**Deterioration in the labour market situation**

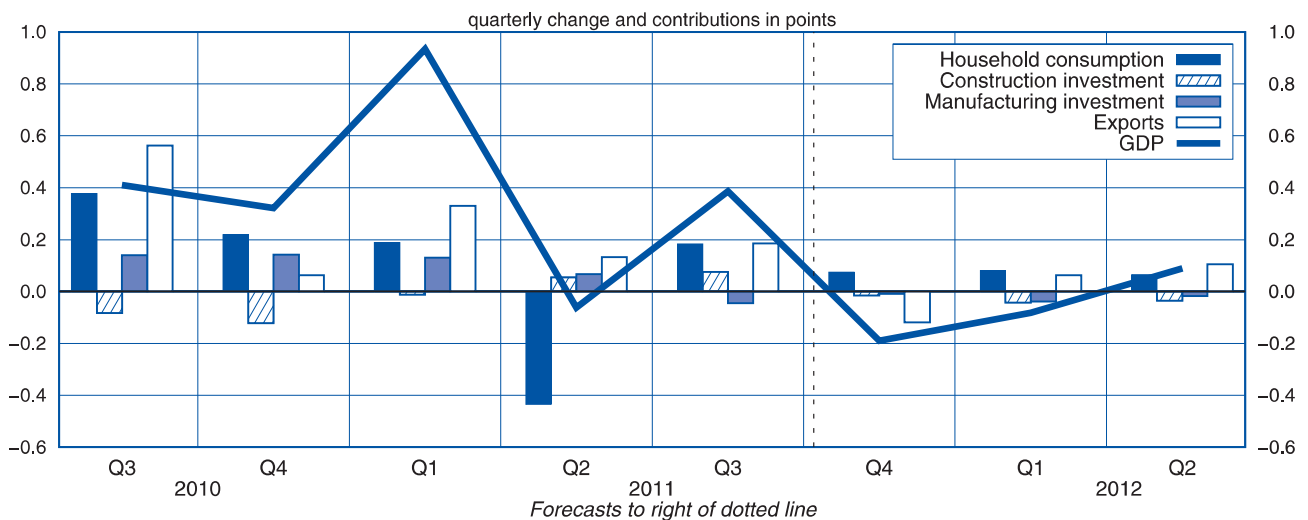
*Fall in market-sector employment*

The rate of job creations in the non-agricultural market sectors took a clear downturn in Q3 2011, with a particular contraction in employment in the temporary work sector. With the weakness of activity, the situation on the employment market should continue to worsen through to the time horizon of the forecast: 14,000 jobs are likely to be lost in H2 2011 then 61,000 in H1 2012. Total employment should be buoyed up, however, by more intense use of State-aided jobs.

*Unemployment increasing*

The unemployment rate stood at 9.3% of the active population in Q3 2011 (respectively 9.7% including overseas departments). It should increase to 9.6% by mid-2012 (respectively 10.0%).

**4 - In Q4, domestic demand and exports grind to a halt**



Source: INSEE

## Inflation should fall clearly by mid-2012

### Fall in energy and food inflation

The high level of unemployment and limited degree of use of production capacities should ease inflationary pressures. Also, imported food commodity prices have been on a downward trend since early 2011, after two years of sharp rises. Through to June 2012, these past rises should stop working through into food prices. Core inflation should therefore fall slightly to 1.1% at the end of June 2012, after 1.3% in October 2011. Headline inflation should fall more noticeably to 1.4% in June 2012, after 2.3% in October 2011. This fall in inflation should be driven by a very sharp drop in energy prices, offset only very slightly by the rise in the reduced VAT rate (0.1 point rise in headline inflation through to June 2012).

## Small progression in household consumption

### Dynamic nominal wages but moderate real wage gains

The upturn in inflation recorded in 2011 should work through gradually into nominal wages. In addition, the introduction of a bonus for companies paying out higher dividends should support wages in H2. Transmission of the upturn in inflation in 2011 should continue to buoy up nominal wages in early 2012, in particular with the increase in the minimum wage.<sup>(1)</sup> But the labour market situation is likely to influence wage negotiations and real wage gains should therefore be more moderate.

### Acceleration in household purchasing power in 2011

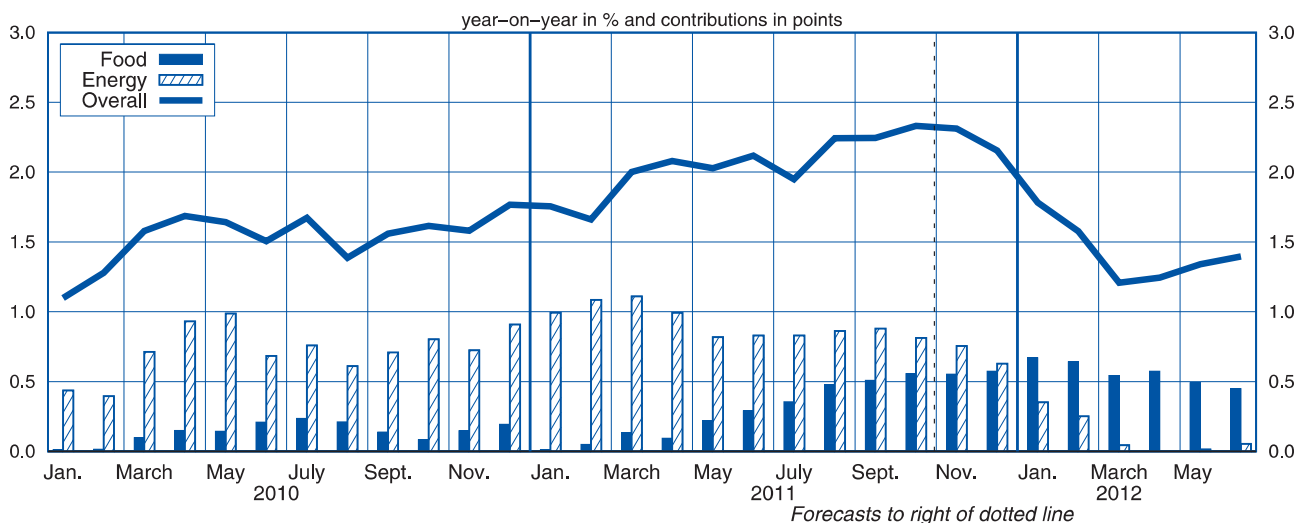
Household purchasing power should progress in 2011 by 1.4%, after +0.8% in 2010. Household income should be boosted in 2011 by more dynamic employment and nominal wages which should do more than offset the acceleration in taxes and rise in inflation.

### In H1 2012, purchasing power not to progress

However, in H1 2012, purchasing power should be stable. The worsening labour market is likely to slow down progression in earned income and taxes should remain dynamic, backed by the measures passed in the Finance Law and coming into force in 2012.

(1) The minimum wage (SMIC) was increased by 2.1% on 1<sup>st</sup> December 2011. All other things being equal, nominal wages will therefore be higher on average in Q1 2012 than in Q4 2011.

## 5 - Inflation should fall clearly by mid-2012



*The savings ratio set to remain high*

The household savings ratio stood at 17.1% in Q2 2011. Faced with the deterioration in activity prospects, households have been setting savings aside as a precaution since the beginning of the crisis in 2008, and that savings ratio should remain at a high level through to mid-2012. It should fall slightly, however, in early 2012 as the new measures passed in the Finance Law (taxation of capital gains, increase in contributions on capital) will affect to some extent income that is generally saved.

*Household consumption not very dynamic through to mid-2012*

Through to mid-2012, household consumption should progress very slightly, driven only by this moderate fall in the savings ratio: + 0.1% per quarter through to this time horizon.

### Investment set to fall

*Corporate investment should continue to fall*

The context is likely to remain unfavourable for investment through to mid-2012: activity prospects are tending to worsen, capacity utilisation rates are falling and lending terms becoming tighter. Investment by non-financial enterprises should therefore continue to decline in Q4 2011 (-0.5% after -0.3% in Q3 2011) and in Q1 2012 (-0.6%), before levelling out in Q2 2012 (-0.1%).

### Uncertainties: the consequences of financial turmoil, US public finances and the impetus provided by the emerging economies

#### Consequences of financial turmoil

As suggested by the surveys of lending terms, financial tensions in the Eurozone are resulting in signs of tighter financing terms for financial agents. There is the risk that financial tensions in the Eurozone might amplify and seize up the world financial system. Conversely, the application of measures to restore the confidence of economic agents could lead to a turnaround in expectations and a more pronounced rebound in activity in the Eurozone and therefore in France.

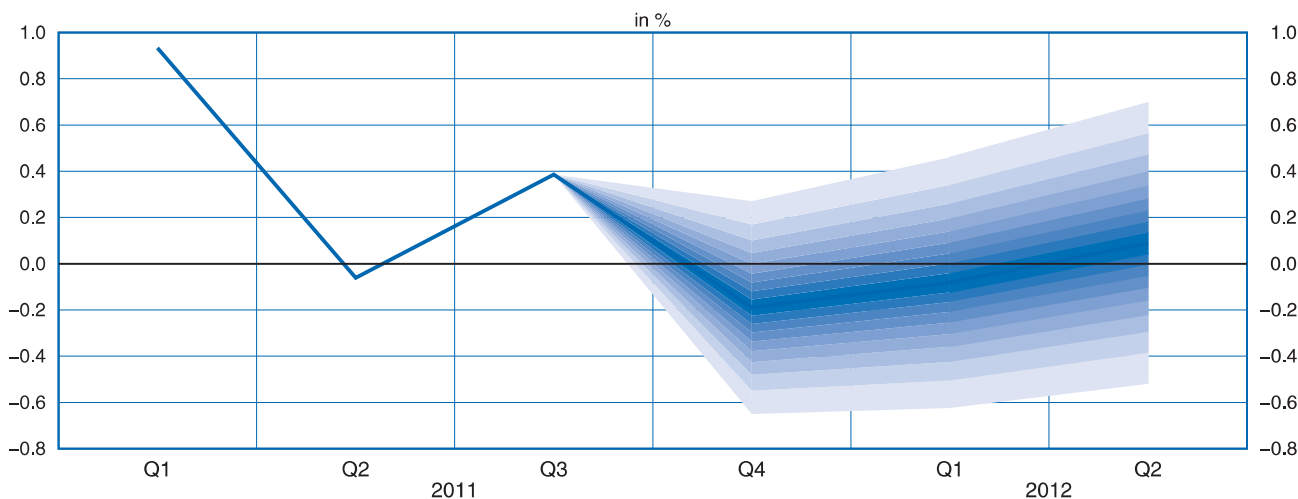
#### American public finances

In the United States, the assumption is that most of the income support measures should be renewed at the end of December 2011 and that the fiscal shock suffered by US households at the start of the year should therefore remain limited. In a difficult institutional context, it is possible that a larger than expected part of these measures might be brought into question, which could slow down consumption by American households more sharply at the beginning of 2012.

#### Impetus from emerging economies

While the advanced economies are slowing down distinctly, the emerging countries have large monetary and fiscal room for manoeuvre to boost their domestic demand. It is possible that they might act more extensively and rapidly than in our scenario, thereby enabling a quicker upturn in activity in France and the rest of the Eurozone. ■

6 - Fan chart for *Conjoncture in France*



How to read it: the fan chart plots 90% of the likely scenarios around the baseline forecast (blue line). The first and darkest band covers the likeliest scenarios around the baseline, which have a combined probability of 10%. The second band, which is a shade lighter, comprises two sub-bands just above and just below the central band. It contains the next most likely scenarios, raising the total probability of the first two bands to 20%. We can repeat the process, moving from the centre outwards and from the darkest band to the lightest, up to a 90% probability (see the INSEE *Conjoncture in France* for June 2008, pages 15 to 18). It can therefore be estimated that the first result published by the quarterly accounts for Q4 2011 has a 50% chance of being between -0.4% (lower limit of the fifth band from the bottom) and +0.0% (upper limit of the fifth band from the top). Likewise, it has a 90% chance of being between -0.7% and +0.3%. In Q1 and Q2 2012, the 90% confidence intervals are respectively [-0.6% ; +0.5%] and [-0.5% ; +0.7%].  
Source: INSEE

## Key figures: France and its international environment

seasonally adjusted / working-day adjusted data (except for prices), quarterly or annual averages, as a %

	2010				2011				2012		2010	2011	2012 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
<b>International environment</b>													
Advanced economy GDP	0.9	0.8	0.6	0.2	0.2	0.2	0.5	0.2	0.2	0.3	2.7	1.3	0.8
Euro Zone GDP	0.4	0.9	0.4	0.3	0.8	0.2	0.2	-0.3	-0.1	0.0	1.8	1.6	-0.1
Barrel of Brent oil (in dollars)	76	78	77	87	105	118	113	110	105	100	79.5	111.2	102.5
Euro-dollar exchange rate	1.38	1.27	1.29	1.36	1.37	1.44	1.41	1.37	1.37	1.37	1.33	1.40	1.37
World demand for French products	3.8	4.0	1.1	2.1	1.7	0.4	1.0	-0.4	0.1	0.2	11.8	5.6	0.6
<b>France - supply and use</b>													
<b>GDP</b>													
Imports	1.4	3.5	4.0	-0.3	3.1	-1.2	0.3	-0.1	0.2	0.5	8.3	5.0	0.4
Household consumption	0.1	0.1	0.7	0.4	0.3	-0.8	0.3	0.1	0.1	0.1	1.3	0.6	0.3
Public and NPISH consumption	0.0	0.2	0.3	0.1	0.4	0.1	0.2	0.1	0.1	0.1	1.2	0.8	0.5
Total GFCF	-1.2	1.2	0.8	0.4	1.2	0.6	0.4	-0.3	-0.5	-0.2	-1.4	2.8	-0.5
of which: NFEs	-0.1	2.9	1.3	0.8	1.9	0.3	-0.3	-0.5	-0.6	-0.1	2.0	3.9	-1.1
Households	-0.4	0.1	1.7	0.7	-0.1	1.2	1.4	0.0	-0.5	-0.4	-1.4	2.9	0.2
Exports	4.6	3.1	2.2	0.2	1.3	0.5	0.7	-0.5	0.2	0.4	9.3	4.0	0.7
Contributions (in point)													
Domestic demand excluding change in inventories (**)	-0.2	0.3	0.6	0.3	0.5	-0.3	0.3	0.1	0.0	0.1	0.8	1.1	0.2
Change in inventories (**)	-0.4	0.3	0.3	-0.1	1.0	-0.2	0.0	-0.2	-0.1	0.0	0.5	0.9	-0.3
Net foreign trade	0.7	-0.1	-0.5	0.1	-0.6	0.5	0.1	-0.1	0.0	0.0	0.1	-0.4	0.1
<b>France - situation of households</b>													
Total employment	37	45	33	49	75	52	-13	16	-6	-16	165	130	-
Non-agricultural market sector employment	20	35	28	46	83	54	4	-18	-30	-31	129	123	-
Unemployment rate Metropolitan France	9.5	9.4	9.4	9.2	9.2	9.1	9.3	9.4	9.5	9.6	9.2	9.4	-
Unemployment rate France	9.9	9.8	9.8	9.7	9.6	9.6	9.7	9.8	9.9	10.0	9.7	9.8	-
Consumer price index (*)	1.3	1.6	1.5	1.7	1.8	2.1	2.1	2.3	1.5	1.3	1.5	2.1	-
Core inflation (*)	1.7	1.4	0.7	0.8	0.6	1.1	1.0	1.3	0.8	1.0	1.2	1.0	-
Household purchasing power	-0.1	0.3	0.6	0.4	0.2	0.6	0.2	0.3	-0.3	0.2	0.8	1.4	0.3

Forecast

(\*) Year on year on the last month of the quarter

(\*\*) Inventory changes include acquisitions net of sales of valuable

Note: the volumes are calculated at the previous year's chain-linked prices, seasonally and working-day adjusted, quarterly and annual averages, as a %

Source: INSEE

### Focus: Uncertainty surrounding the forecast is not independent of the macroeconomic context

Conjoncture in France always contains, in its overview, an estimation of the confidence interval surrounding its growth forecast (see graph 6 of the overview). This interval is estimated by measuring mean forecast error in the past. We therefore suppose this to be constant and independent of the information available at a given moment and, more generally, of the economic environment. However, depending on the circumstances, a given forecast might seem to be more or less difficult. If the available outlook information has unusual features which have rarely or never been observed, forecasting will be more difficult and less precise.

Here, we will present a method which allows to quantify the precision of the forecast at each date, taking account of the available information. When applied to the forecast for Q4, this method suggests that the forecast presented in this document is surrounded by great uncertainties, given the speed at which the business tendency surveys are falling.

#### The example of a GDP growth forecasting model

We will base ourselves on an econometric model used in our forecasting of growth in gross domestic product. For each quarter  $t$ , this model supposes that growth in gross domestic product ( $Cpib_t$ ) is written:

$$Cpib_t = \text{Constant} + a \cdot Cpib_{t-1} + b \cdot \text{Business Climate}_t + c \cdot \text{Business Climate Dynamics}_t + e_t$$

The  $Cpib_{t-1}$  variable, that is, the growth in gross domestic product observed in the previous quarter, is interpreted as a «restoring force»: if growth in the previous quarter was lower than average growth, we generally expect to see a catch-up phenomenon and conversely, if growth was particularly high, we expect a slowdown. In practice, that is effectively what we observe; estimated coefficient  $a$  is negative and significant. The Business Climate <sub>$t$</sub>  variable is equal to the three-month average of the business climate indicator France calculated on the basis of the responses of entrepreneurs in the main sectors of activity to the business tendency surveys. The Business Climate Dynamics <sub>$t$</sub>  variable is equal to the square of the difference between the Business Climate variable in quarter  $t$  and quarter  $t-1$ , multiplied by the sign of that difference. It is no surprise that coefficients  $b$  and  $c$  are negative: the worse the business climate and the sharper its downward change, the lower the growth in activity. Finally, the variable  $e_t$  represents the error term of the model.

#### Quantile regressions: to quantify the uncertainty around the forecasts

If we estimate this model using the least squares method, we get a forecast of growth at each date as a linear combination of the explanatory variables. It shows that, over the past, the growth in GDP tracked by the model is that observed in GDP, on average.

This is therefore an average forecast, knowing the past. It can also provide an estimate of the imprecision associated with the forecast, but this estimate has the drawback of being constant over time and therefore not dependent on the macroeconomic context.

The so-called quantile regression method enables us to do away with this constant and provide an estimate of the uncertainty around the forecast that does take account of the information available at each date. The quantile regression can directly estimate the impact of the economic conditions as tracked here by the survey data over a given confidence interval (meaning the zone around the central forecast in which the occurrence has a given probability of being found). Technically, if we take a proportion  $p$  between 0 and 1, the idea is to look for linear combinations  $Q(p)$  of the same variables such that, over the past, observed growth  $Cpib_t$  is lower than the quantity  $Q(p)$ , in a proportion  $p$  of the observations, and higher than  $Q(p)$ , in a proportion  $(1-p)$ :

$$Q(p)_t = \text{Constant}_p + a_p \cdot Cpib_{t-1} + b_p \cdot \text{Business Climate}_t + c_p \cdot \text{Business Climate Dynamics}_t$$

For example, taking  $p = 0.5$ ,  $Q(0.5)$ , represents the median at each date  $t$ , according to the model presented, of the possible values of  $Cpib_t$ , knowing  $Cpib_{t-1}$ , Business Climate <sub>$t$</sub>  and Business Climate Dynamics <sub>$t$</sub>  variables. In other words, over the past, observed growth in GDP  $Cpib_t$  is higher than  $Q(0.5)$ , in one case in two, and lower in one case in two.

The difference between the value of the 95th percentile, that is  $Q(0.95)_t$ , and the value of the 5th percentile, that is  $Q(0.05)_t$ , for this model is interpreted as the width of the 90% confidence interval of the model (see graph). The gap between the 5th and the 95th percentile, between which the model forecasts that 90% of the actual values of growth are to be found, is variable over time. It is close to 1 point on average over the period 2000-2011, which is consistent with the average error presented in the overview. However, it remained above 1.5 points between Q3 2008 and Q2 2009, with a peak at 3 points in Q1 2009. That means that at the time of the sharpest slide in activity, the forecasts of this model were distinctly more imprecise than usual, and also that this imprecision was quantifiable and about three times greater than usual. Over recent quarters, the gap between the two quantiles has been increasing again: in Q3 2011 it was up to 1.15 points and it reaches 2.4 points in Q4 2011. The average forecast of this model is therefore affected by great uncertainty once again.

The contribution of the different variables to the difference between the two quantiles is also represented. It is the Business Climate Dynamics that has the greatest influence on the precision of the model (see graph). ■

**Difference between the 5th and 95th quantile and contribution of the different variables to the difference**  
in points of growth



NB: The contribution of the constant, which is time independent, is not shown. It is about 1 point and corresponds to the difference between the width of the 90% confidence interval and the sum of the contributions.  
Source: INSEE

### Estimation of the quantiles

In practice, coefficients  $a_p$ ,  $b_p$  and  $c_p$  are estimated minimising function F:

$$F(Q(p)_t) = p \sum_{Cpib_t \geq Q(p)_t} (Cpib_t - Q(p)_t) + (1-p) \sum_{Cpib_t < Q(p)_t} (Q(p)_t - Cpib_t)$$

If  $Q(p)_t$  minimises F then  $Q(p)_t$  must cancel out:

$$\frac{\partial F(Q(p)_t)}{\partial Q(p)_t} = p \sum_{Cpib_t \geq Q(p)_t} (+1) + (1-p) \sum_{Cpib_t < Q(p)_t} (-1)$$

Therefore, the values of estimated coefficients  $a_p$ ,  $b_p$  and  $c_p$  are such that growth  $Cpib_t$  is lower than  $Q(p)_t$  in proportion  $p$  of observations and higher than  $Q(p)_t$  in proportion  $(1-p)$  of observations. In this case:

$$\sum_{Cpib_t \geq Q(p)_t} (+1) = 1-p \quad \text{and} \quad \sum_{Cpib_t < Q(p)_t} (-1) = -p$$

and we have:

$$\frac{\partial F(Q(p)_t)}{\partial Q(p)_t} = p \sum_{Cpib_t \geq Q(p)_t} (+1) + (1-p) \sum_{Cpib_t < Q(p)_t} (-1) = p(1-p) - (1-p)p = 0$$

The value of  $Q(p)_t$  thus corresponds to an estimate of the "pth quantile" of the distribution of  $Cpib_t$  in t

# Review of the previous forecast

In Q3 2011, activity rebounded: after -0.1% in Q2, the growth rate stood at +0.4%, almost the figure forecast in the October Conjoncture in France (+0.3%). The contribution of final domestic demand (excluding inventory changes) was only +0.3 point against the +0.4 point forecast in October, mainly because consumption did not rebound as sharply as expected. Imports suffered due to the weak rebound of domestic demand. However, like world trade in general, exports were more dynamic than expected. All in all, foreign trade sustained growth more strongly: the contribution of foreign trade to growth came to +0.1 point, instead of the -0.1 point predicted in the October Conjoncture in France. As expected, inventory changes made no contribution to growth.

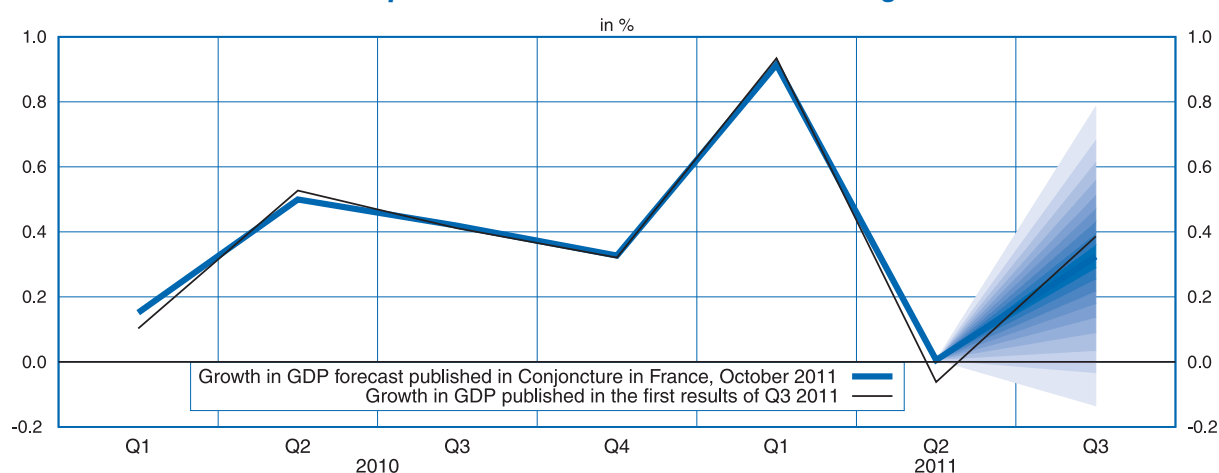
For Q4 2011, we anticipate a more marked deterioration in activity than in the October Conjoncture in France: activity should slide by 0.2%, whereas we predicted it to be stable in October. All the non-agricultural market sectors are set to bear the brunt of the worsening macroeconomic climate.

## As predicted in October, activity rebounded in Q3

After a slight decline in Q2 (-0.1%), activity progressed by +0.4% in Q3 2011, almost in line with the October Conjoncture in France, which saw a rise of +0.3% (see Graph 1). This rebound, caused by the disappearance of effects that had temporarily penalised activity in Q2, was slightly greater than forecast. On the one hand, energy production picked up by +2.6%, against +0.7% predicted in October, after a sharp decline in Q2. On the other, activity in market services accelerated more than anticipated: +0.5% against a forecast of +0.4%. Conversely, manufacturing output continued to decline (-0.2%) whereas we had predicted stability. Output from the transport equipment branch, notably, continued to fall.

The acceleration in construction output was correctly forecasted (+0.7% as predicted), supported among other things by the dynamism of household investment. Similarly, the production of non-market services grew slightly, as anticipated in October: +0.2% in Q3. This trend, linked to current efforts to limit government expenditure, should continue through to mid-2012.

1- Fan chart for Conjoncture in France for October 2011 and growth achieved



Source: INSEE

### Domestic demand rebounded less sharply than forecast

Final domestic demand (excluding inventory changes) was not quite as dynamic as expected: its contribution to growth in activity was +0.3 point against the forecast of +0.4 point. In the October *Conjoncture in France*, we predicted a marked rebound in household consumption, after a distinct decline during Q2. Although this rebound did occur, it was less sharp than predicted (+0.3% against +0.5%). Consumption of manufactured goods in particular declined slightly, (-0.1%), when we were expecting a moderate rise (+0.2% forecast). Automobile consumption did indeed stabilise, after a sharp drop in Q2 due to the end of the scrappage allowance. Similarly, consumption of refined petroleum products rebounded after a particularly mild Q2. But purchases of agrifood products, which represent 15% of household consumption, fell back sharply.

On the other hand, unlike in our October forecast, investment decelerated (+0.4% against +0.6%). While household investment was correctly predicted (+1.4% against +1.2%), corporate investment fell back (-0.3%), when we were expecting a similar increase to that in Q2 (+0.3% predicted). Here again, it was above all demand for manufactured products that was lower than expected: investments by non-financial enterprises on manufactured products slipped back by -1.1%, whereas we had only forecast a deceleration (+0.8% predicted, after +1.5% in Q2). All in all, the forecasting error in domestic demand originates mainly from demand for manufactured products, which continued to decline (-0.1% against +0.3% forecast, after -0.8% in Q2).

In this context, imports were less dynamic than expected: they increased by +0.3%, against our anticipation of +0.7%. The error logically stems from the imports of manufactured goods, which slipped back by -0.1% (against +0.7%) due to weak domestic demand for these goods. Conversely, exports made more progress than expected: the increase in world demand for French

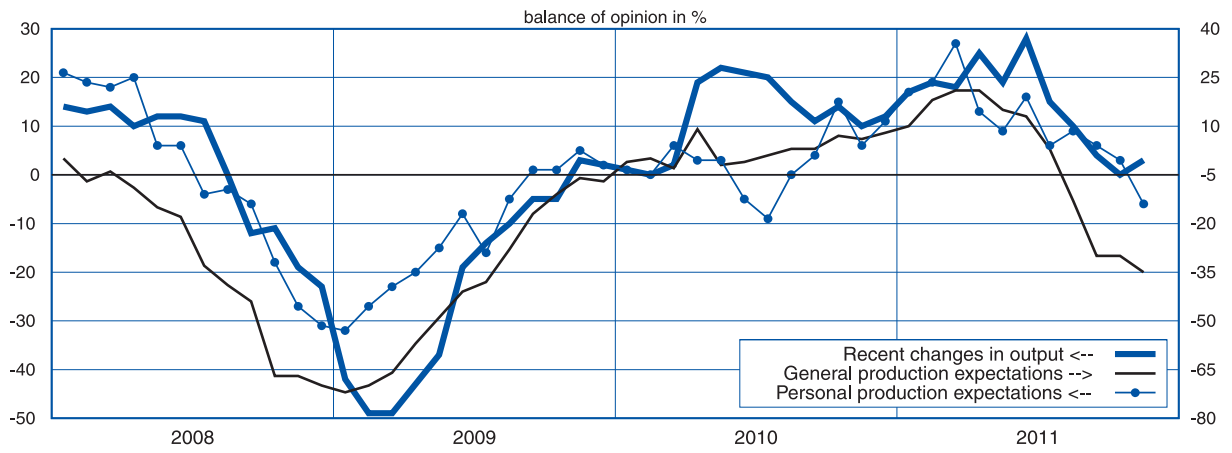
products was surprisingly high, partly thanks to the unexpected vigour of imports by France's European partners. Overall, foreign trade therefore sustained activity in Q3: its contribution to GDP growth stood at +0.1 point, against the forecast of -0.1 point. Lastly, inventory changes did not contribute to growth in Q3, in line with the scenario outlined in October.

### A more pronounced deterioration in activity in Q4 2011

Our growth forecast for Q4 2011 is revised slightly downwards, to -0.2% against +0.0% previously. In the business tendency surveys of September, entrepreneurs were already pointing to a slowdown in output in their sectors. But since then, individual prospects for production have deteriorated sharply in the manufacturing industry (see *Graph 2*) and remained below their long-term average in the other branches. The drop in manufacturing output in Q4 should be more pronounced than in the October scenario: -1.1% against -0.7% previously. In its wake, the production of market services should slip back by 0.1%, against +0.1% previously, as well as energy production (-2.0% against +0.3%). Furthermore, the business climate in construction has continued to deteriorate: we now expect a decline of 0.2% in production in the construction sector, whereas we predicted a stabilisation in October.

As regards demand, domestic demand is revised downwards from October: household consumption should still progress moderately (+0.1% against +0.3% previously), but investment is set to sag more markedly than in our October scenario (-0.3% against +0.1%), due to a pronounced decline in the investments of non-financial enterprises (-0.5% predicted against +0.1% previously), affecting all products. The contribution of foreign trade to growth in Q4 should be -0.1 point, as in the October scenario, due to the fall in world demand for French products. However, the dynamism of trade is revised downwards. Similarly, inventory changes should still weigh down on growth, to the tune of -0.2 point (against -0.1 point previously). ■

## 2 - Recent changes and production expectations in the manufacturing industry



Source: INSEE, Business Survey