French developments

France's international Environment

In Q3 2010, growth in the advanced economies was slightly stronger than forecast in our October Conjoncture in France (+0.6% against +0.4%). Household consumption in particular was more dynamic, most notably in the United States and in Japan.

In Q4, growth should level off (+0.4%). It is likely to remain slightly more buoyant in the United States than in the euro zone. Conversely, Japanese growth looks set to slump once again at the end of 2010, following the expiry of the scrappage allowance and faced with the slowdown in activity in Asia.

In H1 2011, the GDP of the advanced economies should globally maintain this growth rate (+0.4% per quarter). The Japanese economy should see renewed growth after the exceptional drop expected in Q4, but the other countries are likely to witness a slowdown. Budgetary policies are set to take their toll on activity and the boost from the emerging countries should continue to drop off; in parallel, the trend towards rebuilding stocks is likely to stall.

Still-fragile financial systems

By mid-2011, the central banks of the main advanced economies are likely to conserve their accommodating monetary policies. Deeming the high level of unemployment and the low inflation rate to be out of synch with its dual mandate of full employment and moderate inflation, the Fed has announced a programme of asset purchases until June 2011 ('QE2', see *Focus*). In Japan too, the Central Bank injected cash in early September with the aim of limiting the recessional effects of this summer's appreciation of the yen.

Despite the efforts of the monetary authorities, the financing conditions of businesses and households remain unfavourable, albeit improving. In the United States, private agents are continuing to rid themselves of debt, despite the easing of bank credit award terms. In the euro zone, the rise in the distribution of credit is going hand in hand with a tightening of financing terms, except in Germany and France.

Since the end of the summer new tensions have emerged surrounding the sovereign debt of certain

Industrialized countries: consolidated supply and use table

in real terms

	Quarterly changes. %													
	2009				2010				2011		2008	2009	2010	2011 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2				
GDP	**-2.2**	**0.2**	**0.2**	**0.8**	**0.8**	**0.7**	**0.6**	**0.4**	**0.4**	**0.4**	**-0.1**	**-3.6**	**2.4**	**1.4**
Private consumption	-0.6	0.0	0.2	0.4	0.4	0.4	0.6	0.2	0.2	0.2	-0.1	-1.3	1.4	1.0
Public consumption	0.0	0.9	0.3	0.0	0.0	0.6	0.6	0.0	0.2	0.2	2.2	1.8	1.0	0.8
Investment	-7.8	-2.8	-0.7	-0.6	0.5	2.7	1.2	0.7	0.9	1.0	-4.0	-15.1	1.4	2.8
Exports	-10.6	0.9	3.6	4.1	3.1	3.5	1.8	1.5	1.3	1.3	3.3	-12.8	12.5	5.3
Imports	-10.2	-3.2	3.8	1.5	3.3	5.4	2.8	0.7	0.9	1.4	-0.9	-13.4	11.6	5.3
Contributions to GDP growth														
Domestic demand excluding inventories	-1.7	-0.4	0.1	0.1	0.3	0.8	0.6	0.2	0.3	0.3	-0.3	-3.2	1.3	0.9
Inventories	-0.6	-0.2	0.2	0.3	0.7	0.2	0.2	0.0	0.0	0.0	-0.4	-0.6	1.2	-0.1
Net exports	0.1	0.7	-0.1	0.4	-0.2	-0.3	-0.1	0.1	0.1	0.0	0.6	0.2	-0.1	0.5
Net exports	0,1	0,7	-0,1	0,4	-0,2	-0,3	-0,1	0,1	0,1	0,0	0,6	0,2	-0,1	

Forecast

Sources: national statistical institutes; IMF; INSEE estimates and forecasts

euro zone states, particularly Ireland and Portugal, and even Spain and Italy. This renewed pressure regarding European sovereign debt has contributed to a gradual depreciation of the euro against the dollar; the euro had substantially appreciated in previous months, after the announcement of the 'QE2' *(see Focus)*.

More restrictive budgetary policies

In the United States and in Japan, fiscal stimulus to activity should be less prononced within the forecasting timeline. In the United States, the amounts paid to households in the form of tax credits and unemployment benefits should remain significant. Public investment expenditure should continue to support American activity, but the States seem set to reduce their operating expenditure in order to balance their budgets. In Japan, the end of the scrappage allowance in early September is likely to be followed by a sharp downturn in automobile consumption in Q4. The extension of the eco-point system (subsidised purchases of environmentally-friendly household appliances) until March 2011 is unlikely to boost Japanese consumption to any great extent. However, the rise in public expenditure announced in November 2010 should sustain Japanese activity in early 2011.

In Europe, strategies to consolidate public finances will be implemented in early 2011. In Spain, while the VAT rate was already raised by 2 points last July and taxes have also increased, cuts in social benefits are scheduled at the start of 2011. In the United Kingdom, the main VAT rate will be raised by 2.5 points on 1st January 2011, while a new rise in income taxes and a cut in social benefits are planned for Q2 2011. In Italy, the tax incentives for corporate investment came to an end in June 2010 and social benefits are likely to be decreased. In Germany, although the tax cuts brought in as part of the stimulus plan have been maintained, the government expects to tighten the conditions for awarding social benefits and to raise social contributions and corporate taxes. Lastly, in Germany, the United Kingdom and Italy, government expenditure seems set to slow sharply over the coming quarters.

These globally restrictive budgetary policies should take their toll on growth in the advanced economies from H2 2010.

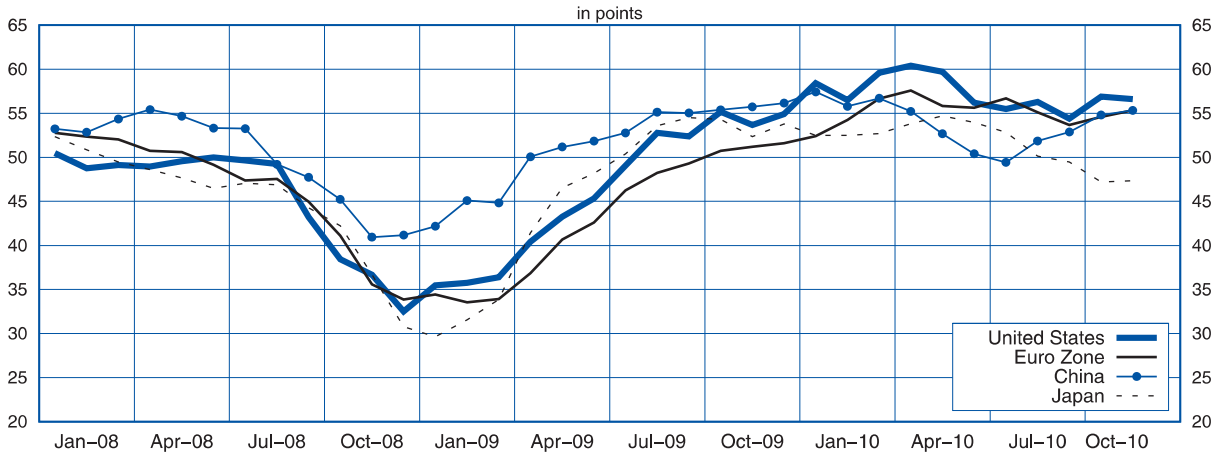
The emerging countries finding their feet

In Q3 2010, growth in the main emerging countries of Asia sagged under the combined effect of the end of the budgetary support measures, the tightening of monetary policy - particularly in China - and the slowdown in demand from the advanced economies.

In Q4 2010, these effects should still be visible. But the depreciation of the yuan is likely to boost production in China, to the detriment of its trading partners.

The acceleration in demand for Chinese output has however accentuated inflationary tensions. In response, the Chinese authorities raised the minimum reserve rate of banks in October, and again in November. This tightening of monetary policy in China is likely to take its toll on domestic demand and the yuan should appreciate as a

PMI manufacturing output indices: Euro Zone, Japan, China and the United States



Source: Markit

result. Within the time horizon of this forecast, the other emerging countries of East Asia should reap the benefits of their neighbour's diminished competitiveness, but are likely to be penalised by the slowdown in demand in China and the advanced economies: their activity is thus unlikely to accelerate much.

Overall, the governments of the main emerging countries are having difficulty combining their objectives of full employment and moderate inflation. Over the last few months they, like the Chinese, have been confronted with a rise in inflationary tensions, despite more restrictive economic policies. Sustained by the dynamism of domestic demand, these countries' inflation has been accentuated by the rebound in the prices of commodities, in particular agricultural products. Additionally, the buoyant foreign capital in flours has heightened domestic inflationary tensions. Bearing in mind these risks, current growth in activity in the emerging countries does not seem particularly sustainable: in our scenario it should return to its normal trend.

The advanced countries suffering a slowdown

In Q3, the advanced economies grew more sharply than expected in the October 2010 Conjoncture in France (+0.6% against the forecast +0.4%). Household consumption was surprisingly dynamic, most notably in Japan where households brought forward their automobile purchases before September's expiry of the scrappage allowance.

Within the forecasting period, certain drivers of growth such as support from the stimulus plans, the boost from the emerging countries and the rebuilding of stocks seem likely to lose some of their intensity.

Household consumption should brake sharply (+0.2% per quarter until mid-2011 after +0.6% in Q3). Household income should increase moderately. The lower level of support from the stimulus measures in Japan, and the implementation of budget consolidation policy in the euro zone and the United Kingdom, should globally take their toll on purchasing power. Owing to the poorer prospects of trading outlets, companies are likely to rationalise their investment expenditure somewhat. All in all, the advanced economies should see a slowdown starting in Q4 2010 (+0.4% per quarter until Q2 2011, after +0.6% in Q3 2010).

World demand for French goods and services set to slow in the wake of world trade

Over the coming quarters, world trade looks likely to slow because of the more moderate demand in most economies. Accordingly, world demand for French goods and services should also slow down: +1.0% in Q4 as in Q3 2010. It should then maintain this growth rate in H1 2011. ■

Foreign trade

In late 2010 and early 2011, exports should slow down in an international environment that is set to be less and less buoyant. World demand for French products should progress more slowly than its medium-term rate. In particular, France's main European partners are likely to implement public finance consolidation measures and their demand should therefore become more moderate. In addition to this, the positive effects of the Euro depreciation in H1 2010 should be attenuated. Exports should grow by 9.6% in 2010. At the end of H1 2011, their growth overhang should be +5.2% for the year 2011.

Imports should slow down sharply following the trend in exports of non-energy industrial goods and in domestic demand excluding inventories. In addition, in Q2 and Q3, the movement to build up stocks had fed the upturn in imports. Through to the time horizon of this forecast, this stocking up movement should ease somewhat, thereby putting the brakes on imports. In 2010, imports should increase by 8.8%. Their growth overhang at the end of H1 2011 should be +6.5% for the year 2011.

The contribution of foreign trade to growth should remain negative in Q4 2010 and should then be zero in H1 2011.

Exports should slow down, in line with less buoyant world demand

In Q3 2010, French exports of goods and services remained dynamic (+2.5% after +2.6%, *see Table*). World demand for French products slowed down. In Spain, household consumption fell, after the application of budget consolidation measures this summer. However, buoyant German and American demand partly offset the fall in demand in Spain. In addition, exports were boosted by the positive effects of the Euro depreciation in H1 2010.

Through to mid-2011, total exports should slow down (+1.5% in Q4 then +1.3% and +1.2% in Q1 and Q2 2011) in the wake of exports of non-energy industrial goods, as world demand for French products continues to slow. Demand from the emerging countries, in particular in Asia, which had largely contributed to the upturn in trade since mid-2009, should run out of steam in H1 2011. The slowdown in demand should be even more marked in Europe, among France's main trading partners [1]: budget consolidation measures in Germany, the United Kingdom, Spain and Italy should take their toll on

(1) See chapter "France's international environment"

Foreign trade growth forecast

Changes in % to the chained prices of the previous year, contributions in points

	Quarterly variations										Annual variations		
	2009				2010				2011		2009	2010	2011 acq.
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
Exports													
All goods and services	-7.5	-0.6	1.1	1.3	4.4	2.6	2.5	1.5	1.3	1.2	-12.2	9.6	5.2
Non-energy industrial goods (67%*)	-9.4	0.4	3.0	1.9	5.2	2.7	3.3	2.2	1.5	1.5	-14.1	13.0	6.7
Imports													
All goods and services	-5.8	-3.1	-0.4	2.9	1.8	3.9	4.1	2.1	1.1	1.0	-10.6	8.8	6.5
Non-energy industrial goods (66%*)	-6.9	-3.3	0.6	5.4	3.6	4.8	4.8	2.8	1.6	1.3	-13.0	14.5	8.3
Contribution of foreign trade to GDP	-0.3	0.7	0.4	-0.5	0.6	-0.4	-0.5	-0.2	0.0	0.0	-0.2	0.0	-0.5

Forecast

* Part of exports (resp. imports) of non-energu industrial goods in exports (resp. imports) in a whole in 2009.

Source: Insee

demand there in H1 2011 *(see graph 1)*. Finally, the positive effects of the past Euro depreciation should fade in early 2011 *(see graph 2)*.

Energy exports, which have been very dynamic since the start of the year, should fall at the end of the year in the wake of this autumn's strikes in oil refineries. Lastly, sales of agricultural and food services and products should continue to grow moderately until mid-2011.

In 2010 as a whole, exports should increase by 9.6%. At the end of H1 2011, the growth overhang should be +5.2% for the year 2011.

The slowdown in demand and decline in stocking up should cause the rate of imports to ease.

For several months, French imports of goods and services have been increasing at a very strong rate: +4.1% in Q3 2010 after +3.9% in Q2 *(see Table)*. This dynamism has been driven by strong final demand and by the strong stocking up trend.

Through to mid-2011, growth in imports of non-energy industrial goods should ease little by little: +2.8% in Q4 2010 after +4.8% in Q3, then +1.6% and +1.3% in the first two quarters of 2011 *(see graph 3)*. On the one hand, exports should slow down [2]. On the other hand, manufacturing consumption, which was still very dynamic in Q4 2010, should suffer the backlash of the end of the scrappage bonus measure at the start of 2011. The gradual halt to the stocking up trend should also contribute to the trend in imports.

After two very dynamic quarters, imports of energy products should increase again in Q4 2010, as a consequence of the strikes in oil refineries [3] and the cold snaps. They should then level out to the time horizon of the forecast.

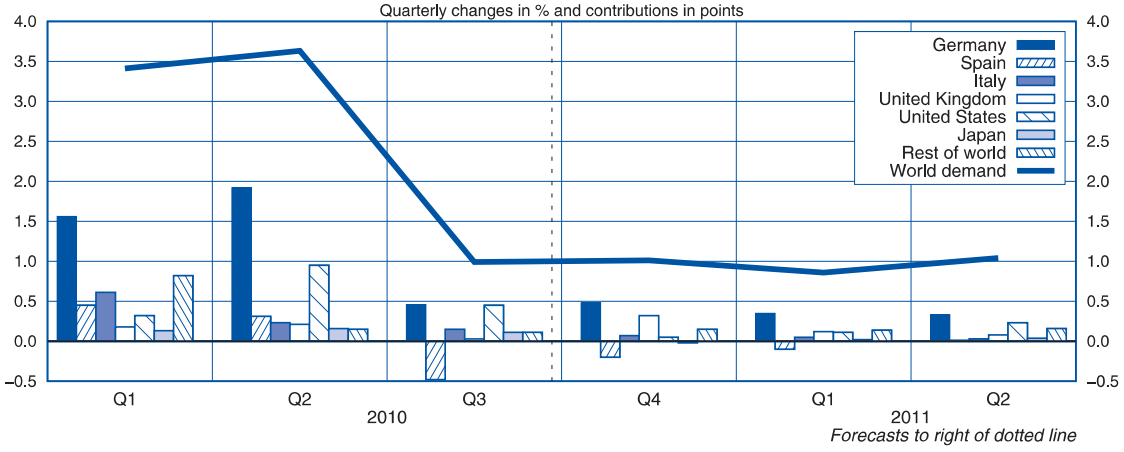
Finally, imports of agricultural and food services and products should increase modestly through to mid-2011.

Over 2010 as a whole, total imports should be dynamic (+8.8%), after an exceptional fall in 2009 (-10.6%). By mid-2011, the growth overhang for 2011 should again be high, at +6.5%.

Imports should remain more dynamic than exports until early 2011. The contribution of foreign trade to growth should again be negative at the end of 2010 (-0.2 points). It should then become neutral again in H1 2011. ■

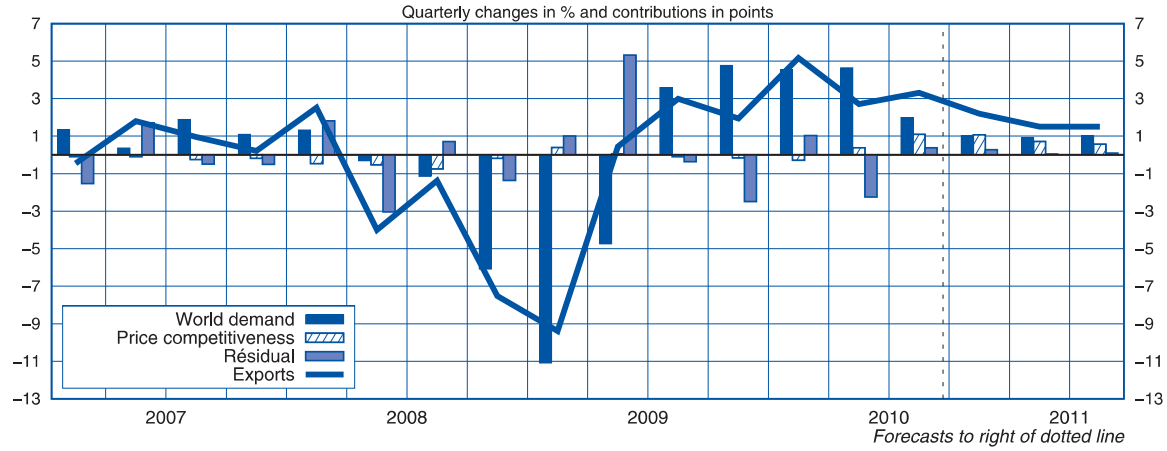
(2) This takes its toll on imports via the exports included in the imports
(3) In the wake of this autumn's strikes, imports of refined oil products have risen. This effect could however be partly offset by a drop in natural hydrocarbons.

1 - World demand for French products, and contributions



Source: Insee

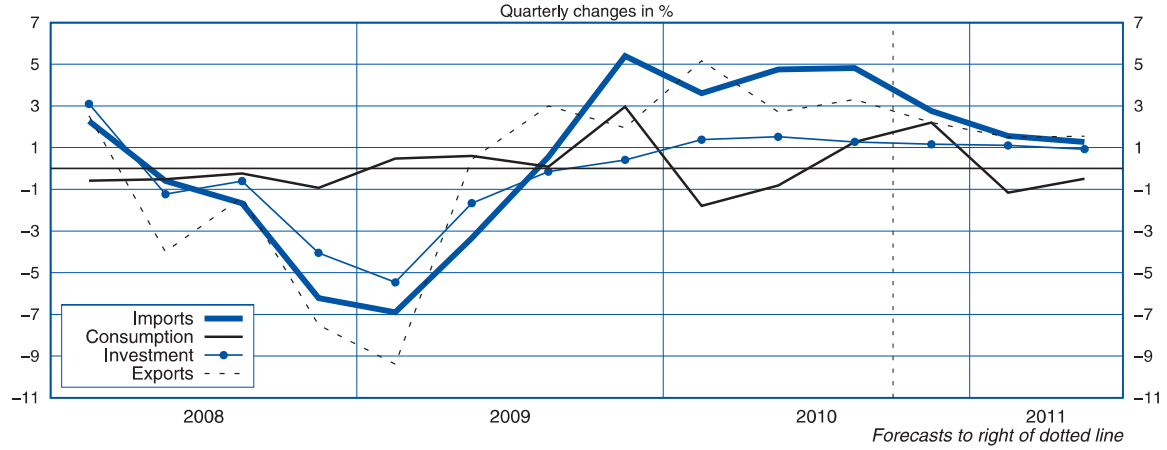
2 - Exports of non-energy industrial goods



How to read it: the curve represents quarterly growth in volume of exports of non-energy industrial goods. It is modelled by an econometric relationship involving world demand, the real effective exchange rate for France (price competitiveness index) and a time trend whose constant contribution is not plotted here. The bars represent the contributions of each of these variables to the growth rate of manufacturing exports, as well as that of the econometric residuals. For example, in Q1 2010, exports of non-energy industrial goods increased by 5.2%: the impact of world demand is evaluated at 4.5 points, and that of price competitiveness at -0.3 point. The residual contributes +1.0 point.

Source: Insee

3 - Imports of non-energy industrial goods



Source: Insee

Consumer prices

Over the forecasting period, 'core' inflation should rise to reach 1.1% year on year in June 2011. The recent rises in the prices of industrial and food commodities should gradually spread to core inflation via production prices. Nonetheless, the still-high unemployment rate should temper this rise in core inflation.

Headline inflation should drop very slightly, to 1.5% in December 2010, then to 1.4% in June 2011. It should reach an average of +1.5% over the year 2010 as a whole. The slight rise in core inflation should be more than offset by the slowdown in the prices of energy and seasonal products.

Core inflation on the rise, headline inflation slightly down

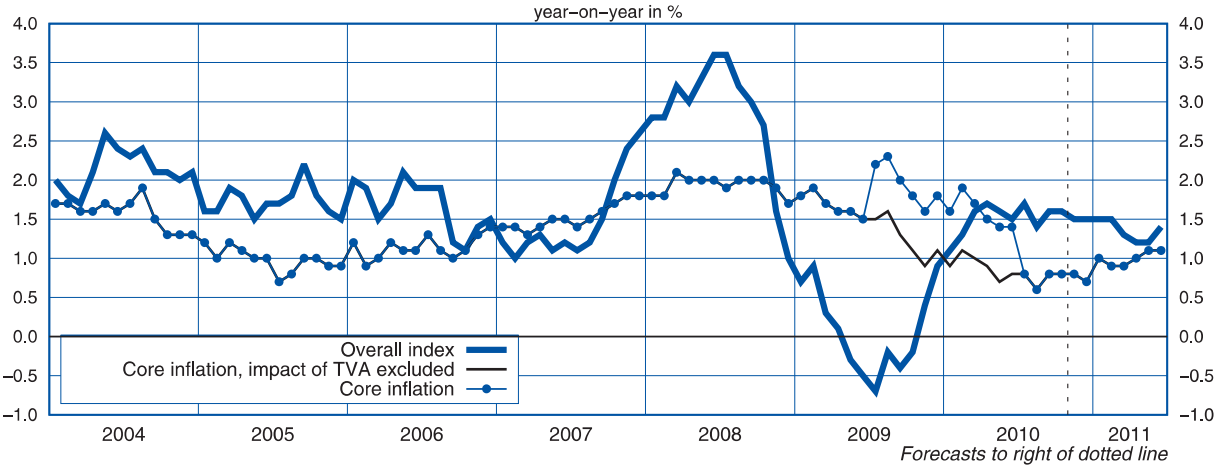
Core inflation is measured by subtracting the prices of energy products, seasonal products and public tariffs from headline inflation, and by correcting it for tax measures. By June 2011, core inflation should gradually recover: from 0.8% year-on-year in November, it should reach 1.1% in June 2011 *(see Graph 1)*. This rise should be notably more concentrated on food prices. . Since the start of 2010, the prices of industrial and food commodities have increased sharply *(see Graph 2)*. In recent months however, the appreciation of the euro has softened this rise in the prices of imported commodities, and prices have stabilised at a high level. These increases should gradually filter through to core inflation via production costs. They are nonetheless likely to be limited by the still-high level of unemployment, which has resulted in a moderation of wages.

Headline inflation should fall back slightly, to 1.5% in December 2010, then to 1.4% in June 2011.

Inflation in non-energy industrial goods set to rise slightly over the forecasting period

In October 2010, the prices of non-energy industrial goods remained stable in relation to those of September. This should still be the case in December 2010. Inflation in non-energy industrial goods should then become positive again in H1 2011, reaching +0.2% in June 2011 *(see Table)*. The rise in prices of imported commodities should support production costs. However, the moderation of wage costs and the low capacity utilisation rate in industry are likely to contribute to moderate inflation in this sector.

1 - Consumer prices in France



Source: INSEE

A slight rise in inflation in services

Year-on-year growth in prices of services remained stable in October in relation to September, at 1.4%. Inflation in services should rise slightly, to 1.5% in June 2011 *(see Table)*, mainly under the effect of the rise in prices of transport and communication services. Energy inflation set to stabilise

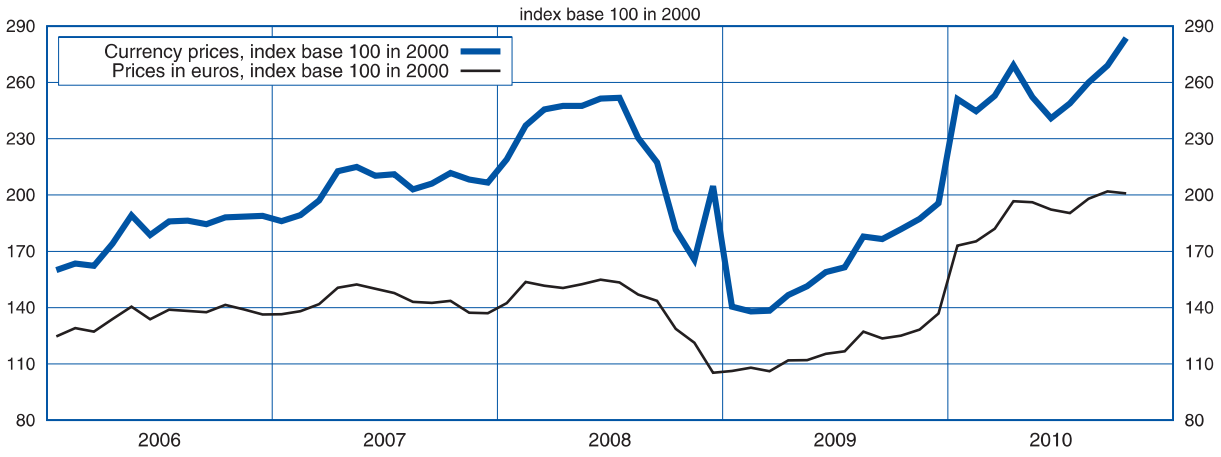
After 11.1% in October, year-on-year growth in energy prices should fall slightly, to 10.3% in December 2010, then drop more sharply to 4.3% in June 2011. On the assumption of a stable Brent price of $85 per barrel, this downturn could be explained by the fact that the price rises that occurred in H1 2010 will no longer be included in the year-on-year figures. The contribution of this item to headline inflation should thus fade gradually *(see Graph 3)*.

Inflation in food products likely to increase through H1 2011

Year-on-year growth in prices of foodstuffs should see an upswing through to June 2011. The recent rises in the prices of food commodities, particularly wheat, should gradually filter through to 'non-seasonal' food products via production prices in the agrifood industry *(see Focus)*. Then, from December 2010 to June 2011, this category should contribute 0.25 of a point to year-on-year core inflation.

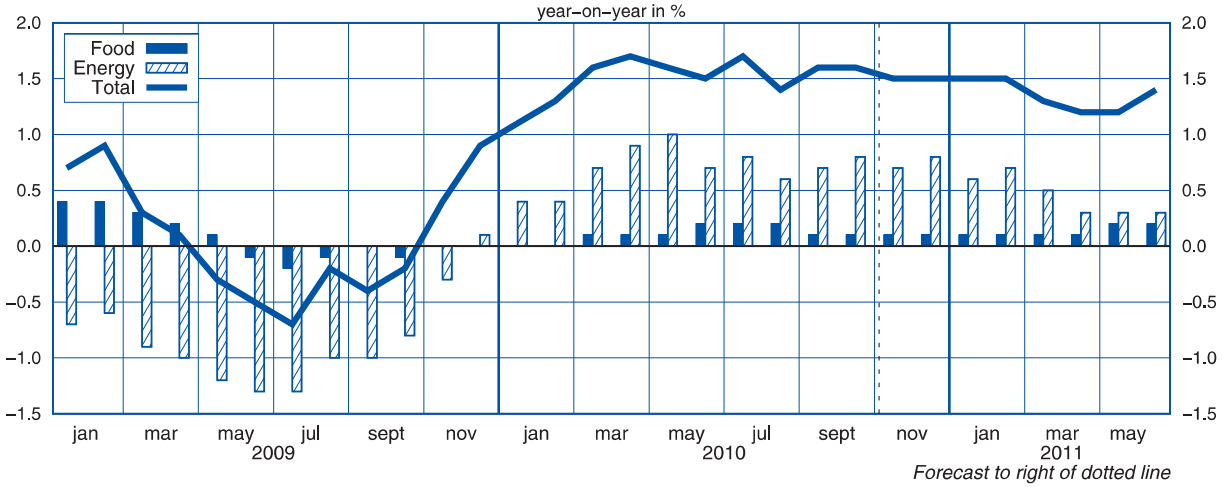
However, year-on-year growth in prices of seasonal products should keep falling until June 2011. Last winter, the prices of seasonal products increased sharply under the effect of difficult weather conditions. They should be restored to their usual seasonal profile over H1 2011. This effect of these prices no longer being included in year-on-year figures should temper headline inflation. ■

2 - All imported industrial and food commodities (except energy)



Source: INSEE

3 - Inflation in France: contributions of the most volatile items



Source: INSEE

Consumer prices

changes as a % and contributions in points

CPI* groups (2009 weightings)	June 2009		October2010		December2010		June 2011		Annual averages	
	ga	cga	ga	cga	ga	cga	ga	cga	2009	2010
Food (16.25%)	1.3	0.2	0.5	0.1	0.1	0.1	1.4	0.2	0.4	0.8
including: seasonal food products (1.95%)	11.5	0.2	6.5	0.1	4.0	0.1	-1.2	0.0	-4.2	6.9
excluding seasonal food products (14.30%)	-0.2	0.0	-0.3	0.0	0.5	0.1	1.8	0.3	1.0	-0.1
Tobacco (1.75%)	5.8	0.1	5.6	0.1	5.9	0.1	5.8	0.1	1.4	5.8
Non energy industrial goods (31.1%)	-0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0.0	-0.1
Energy (7.3%)	9.4	0.7	11.1	0.8	10.3	0.8	4.3	0.3	-12.0	9.7
including: oil products (4.28%)	13.0	0.6	14.1	0.6	12.4	0.5	3.2	0.1	-19.1	14.0
Services (43.6%)	1.3	0.6	1.4	0.6	1.2	0.5	1.5	0.6	2.3	1.4
including: rent-water (7.59%)	1.8	0.1	1.5	0.1	1.2	0.1	1.2	0.1	2.8	1.8
health services (5.21%)	0.5	0.0	0.5	0.0	-0.5	0.0	0.0	0.0	0.8	0.4
transport-communications (5.33%)	-0.9	0.0	-0.7	0.0	0.0	0.0	0.8	0.0	1.7	-0.2
other services (25.47%)	1.7	0.4	2.0	0.5	1.8	0.5	1.9	0.5	2.5	1.8
All (100%)	1.5	1.5	1.6	1.6	1.5	1.5	1.4	1.4	0.1	1.5
All excluding energy (92.7%)	0.9	0.8	0.9	0.8	0.8	0.8	1.1	1.0	1.2	0.9
All excluding tobacco (98.25%)	1.4	1.4	1.5	1.5	1.5	1.4	1.3	1.3	0.1	1.4
"Core" inflation (62.6%)(1)	1.4	0.9	0.8	0.5	0.7	0.5	1.1	0.7	1.8	1.1
All HCPI*	1.7	1.7	1.8	1.8	1.7	1.7	1.5	1.5	0.1	1.7

Forecast

ga : year-on-year cga : contribution to the year-on-year value of the overall index

* Consumer price index (CPI) and harmonised consumer price index (HICP).

(1) Index excludes public tariffs and products with volatile prices. corrected for tax measures.

Source: INSEE

Focus: what are the effects of the rise in food commodity prices on consumer prices?

Acceleration in food commodity prices in 2010

Since the beginning of 2009, food commodity prices expressed in Euros have been increasing at a strong rate (see *Graph 1 and Table 1)*. They have accelerated since the beginning of 2010: +15% in Q3 2010 year on year, after +10.8% in H1 2010. This trend hides a more contrasted situation. Expressed in Dollars, prices fell over the first five months of the year. The marked decline in the value of the Euro against the Dollar over the same period nonetheless offset this fall. Symmetrically, prices in dollars accelerated in summer 2010, but this rise in commodities was offset somewhat by the rise in the value of the Euro against the Dollar over the same period.

The acceleration in the rise in commodity prices over the year 2010 is a consequence of the tensions prevailing on world physical markets. These tensions, fed by the growth in world activity, have been accentuated by one-off phenomena. In cereals, for instance, poor weather conditions have raised fears about the level of world wheat production. These concerns were heightened by restrictions imposed on exports in certain producer countries (Russia, Ukraine). These conditions caused a sharp rise in world wheat prices from summer 2010 onwards, which was then passed on to other cereals, notably soy and corn, which can be partial substitutes for wheat to feed humans and animals or to produce biofuels.

It takes two or three quarters for a rise in food commodity prices to work through into consumer prices

An examination of the 2008 price shock *(see Graph 2)* and an econometric model of price formation can explain the transmission of the rise in food commodity prices down the supply chain to consumer prices.(1)

The rise is passed on very quickly, in less than one quarter, to agricultural producer prices. This rise in agricultural prices is then passed on after one more quarter to food industry

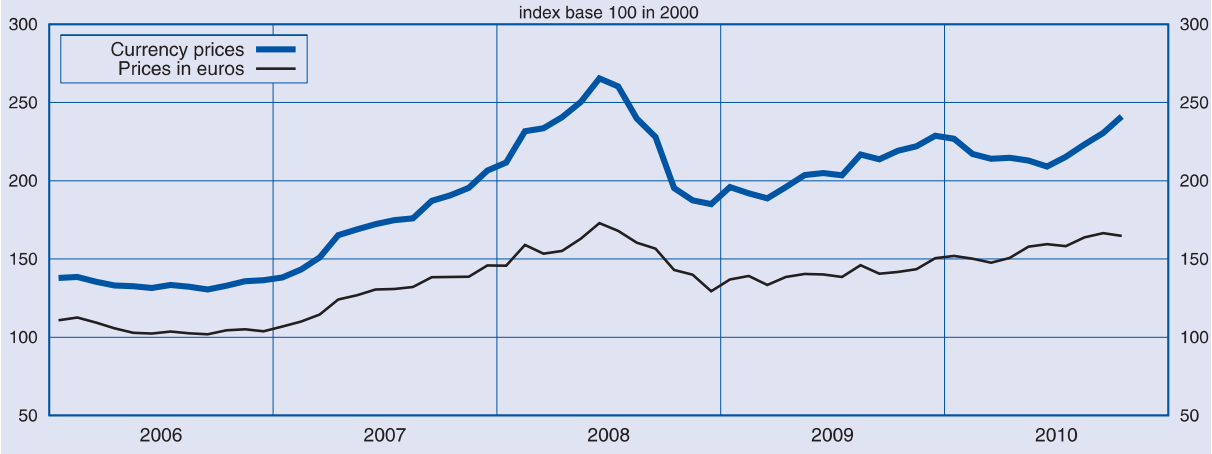
(1) Also see the focuses in Conjoncture in France December 2007 and June 2009.

Table 1 - Changes in prices of certain food commodities

Raw materials	Rise in October 2010 since January 2009 (measured in euro)	Main reasons for the rise
Wheat	+11.0%	Uncertainties about wheat production
Maize	+75.6%	Increase in ethanol production and effect of its substitution as an ingredient for animal and human food owing to the rise in wheat prices
Soya meal	+79.4%	Weather conditions in Argentina and Brazil (heat and drought) and increased use for biofuels
Rice	-3.5%	Rice is not used for animal feed or for the production of biofuels, unlike other cereals (no substitution effect on rice)
Arabica	-54.0%	Drop in production and rise in consumption in Brazil
Robusta	+30.4%	
Sugar	+35.9%	High volatility of prices due to lower than expected production in India and Brazil, and floods in Pakistan

Source : DataInsight

1 - All imported food commodities



Source: INSEE

producer prices. One more quarter later, it is passed on to food consumer prices.

All in all, the rise in food commodity prices is therefore passed on to consumer prices after a period of about two to three quarters *(see Table 2)*.

The rise in food commodity prices observed since the start of 2010 should contribute to a rise of around 0.4 points in consumer prices at the end of Q2 2011

To quantify the impact of the rise in imported food commodity prices observed since the beginning of 2010, the contribution of these rises to changes in consumer prices is determined in relation to a reference scenario in which food commodity prices remain stable at their end-of-2009 level. All in all, since the beginning of 2010, the rise in food prices has contributed 0.13 points to inflation. The most recent rises, notably over the summer, should contribute a further 0.25 points through to mid-2011 *(see Table 3)*. ■

Table 2 - Transmission of rises in food commodity prices

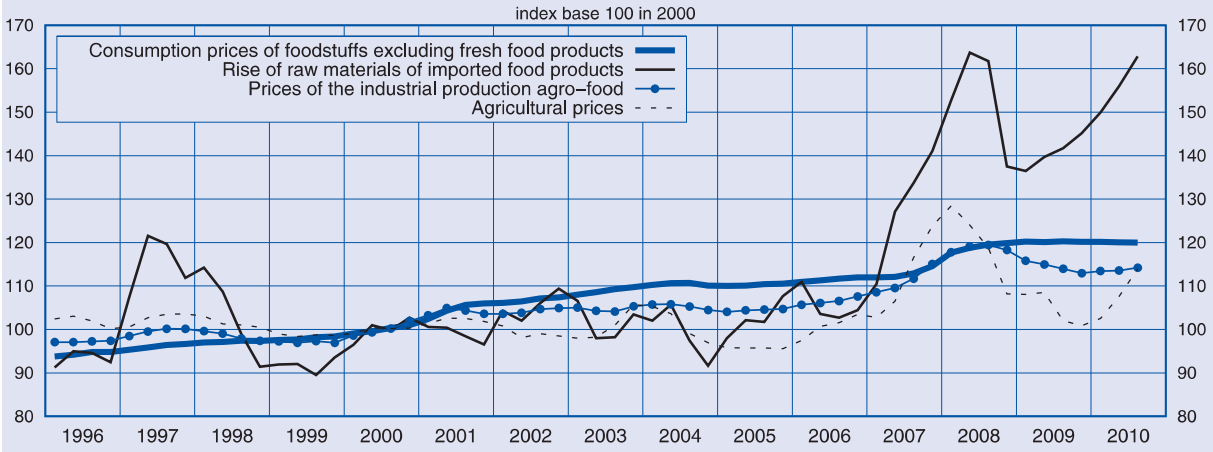
Rise in the prices of food commodities	Minimum transmission period at each stage
Agricultural prices	Immediate or 1 quarter
Agribusiness producer prices	1 quarter
Food consumer prices	1 quarter
Délai minimum total de transmission aux prix à la consommation	2 à 3 trimestres

Table 3 - Estimated effect of the rise in imported food commodity prices on the consumer price index

Impact of variations in the prices of imported agricultural commodities since the start of 2010	2010				2011		Total estimé
	Q1	Q2	Q3	Q4	Q1	Q2	
Inflation in agribusiness producer prices	0.3	1.0	1.5	0.8	0.5	0.3	4.5
Food inflation excluding seasonal produce (14.3%)	0.1	0.3	0.6	0.6	0.6	0.5	2.7
Total inflation	0.01	0.04	0.08	0.09	0.09	0.08	0.4

NB: in Q2 2010. the quarterly growth rate in food industry producer prices should be 1.0 percentage point above the level it would have had if imported food commodity prices had remained constant from Q1 2010.
Source : Insee, estimations Insee

2: Prices in euro along the supply chain



Source: Insee

Employment

To the time horizon of the forecast, the non-agricultural market sectors should continue to create jobs in the wake of the rise in activity. The rate of job creations should be similar to that observed at the start of 2010: 51,000 market-sector jobs should be created in H2 2010, then 50,000 in H1 2011. All in all in 2010, job creations in market sectors should come to 106,000.

In the non-market sectors, employment should be stable in H2 2010. Over the year 2010 as a whole, non-market employment should remain on an upwards trend (+57,000 jobs) although less dynamic than in 2009 (+88,000). It should decrease in H1 2011, as the number of people starting State-aided contracts should gradually decline.

All in all, 173,000 jobs in market and non-market sectors are likely to be created over the year 2010 as a whole, and 41,000 in H1 2011.

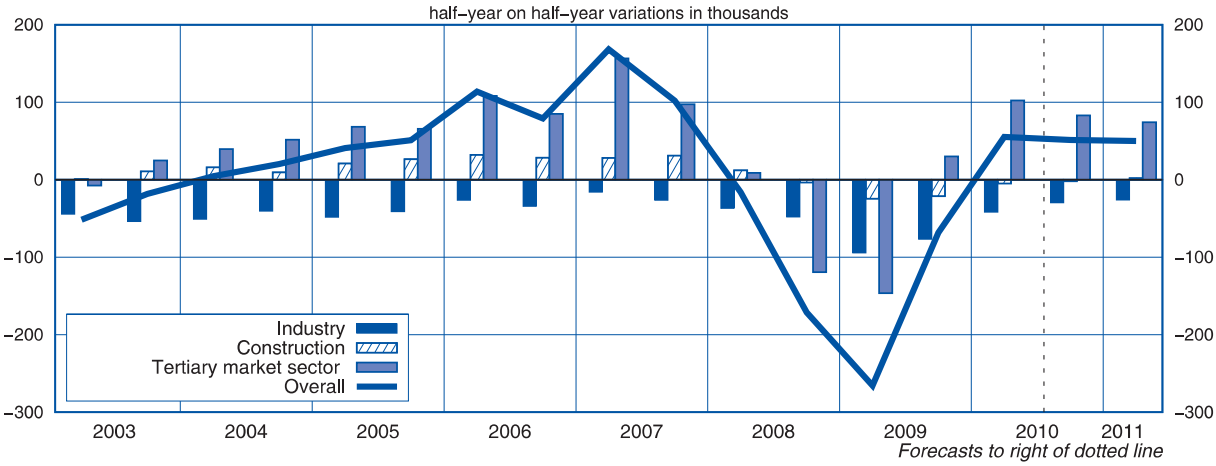
Market-sector employment set to rise in 2010 and early 2011

In H1 2010, market-sector employment rose (+0.3%, or +55,000 jobs) after seven quarters of decline *(see table 1, graphs 1, 2 and 3)*: 567,000 jobs had been destroyed in the market sectors between Q2 2008 and Q4 2009. Paid market-sector employment should increase by 51,000 jobs in H2 2010, then by 50,000 jobs in H1 2011. By mid-2011, it should therefore return to its level of early 2009 *(see graph 3)*. In relation to the slide in activity during the crisis, the adjustment in employment was finally smaller than expected. If the adjustment had been like those in the past, the market sectors would have lost more jobs *(see report)*. Likewise, the upturn in employment in H1 2010 was faster than expected. Looking forward, this relatively dynamic trend in employment should continue at a slightly higher rate than that suggested by simulations based on past behaviour *(see Graph 3)*.

Job losses in industry slowing down

Industrial employment has been on a downward trend since the early 2000s. Between 2002 and 2008, industry was losing about 80,000 jobs a year *(see graph 4)*. The crisis distinctly accentuated this decline: 171,000 jobs were destroyed in the sector in 2009, against 85,000 in 2008. Since the beginning of 2010, job losses in industry have returned to a rate close to that before the crisis (-42,000 jobs in H1). The improved outlook in industry can also be seen in the change in the number of temporary employees on assignments in

1 - Changes in paid employment in the non-agricultural market sectors



Source: INSEE

the sector[1]. Temporary employment in industry has been progressing since early 2009 (75,000 jobs created between Q1 2009 and Q2 2010, of which 39,000 in H1 2010).

Our forecast is that industrial employment should continue to decline at the end of 2010 (-30,000 in H2) and in early 2011 (-26,000 in H1). Over the year 2010, the industrial sector should lose much fewer jobs than in 2009: -72,000 after -171,000.

No significant upturn in construction

In construction, the drop in employment started later than in other sectors, at the end of 2008. After contracting sharply over the year 2009 (-46,000 jobs, or -3.1%), employment in construction still declined in H1 2010 (-0.4%).

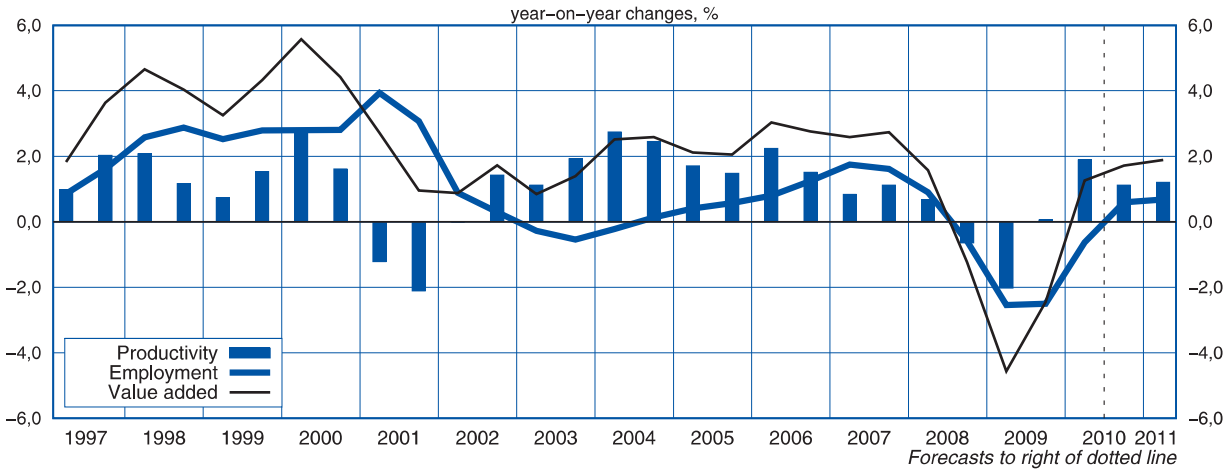
The forecast is that employment in construction should start to recover in H1 2011 (+2,000 jobs after -2,000 in H2 2010). In 2010, 7,000 jobs should be destroyed in this sector, after 46,000 in 2009.

Driven by temporary work, services sector should be dynamic in 2010

Temporary work is classified in services sector regardless of the sector in which the temporary assignments are actually carried out. Thanks to the upturn in temporary work, the services sector was the first to create jobs once again, at the end of 2009.

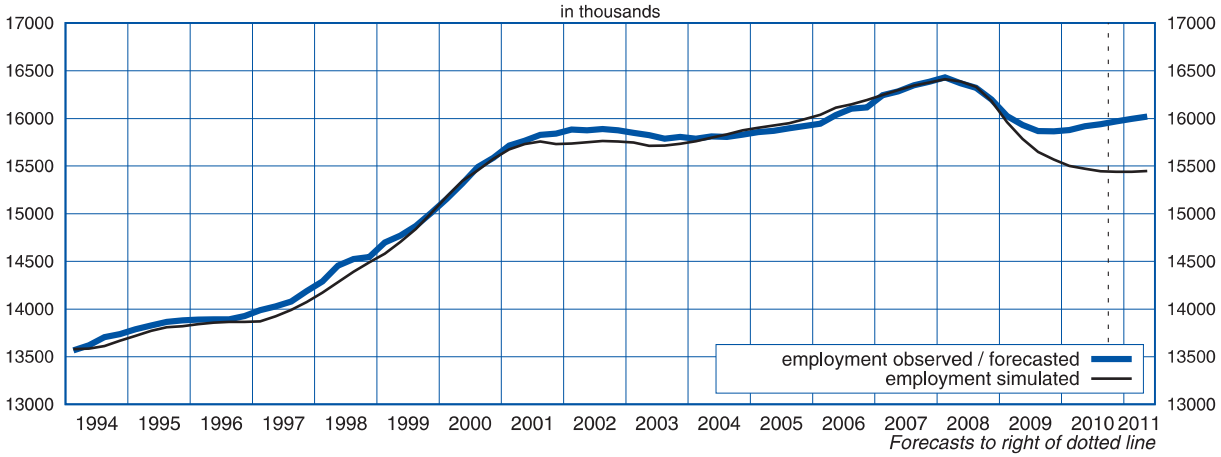
(1) Temporary workers are reflected in the services sector even if they are carrying out an assignment in industry or the building sector.

2 - Paid employment and value added of the non-agricultural market sectors



Source: INSEE

3 - Non-agricultural market paid employment



Source: INSEE

In H1 2010, the rate of job creations in services sector accelerated significantly (+102,000 jobs after +30,000 in H2 2009), driven by the newly-dynamic situation in temporary work (+57,000) but also by the upturn in non-temporary employment in services (+46,000).

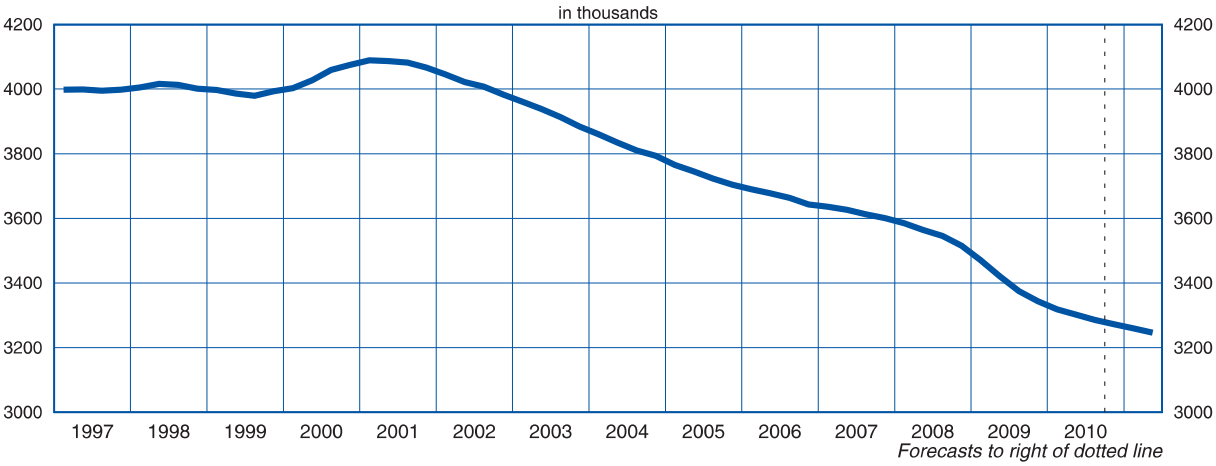
The rise in employment in the services sector should be slightly less strong in our forecast (+83,000 jobs in H2 2010 then +74,000 jobs in H1 2011). In particular, temporary employment should slow down (+37,000 jobs in H2 2010 then +10,000 in H1 2011, after +57,000 in H1 2010).

The fall in the number of beneficiaries of State-aided contracts should weigh down on non-market employment from H2 2010

In 2010, 57,000 jobs should be created in the non-market sector, after a very dynamic year in 2009 (+88 000). This slowdown comes mainly from the trend in State-aided contracts. Indeed, the number of people scheduled to start the non-market Single Integration Contract (CUI-CAE, contrat unique d'insertion), which now replaces the Contract to Support Employment (CAE - Contrat d'accompagnement vers l'emploi) and the Contract for the Future (CAV, contrat d'avenir), should level out in H2 2010. The number of people starting contracts for 2011 is lower than in 2010 (340,000 new contracts scheduled in 2011 for the whole of France, against 400,000 new contracts in 2010). The number of beneficiaries of this contract should slow down in H2 2010, then decline sharply in H1 2011 (-41,000, *see table 2*).

All in all, after a rise in H1 2010 (+42,000), non-market sector employment should level out in H2 2010 (+15,000), then decrease in early 2011 (-14,000 in H1 2011).■

4 - Industrial paid employment



Source: INSEE

Table 1

Change in employment

	Job creations over the period (in thousands) seasonally adjusted					Change in employment over the period (%) seasonally adjusted					Level at the end of the period (in thousands) seasonally adjusted				
	2009	**2010**	**2010 S1**	**2010 S2**	**2011 S1**	**2009**	**2010**	**2010 S1**	**2010 S2**	**2011 S1**	**2009**	**2010**	**2010 S1**	**2010 S2**	**2011 S1**
Market sector employees (1)+(2)	**-285**	**154**	**70**	**84**	**68**	**-1.6**	**0.9**	**0.4**	**0.5**	**0.4**	**17733**	**17887**	**17803**	**17887**	**17955**
Mainly non-agricultural market sectors (1) (private establishments only)	**48**	**47**	**15**	**33**	**18**	**2.7**	**2.5**	**0.8**	**1.7**	**0.9**	**1871**	**1918**	**1885**	**1918**	**1936**
Mainly non-market sectors (2) including:	**-334**	**106**	**55**	**51**	**50**	**-2.1**	**0.7**	**0.3**	**0.3**	**0.3**	**15863**	**15969**	**15918**	**15969**	**16019**
Industry including	-171	-72	-42	-30	-26	-4.9	-2.1	-1.3	-0.9	-0.8	3344	3272	3302	3272	3246
Manufacturing industry	-178	-71	-43	-28	-23	-5.7	-2.4	-1.5	-0.9	-0.8	2970	2900	2927	2900	2877
Construction	-46	-7	-5	-2	2	-3.1	-0.5	-0.4	-0.2	0.1	1438	1431	1433	1431	1433
Tertiary market sector	-116	185	102	83	74	-1.0	1.7	0.9	0.7	0.7	11081	11266	11183	11266	11340
including Trade	*-44*	*14*	*3*	*11*	*18*	*-1.5*	*0.5*	*0.1*	*0.4*	*0.6*	*2965*	*2980*	*2969*	*2980*	*2998*
Market services (including temping)	*-73*	*171*	*99*	*72*	*56*	*-0.9*	*2.1*	*1.2*	*0.9*	*0.7*	*8116*	*8287*	*8215*	*8287*	*8343*

	Job creations over the period (in thousands) seasonally adjusted					Change in employment over the period (%) seasonally adjusted				
	2009	**2010**	**2010 S1**	**2010 S2**	**2011 S1**	**2009**	**2010**	**2010 S1**	**2010 S2**	**2011 S1**
Mainly non-agricultural market sectors	**-334**	**106**	**55**	**51**	**50**	**-2.1**	**0.7**	**0.3**	**0.3**	**0.3**
Agricultural employees	**-3**	**-10**	**-5**	**-5**	**-5**	**-1.1**	**-4.5**	**-2.2**	**-2.3**	**-2.3**
Mainly non-market service sectors (including private establishments)	**88**	**57**	**42**	**15**	**-14**	**1.2**	**0.8**	**0.6**	**0.2**	**-0.2**
Self-employed	**20**	**20**	**10**	**10**	**10**	**0.8**	**0.8**	**0.4**	**0.4**	**0.4**
TOTAL EMPLOYMENT	**-229**	**173**	**103**	**71**	**41**	**-0.9**	**0.7**	**0.4**	**0.3**	**0.2**

Forecast

(1) Sectors DE to MN and RU

(2) Sectors OQ private

How to read the table: 68 000 jobs look set to be lost in the market sector during H1 2011. This corresponds to a fall of 0.4% over the half-year. At 30 June 2011, this sector should account for 17 955 000 paid employees.

Source: INSEE

Table 2

Subsidised employment in the non-market sector

En milliers

	2008	**2009**	**2010 S1**	**2010 S2**	**2010**	**2011 S1**
Contrats Emploi Consolidé	-1	0	0	0	0	0
Contrat Unique d'Insertion (CUI-CAE : remplace CAE+CAV au 01/01/10)	-	-	184	68	252	-41
Contrats d'Accompagnement dans l'Emploi (CAE)	-48	70	-82	-67	-149	-3
Contrats d'Avenir (CAV)	-10	-10	-46	-22	-68	0
Contrats Emploi-jeunes	-4	-3	-1	-1	-2	0
Total	**-63**	**57**	**55**	**-21**	**33**	**-45**

Forecast

Note : including renewal amendments.

Scope: metropolitan France

Source : Dares, Insee

Unemployment

In Q3 2010, the unemployment rate stood at 9.3% of the active population in Metropolitan France (9.7% including the overseas departments). Until mid-2011, the unemployment rate should fall slightly, as employment continues to rise in the wake of the growth in activity. The unemployment rate should be 9.1% on average in Metropolitan France in mid-2011 (9.5% including the overseas departments).

The unemployment rate stood at 9.3% of the active population in Q3 2010

In Metropolitan France, unemployment increased sharply between mid-2008 and the end of 2009, reaching 9.6%. The unemployment rate then dropped slightly in H1 2010, before levelling out at a still high rate in Q3 2010 (*see graph*): 9.3% of the active population in Metropolitan France are currently unemployed, representing 2.6 million people.

Stabilisation of the unemployment rate among people under 30

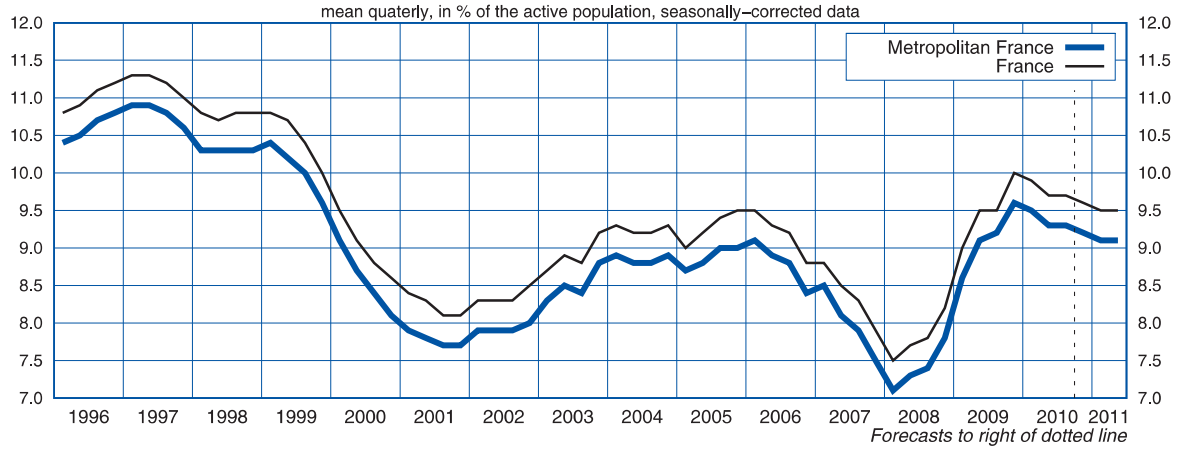
The unemployment rate among the active population aged 15 to 29 has been stable on the whole since mid-2009. In Q3 2010, it stood at 17.5% of the active population. In this population, the unemployment rate for women increased by 0.3 points, while that for men fell by 0.8 points. The unemployment rate among the under-25s is more volatile: this population is highly sensitive to the economic situation, and the transition between activity and inactivity has a great impact on the unemployment rate as a proportion of the active population. The proportion of the unemployed in the population aged 15-24 was stable at 8.5%, although slightly up for women. Among people aged 25 to 49, unemployment has declined since the end of 2009, from 8.7% to 8.3% in Q3 2010. The unemployment rate of the active population aged over 50 would seem to have stabilised since mid-2009 and stood at 6.4% of the active population.

A slight fall in unemployment through to mid-2011

To the time horizon of our forecast, the unemployment rate should fall slightly (*see Graph*). It should stand at 9.1% of the active population in Metropolitan France (9.5% including overseas departments) at the end of Q2 2011.

Employment is set to progress in the wake of the rise in activity (*see "Employment" note*): 35,000 jobs should

Unemployment rate in the sense of the ILO



France = Metropolitan France + Overseas Departments
Scope: Population of households, people aged 15 or over
Source: INSEE

be created in Q4 2010, then 50,000 in 2011. The increase in the active population should be smaller.

The active population should slightly rise. Indeed, the purely demographic component of the active population, which reflects changes in the population and the structural evolution in activity behaviour, should remain positive, but on a distinctly smaller scale: +45,000 people in 2010, after +76,000 people in 2009 (*see table*). This slowdown is due to a structural effect: the rise in working-age people is currently driven by older workers (aged 55-64), whose activity rate is lower than that of young people.

In addition, the upturn in activity should have little influence on people's decisions to enter the labour market in early 2011 ("withdrawal" effects).Finally, among public policies, the gradual suppression of the exemption from the obligation for job-seekers to look for a job should boost the active population, which should increase by +18,000 people in H1 2011.■

Changes to the active population, employment and unemployment in Metropolitan France

mean quarter, in thousands

	2008 T4	2009 T1	2009 T2	2009 T3	2009 T4	2010 T1	2010 T2	2010 T3	2010 T4	2011 T1	2011 T2	2008	2009	2010	2011 S1
	Quarterly changes											Annual changes			
Population of the 15-64 age group	32	31	30	30	30	8	-7	-19	-25	-27	-27	140	122	-42	-54
Population of the 15-59 age group	-30	-29	-28	-27	-27	-23	-20	-19	-20	-22	-25	-109	-111	-83	-47
Active population	**50**	**103**	**50**	**-57**	**132**	**2**	**-2**	**48**	**18**	**11**	**7**	**30**	**229**	**66**	**18**
including:															
(a) Contribution of the population and the trend participation rate	*11*	*15*	*19*	*22*	*20*	*16*	*10*	*10*	*10*	*4*	*0*	*29*	*76*	*45*	*4*
(b) Estimated bending effects	*-3*	*-6*	*-5*	*-3*	*-1*	*2*	*3*	*3*	*3*	*3*	*2*	*0*	*-14*	*11*	*5*
(c) Estimated effects of public policies	*-3*	*4*	*6*	*1*	*7*	*6*	*5*	*1*	*6*	*5*	*4*	*-12*	*17*	*17*	*9*
(d) Other short-term fluctuations (residual)	*46*	*90*	*30*	*-77*	*106*	*-21*	*-20*	*34*	*0*	*0*	*0*	*14*	*149*	*-7*	*0*
Employment	**-75**	**-134**	**-114**	**-51**	**-1**	**35**	**51**	**48**	**35**	**30**	**20**	**-61**	**-299**	**169**	**51**
Reminder: End-of-period employment (see "Employment" note)	-112	-157	-71	-30	29	41	62	34	37	24	17	-142	-229	173	41
ILO unemployment	125	238	164	-6	133	-33	-53	0	-17	-19	-14	91	528	-103	-33
	Quarterly mean											Mean at last quarter of the period			
ILO unemployment rate (%)															
Metropolitan France	7.8	8.6	9.1	9.2	9.6	9.5	9.3	9.3	9.2	9.1	9.1	7.8	9.6	9.2	9.1
France (including overseas departments)	8.2	9.0	9.5	9.5	10.0	9.9	9.7	9.7	9.6	9.5	9.5	8.2	10.0	9.6	9.5

Forecast

How to read it: Here, employment and unemployment are not estimated over strictly equivalent scopes: total population for employment, population of households (excluding communities) for unemployment. As the impact of this difference in scope is very low (the population outside households represents less than 1% of the active population), it is ignored here for the unemployment forecast.
Source: INSEE

Wages

In 2010, the basic monthly wage should slow down in nominal terms (+1.8%, after +2.2% in 2009). Inflation should sustain the basic monthly wage, but growth is likely to be slowed by the still-high level of unemployment. Conversely, the nominal average wage per head should accelerate in 2010 (+2.9% after +1.3% in 2009), because the sharp decrease in bonuses seen at the start of 2009 did not happen in 2010. In H1 2011, wages should remain dynamic, in the wake of inflation. The growth overhangs at the end of Q2 should reach +1.8% for the basic monthly wage and +1.7% for the average wage per head.

In real terms, the basic monthly wage should slow down sharply in 2010 (+0.6% in 2010 after +2.8% in 2009), bearing in mind the sharp rise in inflation. However, this slowdown should be less pronounced for the average wage per head (+1.7% after +1.9% in 2009). At the start of 2011, real wages are likely to increase slightly: at the end of Q2, the growth overhang should be +0.7% for the basic monthly wage and +0.6% for the average wage per head.

In general government, the nominal average wage per head looks set to fall back in 2010 (+1.8% against +2.0% in 2009). This slowdown should be more pronounced in real terms (+0.6% after +2.6% in 2009).

Slowdown in the basic monthly wage in 2010...

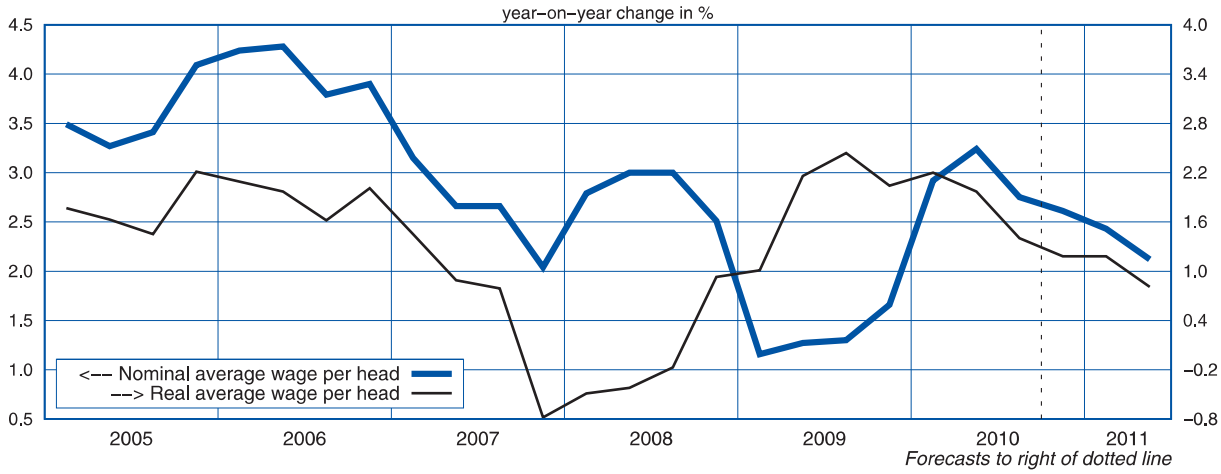
In 2010, the nominal basic monthly wage should be less dynamic than in 2009 (+1.8% after +2.2%). Firstly, the still-high level of unemployment is likely to take its toll on wages. Also, as wages are partly determined by past inflation, the sharp slowdown in prices in 2009 halted their progress at the start of 2010. In particular, the increase in the minimum wage on 1st January 2010, which is based on the inflation observed in 2009, was limited to +0.5%.

. . . but an acceleration in the average wage per head.

Conversely, the average wage per head looks set to accelerate sharply in 2010 (+2.9% against +1.3% in 2009). This can be explained among other things by the sharp drop in results-related bonuses in the services sector in Q1 2009, which gave way in early 2010 to more usual pay rises, in the wake of the rebound in activity.

In real terms, a far more pronounced slowdown in 2010 for the basic monthly wage than for the average wage per head.

Change in the nominal and real average wage per head



* Scope: non-agricultural market sector
Source: Dares, INSEE

In real terms, the basic monthly wage looks set to slow sharply in 2010. The nominal basic monthly wage should be less dynamic in 2010, mainly in H1. In this way, growth in the basic monthly wage should be small (+0.6% after +2.8% in 2009). However, the real average wage per head should grow at almost the same rate as in 2009 (+1.7% in 2010 after +1.9% in 2009): the renewed pace of inflation should be offset by the increase in the nominal average wage per head.

In early 2011, growth in wages should be sustained.

In H1 2011, nominal wages should remain dynamic, in the wake of inflation. The increase in the minimum wage on 1st January should be larger than it was last year (+1.6%, against +0.5% on 1st January 2010). In real terms however, wages (basic monthly wage and average wage per head) should grow modestly in H1: the employment situation is not conducive to wage rises.

The growth overhangs at the end of Q2 2011 should be +1.8% for the basic monthly wage and +1.7% for the average wage per head. In real terms, they should reach +0.7% for the real basic monthly wage and +0.6% for the real average wage per head.

General government wages set to slow in 2010

In the civil service, the index point was increased by +0.5% on 1st July 2010, but the civil service minimum index is unlikely to increase this year. Also, the individual purchasing power guarantee (GIPA) scheme[1] is set to be renewed at the end of the year, but more restrictedly than in 2009. All in all, the average wage per head in general government should grow a little less quickly in 2010 than in 2009 (+1.8% after +2.0%); in real terms, the slowdown should be far more pronounced (+0.6% after +2.6%) bearing in mind the resurgence of inflation in 2010.

In 2011, the slowdown in the general government average wage per head should be accentuated: the growth overhang for Q2 should be +1.0% for the nominal average wage per head and -0.1% for the real average wage per head. ■

(1) The 2010 individual purchasing power guarantee is a compensation that concerns civil servants and government agents who suffered a loss in purchasing power between 2005 and 2009. In 2010 this guarantee will only be paid to civil servants who were blocked at the top of a pay scale for at least the four years from 2005 to 2009, and to those who retired in 2010 and were paid the guarantee in 2008 and 2009.

Growth of the basic monthly wage (SMB) and the average wage per head (SMPT) in the non-agricultural market sector and in general government

change as a %

Seasonally-corrected data	Quarterly growth rates						Annual averages		
	2010				2011		2009	2010	2011 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2			
Basic monthly wage (SMB)	0.4	0.5	0.3	0.6	0.6	0.6	2.2	1.8	1.8
Average wage per head (SMPT)									
- in the non-agricultural market sector (NAMS)	0.9	0.9	0.3	0.5	0.6	0.5	1.3	2.9	1.7
- in general government (GG)	-	-	-	-	-	-	2.0	1.8	1.0
Household consumer price index	0.6	0.3	0.2	0.4	0.4	0.4	-0.6	1.2	1.1
Real basic monthly wage	-0.2	0.2	0.1	0.2	0.2	0.2	2.8	0.6	0.7
Real average wage per head (NAMS)	0.3	0.6	0.1	0.1	0.2	0.1	1.9	1.7	0.6
Real average wage per head (GG)	-	-	-	-	-	-	2.6	0.6	-0.1

Forecast

Sources: Dares. INSEE

The basic monthly wage and the average wage per head - the two wage indicators used in Conjoncture in France

The basic monthly wage: remuneration for work, at a constant structure

Growth in the basic monthly wage reflects the average variation in wages at a constant qualification structure. This index is estimated from the quarterly Acemo survey by the Dares (survey on the activity and employment conditions of the labour force). Each quarter, this survey concerns 20,000 to 30,000 establishments or enterprises with 10 employees or more in the non-agricultural market sector. The basic monthly wage is given for 16 professional categories. Each establishment or enterprise declares the basic wage of a position considered as representative of a professional category. This position is monitored in each survey. The basic monthly wage excludes bonuses and payment in kind, as well as payment for overtime.

The average wage per head: the income paid by all enterprises

Growth in the average wage per head as calculated by the National Accountants reflects growth in the wages paid by all enterprises. This indicator is the result of a comparison of trends in the total wage bill and the headcount, both of which are measured from exhaustive sources (tax data from enterprises). Unlike the basic monthly wage, it includes micro-enterprises and integrates structure effects (changes in qualifications, in the proportion of part-time work), business tendency effects (rate of overtime) and seasonal effects (bonuses). ■

Household income

In 2010, household purchasing power should grow at a slightly slower rate than in 2009 (+1.4% after +1.6%). This slowdown should result from the rebound in consumer prices (+1.2% after -0.6%). Conversely, the disposable income of households picked up (+2.6% after +1.1% in 2009), sustained by earned income. With the expiry of the stimulus measures, social benefits should slow down, and taxes are likely to rise once again. In H1 2011, household purchasing power is set to decelerate (+0.9% after +1.2% in H2 2010). As in the previous half-year, earned income should increase, but taxes are also likely to pick up, in particular income tax, as a result of the buoyancy of income in 2010.

Earned income set to continue growing until mid-2011

In 2010, earned income should increase by 2.2%, after falling back in 2009 (see *Table 1*) in the wake of the crisis (-0.5 %). On the one hand, the wage earnings of households should rise sharply (+2.3% after +0.0% in 2009; see *Table 2*), sustained by the recovery of employment and by the dynamism of wages in the market sectors (see *Graph 1*). On the other hand, the earnings before interest, taxes, depreciation and amortisation (EBITDA) of sole proprietorships seem set to increase in 2010 (+1.7% after -3.9% in 2009). In 2010, net property income should also pick up (+1.9% after -0.8% in 2009), mainly thanks to the cut in interest rates on loans. Last, the earnings before interest, taxes, depreciation and amortisation of pure households should progress once more (+3.9% after -2.1% in 2009).

Table 1

Household gross disposable income

change as a %

	Half-yearly averages					Annual averages		
	2009		2010		2011			
	H1	H2	H1	H2	H1	2008	2009	2010
Gross disposable income (100%)	**0.4**	**1.1**	**1.2**	**1.7**	**1.6**	**3.2**	**1.1**	**2.6**
including :								
Income (68%)	-0.9	0.3	1.5	1.1	1.0	2.8	-0.5	2.2
Gross wages (58%)	-0.6	0.6	1.5	1.1	1.0	3.1	0.0	2.3
GOS of sole proprietors (10%)	-2.6	-1.3	1.7	1.4	0.7	1.4	-3.9	1.7
Social benefits in cash (30%)	3.0	2.2	1.1	1.4	1.4	3.5	5.3	2.9
GOS of "pure" households[1] (14%)	-2.1	0.0	2.9	2.0	2.1	5.0	-2.1	3.9
Property income (10%)	-1.0	-0.3	0.9	2.4	3.0	4.4	-0.8	1.9
Social contribution and tax burden (-23%)[*]	-2.8	-1.3	1.1	0.6	1.2	6.0	2.9	2.7
Contributions by paid employees (-8%)	0.2	1.3	1.1	0.6	1.2	1.5	1.2	2.1
Contributions of self-employed persons (-2%)	1.7	0.6	1.3	2.1	1.2	6.0	2.9	2.7
Income and wealth tax (including CSG and CRDS) (-13%)	-5.2	-3.2	4.8	-0.5	0.2	5.0	-4.4	2.7
Income before taxes	-0.3	0.6	1.5	1.4	1.4	3.4	0.4	2.6
Household consumer prices (quarterly national accounts)	**-0.9**	**0.1**	**0.9**	**0.5**	**0.6**	**2.9**	**-0.6**	**1.2**
Purchasing power of gross disposable income	**1.3**	**1.0**	**0.3**	**1.2**	**0.9**	**0.3**	**1.6**	**1.4**

Forecast

Note: the figures in parentheses give the structure of the year 2009.

Source: INSEE

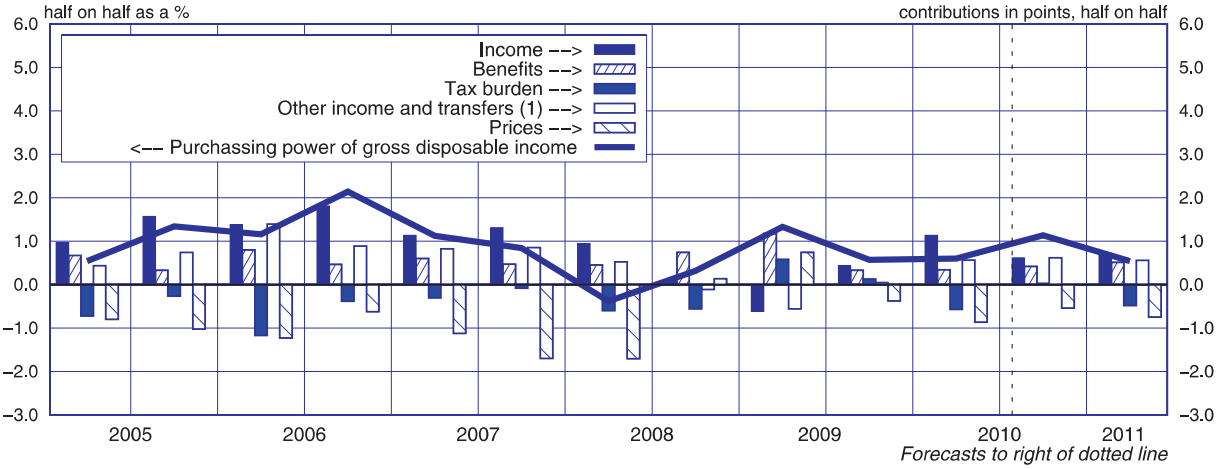
In early 2011, earned income should remain dynamic (+1.0% after +1.1% in H2 2010). The wage earnings of households should grow at the same rate as in the previous half-year (+1.0%). The earnings before interest, taxes, depreciation and amortisation (EBITDA) of sole proprietorships should slow down (+0.7%) than in H2 2010. However, property income should continue to rise (+3.0% after +2.4% in H2 2010).

Social benefits still dynamic in early 2011

In 2010, the social benefits paid to households seem to have slowed after a particularly dynamic 2009 (+2.9% after +5.3% in 2009, *see Table 3)*. Social assistance benefits should experience a downturn (-0.9% after +12.4%), as the measures implemented as part of the stimulus plans in 2009 [1] were not renewed in 2010. Additionally, social security benefits should slow down in 2010 (+3.4% after +5.2% in 2009). In H1 2011, social benefits should grow at the same rate as in H2 2010 (+1.4%). Social assistance benefits should continue to progress (both specific solidarity allowances and active solidarity incomes). Social security benefits should be sustained by buoyant old-age benefits and the scheduled increase in family allowances, which was not implemented in 2010. On the other hand, unemployment benefits should fall.

(1) Two one-off bonuses were created: the 'active solidarity bonus', and a bonus for beneficiaries of the start-of-school-year allowance.

1 - Purchasing power of disposable income and contributions



(1) GOS of "pure households, property income and current transfers
Source: INSEE

Table 2

From non financial enterprise payroll to wages received by households

change as a %

	Half-yearly averages					Annual averages		
	2009		2010		2011			
	HS1	H2	H1	H2	H1	2008	2009	2010
Non-financial enterprises (67%)	-1.8	0.3	1.5	1.4	1.2	3.6	-1.4	2.4
including : Average wage per head	-0.2	1.4	1.5	1.0	0.9	3.2	1.2	2.7
Financial corporations (5%)	4.8	0.1	4.6	1.4	1.9	-1.2	4.3	5.4
General government (23%)	1.2	1.3	0.7	0.2	0.3	1.9	2.4	1.5
Households excluding sole proprietors (2%)	1.6	1,5	1,8	0,0	1,0	7,6	4,0	2,6
Total gross wages received by households (100%)	**-0.6**	**0.6**	**1.5**	**1.1**	**1.0**	**3.1**	**0.0**	**2.3**
including : Non-agricultural market sectors	*-1.6*	*0.2*	*1.7*	*1.4*	*1.3*	*3.3*	*-1.3*	*2.5*

Forecast

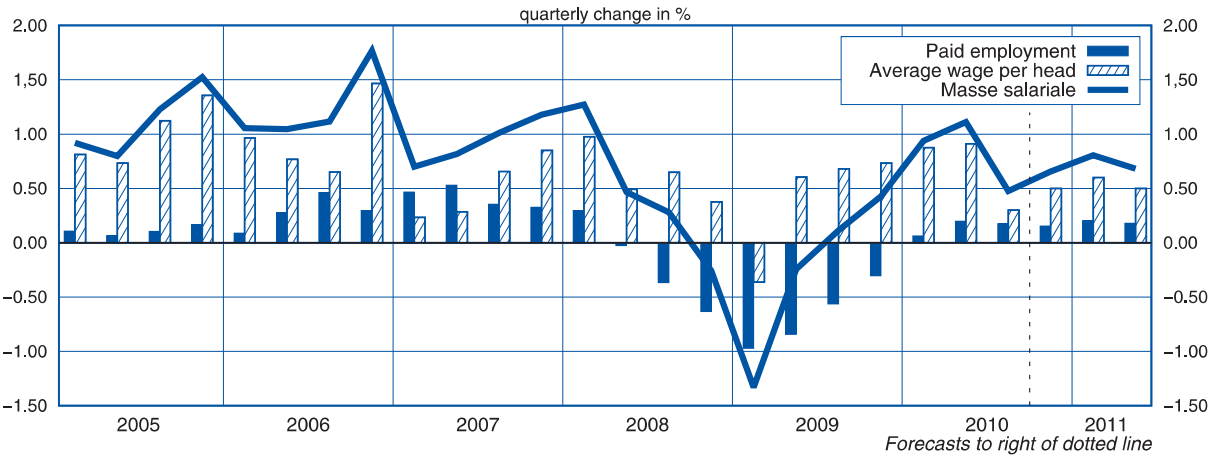
Note: the figures in parentheses give the structure of the year 2009.
Source: INSEE

The total tax burden should accelerate over the forecasting period

The tax burden appears to have increased in 2010 (+2.5% against -1.8% in 2009), mainly due to the rebound in taxes paid by households (+2.7% after -4.4% in 2009). Concentrated in the first half-year, this increase could be explained by the fact that the tax relief granted as part of the 2009 stimulus plan was not renewed in 2010. In H2 2010, income tax should slow because of the drop in income in 2009 (-0.5%). Employee contributions should also grow in 2010 (+2.1% after +1.2% in 2009), following the increase in wage earnings. In parallel, the contributions paid by the self-employed should increase at a similar rate to that of 2009 (+2.7% after +2.9%).

In H1 2011, the overall tax burden should rise faster (+0.7% after +0.1% in H2 2010). The taxes paid by households are set to grow once more (+0.2% after - 0.5% in the previous half-year). The budget consolidation measures voted for 2011, in particular the cuts in certain tax loopholes should have little effect in H1: they should do so in H2, when the end-of-year tax adjustments are made.

2 - Breakdown of the total wages of households in the non-agricultural market sector



Source: INSEE

Table 3

The social transfers received and paid by households

change as a %

	Half-yearly averages					Annual averages		
	2008		2009		2010			
	H1	H2	H1	H2	H1	2007	2008	2009
Social cash benefits received by households (100%)	**3.0**	**2.2**	**1.1**	**1.4**	**1.4**	**3.5**	**5.3**	**2.9**
Social Security benefits in cash (71%)	2.6	2.6	1.4	1.4	1.5	4.1	5.2	3.4
Private funded social benefits (7%)	1.2	3.1	0.0	2.1	1.5	2.7	3.9	2.6
Unfunded employee social benefits (14%)	1.2	1.2	1.4	1.5	1.7	4.7	2.7	2.7
Social assistance benefits in cash (8%)	12.4	-0.6	-0.9	0.5	0.5	-2.7	12.4	-0.9
Total social contribution burden	**-0.2**	**1.2**	**1.3**	**1.2**	**1.3**	**3.0**	**0.8**	**2.6**
Actual social contributions paid by households (100%)	-0.4	1.2	1.3	1.2	1.2	2.8	0.5	2.5
including : Employers contributions[1] (64%)	-0.9	1.2	1.4	1.3	1.2	3.0	-0.1	2.7
Employees contributions (29%)	0.2	1.3	1.1	0.6	1.2	1.5	1.2	2.1
Self-employed contributions (7%)	*1.7*	*0.6*	*1.*	*2.1*	*1.2*	*6.0*	*2.9*	*2.7*

Forecast

Note: the figures in parentheses give the structure of the year 2007.

(1) For accounting reasons employer contributions are considered in both revenue and expenditure in the national accounts: they therefore have no effect on gross disposable income.

Source: INSEE

Household income

Purchasing power likely to suffer a slowdown in H1 2011

In 2010, the nominal gross disposable income of households climbed sharply (+2.6% after +1.1% in 2009). This increase should however be offset by the recovery of consumer prices (+1.2% after -0.6% in 2009). Thus the purchasing power of gross disposable income seems set to grow less sharply in 2010 than in 2009 (+1.4% after +1.6% in 2009). Purchasing power per consumption unit, which takes account of demographic changes, should grow at the same rate in 2010 as in 2009 (+0.8%).

In H1 2011, household income should grow by +1.6%, i.e. at a similar rate to that of H2 2010. As inflation is increasing, purchasing power should slow somewhat (+0.9% as a half-yearly average after +1.2% in H2 2010).■

Different measures of purchasing power

The household income that is presented and analysed in Conjoncture in France represents all incomes received by all households. It is this magnitude that is pertinent at macroeconomic level, for example in order to build the balance between resources (GDP and imports) and uses (consumption, investment, exports...) or to forecast GDP. If the aim is to measure the average purchasing power of the French people, this magnitude needs to be corrected in order to include both the growth in the number of households and the changes to the composition of these households. The most accurate correction in this respect consists in dividing the income by the number of consumption units in France. This concept takes account of demographic growth, but also the sharing of certain consumptions within households (electrical appliances, for example). A large household achieves certain 'economies of scale' compared to a smaller household. In 2009, growth in the number of consumption units was 0.8% (as a comparison, growth in the number of inhabitants was 0.5% and growth in the number of households was 1.2%).

In 2010, purchasing power per consumption unit should increase at the same rate as in 2009 (+0.6%). Per inhabitant, the rise should be 0.9%, while purchasing power per household should increase by 0.2%. (*) ■

(*) Figures in this paragraph were changed on March 7th, 2011.

Household consumption and investment

In Q3 2010, household consumption accelerated (+0.6% after +0.3%), boosted by gains in purchasing power (+0.7% after +0.5% in Q2). In parallel, the household savings ratio increased slightly (+0.1 point).

Over the coming quarters, the consumption pattern should be affected by the effects of the end of the scrappage allowance by the end of 2010: consumption should be very strong in Q4 (+0.9 %) before slowing down sharply in H1 2011 (+0.1 % and +0.2 % in Q1 and Q2, see Graph 1). With moderate purchasing power gains, the savings ratio should stay at a high level, since households have little confidence in the economy as a whole and the unemployment situation.

After returning to growth in the spring for the first time in over two years, household investment should continue to increase through to the time horizon of the forecast.

In Q3 2010, expenditure was strong in textiles-clothing-leather and in automobiles

In Q3 2010, household consumption strengthened (+0.6%, see table) after a sluggish start to the year (0.0% then +0.3% in Q1 and Q2). With gains in purchasing power remaining strong (+0.7% after +0.5%), households' savings ratio increased slightly: the savings ratio rose from 16.1% in Q2 to 16.2% (see Graph 2).

After two quarters of sharp decline, automobile purchases increased again in Q3 (+0.7%), with strong growth in September. In H1, automobile purchases had indeed fallen significantly in the wake of the reduction in the scrappage allowance and the tightening of the terms of the environmental bonus-malus on 1st January 2010.

Q3 was also marked by a very sharp rise in purchases of textiles-clothing-leather (+4.5%). This can be partly explained by this year's bargain sales calendar, with sales being concentrated in July.(1)

Conversely, energy consumption fell sharply in Q3 (-3.1%). Winter and early spring were colder than normal and heating expenditure had been exceptionally high in H1, and therefore fell in Q3.

Consumption in services was slightly less dynamic in Q1 and returned to trend in Q3 (+0.6%). Finally, consumption of food products remained buoyant (+0.5% after +0.6%), as it has been since the start of the year.

(1) The last wednesday in June, official date of the beggining of sales, was this year, the last day of the month.

Household consumption and investment expenditure

	Quarterly changes														Annual changes			
	2008				2009				2010				2011		2008	2009	2010	2011
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2				
Total household consumption expenditure	-0.2	-0.2	0.0	0.1	0.1	0.3	0.2	1.0	0.0	0.3	0.6	0.9.	0.1	0.2.	0.5	0..	1.7	1.2
including:																		
Food (17%)	0.1	-0.	0.0	0.6	-0.6	0.6	1.0	-0.6	0.3	0.6	0.5	0.0	0.2	02.	-0.2	0.4	1.1	0.7
Non-energy industrial goods (24%)	-0.6	-0.5	-0.2	-0.9	0.5	0.6	0.1	3.0	-1.8	-0.	1.3	2.2	-1.2	-0.5	-0.3	0.8	1.1	0.5
Energy (7%)	-4.7	2.0	1.0	0.7	-1.2	-1.3	-3.2	1.4	2.9	1.2	-3.1	1.0	0.9	0.2	0.8	-1.9	1.5	0.5
Services (52%)	0.3	-0.2	-0.1	0.1	0.3	0.2	0.3	0.5	0.4	0.6	0.6	0.6	0.5	0.5	0.7	0.8	2.0	1.8
Household investment	-0.3	-1.6	-2.9	-2.8	-2.3	-1.9	-1.9	-1.4	-0.5	0.2	1.0	0.6	0.3	0.4	-2.7	-8.7	-2.1	1.7

Forecast

Source: INSEE

Household consumption and investment

Strong rebound in household consumption by the end of 2010, slowdown in H1 2011

The household consumption pattern should be affected by the effects of the end of the scrappage allowance *(see below)*: it should rebound strongly in Q4 (+0.9 %) before slowing down in H1 2011 (+0.1% and +0.2 %in Q1 and Q2). Households, preoccupied by unemployment trends and economic prospects, are likely to maintain their savings at a high level as a precaution. The savings ratio should therefore be stable at around 16.0% to the time horizon of the forecast.

The scrappage allowance boosts auto purchases in Q4 2010...

In Q4 2010, consumption of manufactured goods should rebound (+2.2 % after 1.3 %). On the one hand, automobile consumption should be buoyed up by the prospect of the disappearance of the scrappage allowance and the further tightening of the terms of the environmental bonus-malus on 1st January 2011: like last year, households are likely to bring their purchases forward before the systems are changed. To a lesser extent, consumption of electronic consumer goods should be boosted by the switch to all-digital television in the Centre, Poitou-Charentes, Burgundy and Franche-Comté regions. However, textile consumption should suffer a downswing as an after-effect of its exceptional growth in Q3.

...before slowing them in H1 2011

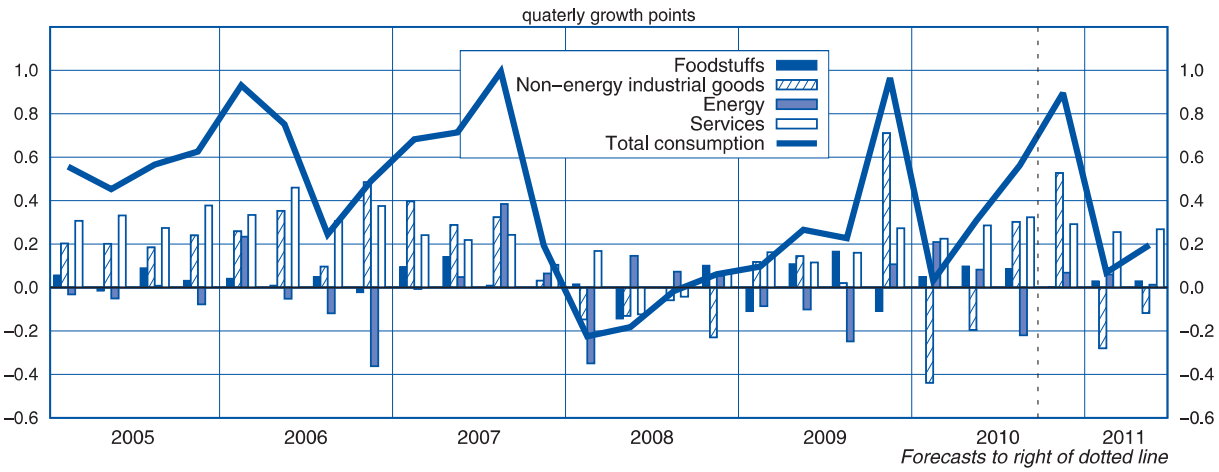
In Q1 2011, consumption of non-energy industrial goods should decrease: -1.2 % in Q1 and -0.5 % in Q2. At the start of the year, it should be boosted by the switch to all-digital television in six more regions, including the Ile-de-France region, but should be held back by the fall in automobile purchases. At the start of Q4 2010, temperatures were below their normal seasonal values. Energy expenditure should therefore be more sustained (+1.0%).

Finally, food consumption should stagnate in Q4, after dynamic growth in the previous two quarters (+0.5% per quarter on average). It should then return to trend: +0.2% in Q1 and Q2 2011.

Consumption of services should remain dynamic in Q4 (+0.6%) then slow down in early 2011 (+0.5% per quarter on average)

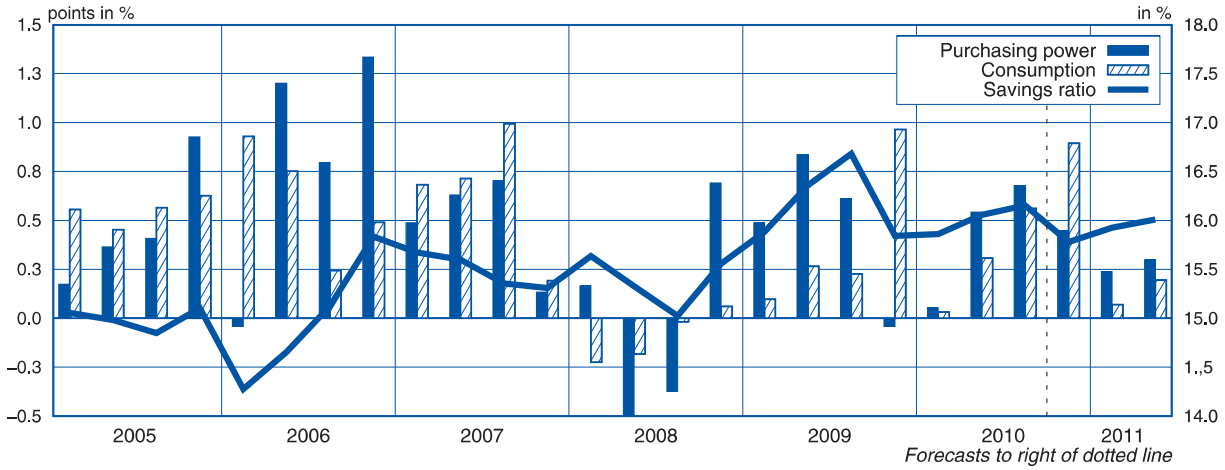
After falling for two years, household investment (mainly purchases of new houses) progressed in Q2 (+0.2%) and Q3 2010 (+1.0%). In the wake of the upturn in housing starts, household investment should continue to increase through to the time horizon of the forecast, although at a slightly slower rate (+0.6% in Q4 2010 then +0.3% and +0.4% in the first two quarters of 2011).■

1 - Contributions of the different items to quartely household consumption



Source: INSEE

2 – Savings ratio and growth rate of consumption and the purchasing power of gross disposable income



Source: INSEE

Corporate investment and inventory

Corporate investment should pick up slightly by mid-2011. It is set to rise by 0.7% in Q4 2010 and in Q1 2011, then by 1.0% in Q2 2011. It should be sustained by favourable business prospects and by the improvement in financing terms. Investment in construction in particular should gradually get back on track. The other components of corporate investment - investment in non-energy industrial goods and in services - should remain dynamic.

In Q3 2010 like in Q2, inventory change positively contributed to growth (a +0.3 point contribution, after +0.6 point), most notably in the energy and intermediate goods sectors. Over the forecasting period, inventory change should sustain growth slightly owing to less extensive running-off of stocks of non-energy industrial goods. The contribution of inventory change should be nil in Q2 2011.

Corporate investment still heading in the right direction

In Q3 2010, investments by non-financial enterprises (NFE) slowed: +0.5% after +1.2% in Q2 *(see table 1)*. Civil engineering expenditure dropped this summer. It had increased sharply in spring in order to compensate for the dip in activity in Q1, due to a harsher than usual winter. In parallel, enterprises reduced their automobile purchases (-0.6% after +2.7% in Q2) and kept their expenditure on services moderate (+1.6% after +2.7%).

The rise in investments should continue over the forecasting period although at a slower rate: +0.7% in Q4 2009 and in Q1 2010 then +1.0% in Q2 2010. Business prospects as reported in the business tendency surveys are likely to encourage enterprises to invest more. In parallel, the criteria for awarding credit to enterprises are easing further and the real interest rates are still at low levels *(see graph 1)*. Last, production capacities are being used a little more. More entrepreneurs are talking about production bottlenecks and the production capacity utilisation rate is still at a far higher level than it was, on average, in 2009 *(see graph 2)*. The industrial business leaders surveyed in October are showing more optimism as regards growth in their investments over the forecasting period. The balances of opinion concerning half-yearly growth in investments in H2 2010 and H1 2011 are above their long-term average, and the investment revision indicator [1] is positive.

(1) The investment revision indicator summarises the trends in the adjustments by companies between two successive surveys for the investments of the same year. It is centred and reduced. It generally appears to be well correlated with the quarterly growth in the GFCF of enterprises in the current quarter or the previous quarter (see report, "Forecasting corporate investment: an indicator for expectation adjustments in the survey on Industrial Investment" in Conjoncture in France, March 2005.).

Tableau 1

Investment by non-financial enterprises (NFE)

Variations at previous year's chain-linked prices. as a %

	Quarterly variations										Annual variations		
	2009				2010				2011		2009	2010	acquis 2011
	Q1	Q2	Q3	QT4	Q1	Q2	Q3	Q4	Q1	Q2			
Non-energy industrial goods (41%)	-6.0	-1.7	-0.2	0.3	1.3	1.5	1.2	1.2	1.2	1.0	-11.2	3.0	3.9
Building and public works (29%))	-1.0	-1.5	-3.1	-3.4	-4.6	-0.8	-2.0	-1.0	-0.7	0.7	-6.0	-10.5	-2.1
Other (29%)	-0.9	-2.3	-1.4	-0.4	-0.7	2.7	1.6	1.6	1.2	1.2	-4.7	0.9	4.8
All non-financial enterprises (100%))	-3.1	-1.8	-1.4	-1.0	-1.0	1.2	0.5	0.7	0.7	1.0	-7.9	-1.5	2.6

Forecast

Source: INSEE

Investment in construction on the road to recovery...

In the building industry, entrepreneurs surveyed in November anticipate a smaller fall in activity over the coming months. In parallel, public works entrepreneurs surveyed in October point to a resumption of their activity. All in all, the drop in construction investment should level off in Q4 2010 and in Q1 2011 (-1.0% then -0.7%), then take off again in Q2 2011 (+0.7%).

...and productive investment still dynamic

Investments in non-energy industrial goods should continue to grow over the forecasting period (+1.2% in Q4 2010 and in Q1 2011 then +1.0% the following quarter). According to wholesalers surveyed in November, ordering intentions for capital goods, which account for two-thirds of investments in non-energy industrial goods, are heading in the right direction. More specifically in the information and communication sector, ordering intentions, although slightly down, are still well above their long-term average. The other capital goods continue to show signs of recovery and are now above their long-term average.

Investments in services, mostly in IT services and specialised scientific and technical activities, should continue to grow in Q4 2010 (+1.6%): business perspectives in these sectors remain favourable in November. This growth should sag slightly in 2011 (+1.2% in Q1 and Q2 2011).

Towards a more stable investment rate

Over 2010 as a whole, investments by NFE should drop by 1.5% because investment in construction is set to experience another major downturn this year (-10.5%). This drop should be offset by the upturn in other expenditure: + 3.0% for non-energy industrial goods and +0.9% for services.

The investment rate has fallen sharply compared to the average level achieved just prior to the crisis (19.6% on average in 2008). It should settle at 18.2% on average in 2010 and rise slightly over the rest of the forecasting period (18.3% in Q2 2011). The self-financing ratio of non-financial corporations (2) should also pick up, with 65.6% in 2010 against 63.5% in 2009, but then slightly slip back in H1 2011.

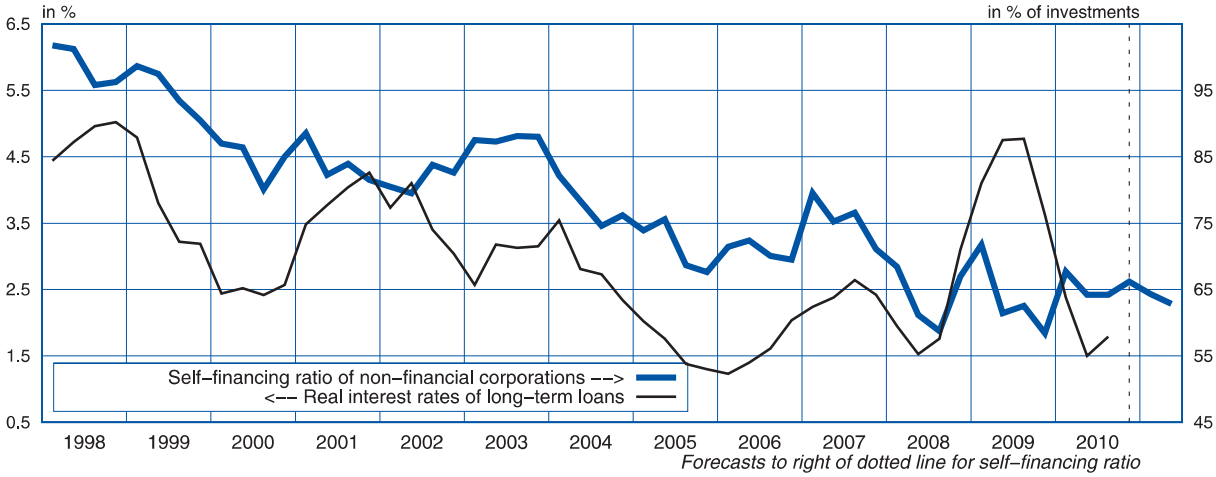
Inventory change has positively contributed to growth in Q3 2010

In Q3 2010, inventory change contributed to GDP growth (+0.3 point, after +0.6 point in the previous quarter, *see Table 2*), mainly in energy products (+0.2 point) and non-energy industrial goods (+0.1 point).

Two factors contributed to the increase in inventory of energy goods in Q3 2010. On the one hand, imports, particularly refined oil products, showed a

(2) Non-financial corporations are composed of ENF except for individual entrepreneurs.

1 - Self-financing ratios and real interest rates for long-term loans



* The self-financing ratio of non-financial corporations is the ratio of these non-financial corporations' savings to their investments

** Here, the interest rate for long-term loans means the average interest rate on new loans taken out by non-financial enterprises with a duration of more than one year, whether the rate is revisable or fixed. The interest rate for long-term loans is said to be real because it is deflated by the producer price index for all goods and services.

Source: INSEE, quaterly accounts and Banque de France

sharp increase. On the other hand, the consumption expenditure of households on energy goods fell sharply in Q3 2010 (-3.1%).The running-off of stocks of non-energy industrial goods levelled off in Q3 2010. A return to stock, partly fuelled by imports of chemicals, has notably been observed in the intermediate goods sector.

Within the forecasting period, inventory should sustain growth slightly.

Industrialists report that inventory levels are lower than their long-term average and anticipate dynamic production supported by rising demand expectations. Last, more favourable financing conditions allow companies to hold stock at a lower cost. In industry, after a break in Q4 2010, restocking should be temporarily picking up in Q1 2011.Globally over the forecasting period, the contribution of inventory change to growth is likely to be nil. ■

Tableau 2

Contribution of inventory changes to growth

in GDP points

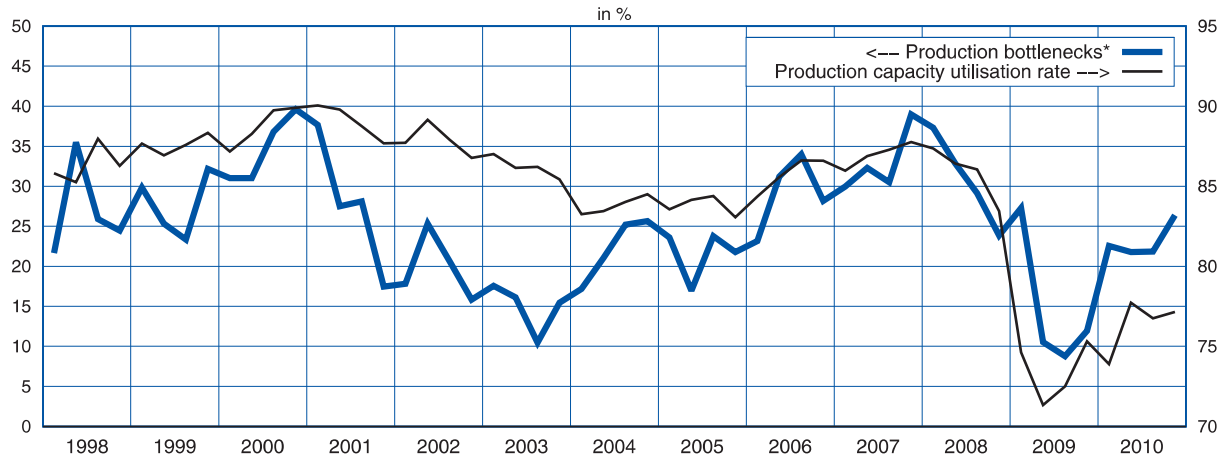
	2009				2010				2011		Annual changes		
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	2009	2010	2011 acq.
Agricultural and agrifood products	**0.1**	**-0.1**	**-0.2**	**0.0**	**-0.2**	**-0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**-0.4**	**0.0**
Manufactured products	**-0.7**	**-0.4**	**-0.1**	**0.6**	**0.1**	**0.6**	**0.1**	**0.0**	**0.1**	**0.0**	**-1.7**	**1.0**	**0.4**
ncluding: Consumer goods	*-0.2*	*-0.1*	*0.1*	*0.0*	*0.2*	*0.3*	*0.0*				*-0.2*		
Automobile	*-0.2*	*0.0*	*0.2*	*-0.1*	*0.3*	*0.0*	*-0.2*				*-0.7*		
Capital goods	*0.2*	*0.0*	*-0.5*	*0.6*	*-0.5*	*0.1*	*0.1*				*0.0*		
Intermediate goods	*-0.4*	*-0.2*	*0.2*	*0.2*	*0.1*	*0.2*	*0.2*				*-0.8*		
Energy products	**-0.2**	**-0.1**	**0.0**	**0.0**	**-0.1**	**0.0**	**0.2**	**0.0**	**0.0**	**0.0**	**-0.2**	**-0.1**	**0.1**
Other (construction. services)	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**
TOTAL (1)	**-0.8**	**-0.6**	**-0.2**	**0.6**	**-0.2**	**0.6**	**0.3**	**0.0**	**0.1**	**0.0**	**-1.8**	**0.6**	**0.5**

Forecast

(1) Inventory changes include acquisitions net of sales of valuables.

Source: INSEE

2 - Tensions on production capacities in manufacturing industry



* proportion of enterprises which, if they received more orders, could not produce more with their current means

Source: INSEE, quaterly survey on activity in industrie

Output

In Q3 2010, output of goods and services slowed sharply (+0.4% after +0.8% the previous quarter). In the manufacturing industry in particular, activity suffered a slight downturn after five quarters of growth.
On the rise since the summer, the France business climate indicator stabilised in November at a higher level than its long-term average. The "France" turning point indicator has remained in the favourable zone for the last year and a half.
By mid-2011, output should globally maintain this growth rate (+0.4% in Q4 2010 then +0.5% and +0.4% in Q1 and Q2 2011).
At the end of H1 2011, the growth overhang for 2011 should come to +1.5%, after a rise of +2.0% in 2010.

Output set to stay on course until mid-2011

In Q3 2010, production slowed (+0.4% after +0.8% in Q2, see associated account). This sharp slowdown is mainly attributable to the downturn in manufacturing output (-0.1% after +1.5%) and energy production (-0.6% after +1.0%). Activity in the construction industry also continued to fall (-0.4% after -0.3%). Conversely, growth was sustained in the market services sector (+0.8% after +0.9%, *see graph 1*).

In Q4 2010, output should grow at a similar rate (+0.4%): according to the business leaders survey, the business climate indicator in France stabilised in November at a higher level than its long-term average, after four months of strong growth *(see graph 2)*. For the beginning of 2011, overall production outlooks are good in all sectors of the economy. In the manufacturing industry and the market services sector in particular, the business climate indicators remain higher than their long-term average. Therefore, output should maintain its growth rate across all sectors: +0.5% in Q1 2011, then +0.4% in Q2.

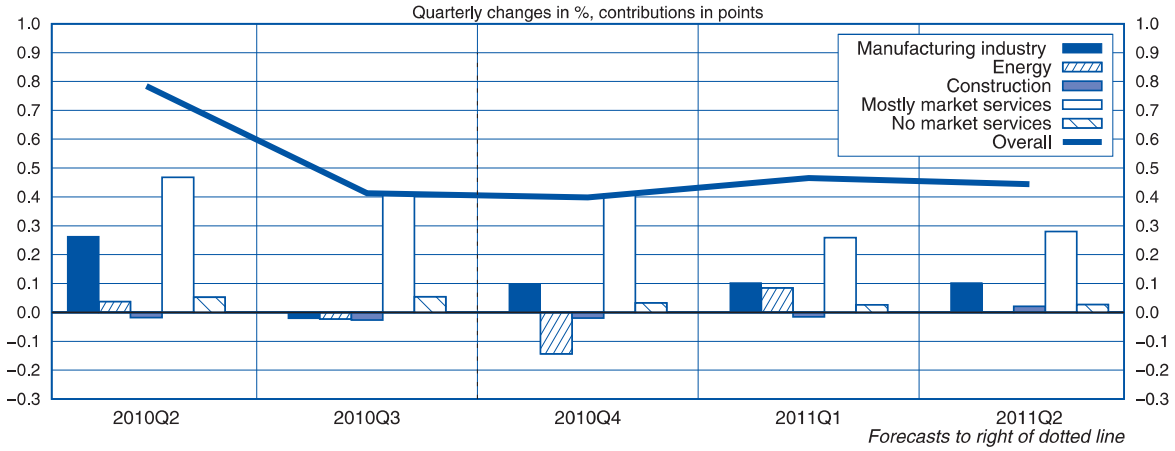
The production growth overhang for 2011 should come to +1.5% at the end of H1 2011, after a rise of +2.0% in 2010.

Moderate growth in manufacturing output over the forecasting period

Manufacturing output stalled in Q3 2010: -0.1% after +1.5% in Q2 2010. The downturn in activity was particularly pronounced in the intermediate goods (-0.8% after +2.6%) and capital goods (-0.8% after +2.3%) sectors. However, output in the automobile industry rebounded in Q3 2010 (+1.9%), after a sharp fall in Q2 (-3.4%). In the consumer goods sector output increased by +1.0%, virtually the same as in Q2.

In Q4 2010, manufacturing output seems set to grow slightly (+0.5%). The industrialists surveyed in November report output levels that are sustained, although slowing slightly *(see graph 3)*.

1 - Sector contributions to growth in total output



Source: Insee

In H1 2011, manufacturing output should maintain this growth rate (+0.6% per quarter). Personal output prospects stated in November have slipped back slightly but remain well above their long-term average.

Over 2010 as a whole, growth in manufacturing output should settle at 4.7%, after -11.8% in 2009. The growth overhang for 2011 at the end of Q2 should be +1.7%.

Gradual improvement in construction activity

In Q3 2010, production in the construction industry contracted once again: -0.4%, after -0.3% in Q2 2010. This drop only affected building, as civil engineering activity saw renewed growth after the dip last winter.

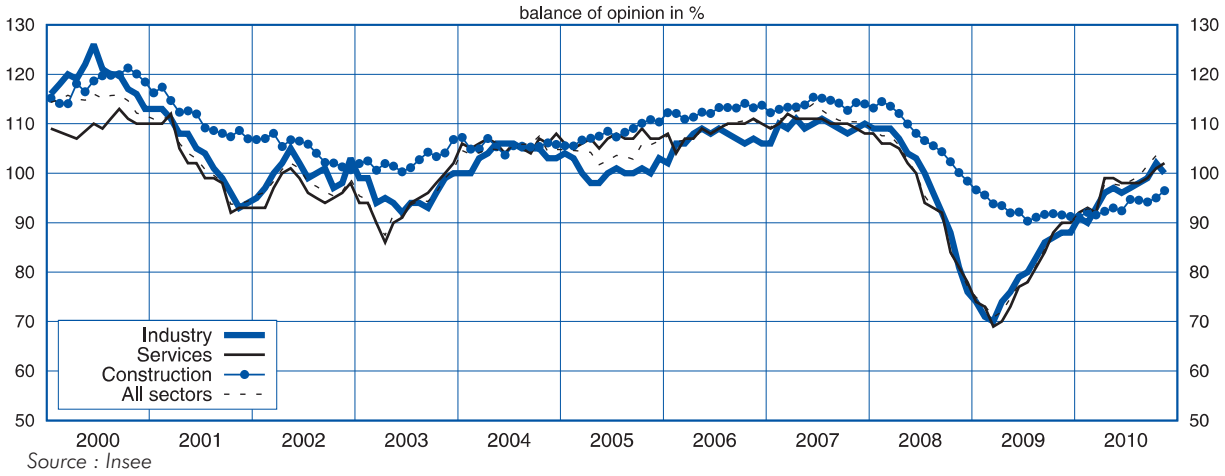
The fall in activity is expected to continue in Q4 2010 (-0.3%) and in Q1 2011 (-0.2%): housing starts stay at a low level, while activity should remain bleak as witnessed by building contractors surveyed in November *(see Graph 4)*. Entrepreneurs are however more optimistic on their future outlooks: activity in the construction industry should then recover in Q1 2011 (+0.3%).

Over 2010 as a whole, output in the construction industry should fall by 4.9%. In mid-2011, its growth overhang for 2011 should be -0.5%.

Market services: dynamic activity in Q4 2010, slightly less so in H1 2011

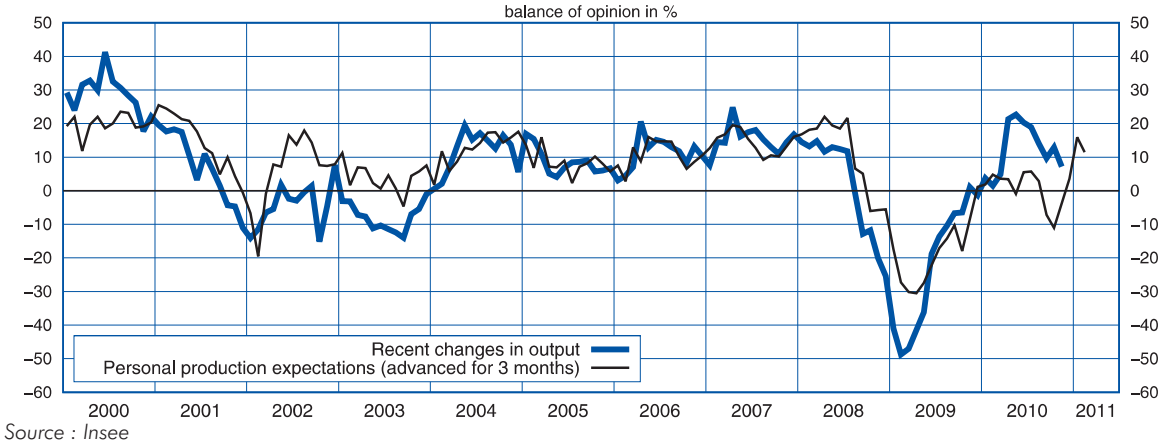
Activity in market services (real-estate services, services to businesses and personal services) slowed in Q3 2010: +0.7% after +1.0% in Q2. This slowdown mainly concerns the services to businesses sector (+0.9% after +1.5% in Q2 2009), and can be attributed to more sluggish activity in the consulting and assistance businesses (+0.9% after +2.1%). In the personal services sector, activity grew a little less than in Q2 (+0.4% after +0.6%), owing to the slowdown in the hotel/catering sector (+0.4% after +0.8%). In real-estate, production continued to progress at the same pace as in Q2 (+0.4%).

2 - Composite indicators in France: all sectors, in industry, services and construction



Source : Insee

3 - Opinion about output in the manufacturing industry



Source : Insee

In Q4 2010, activity is likely to accelerate in market services (+0.8% after +0.7%). According to business leaders, the outlook has improved in services in early Q4 2010. The composite business climate indicator returned to a level above its long-term average in October, for the first time in more than two years.

Activity in services should be slightly less sustained in H1 2011 (+0.6% per quarter). In November 2010, business leaders report a relative stabilisation of prospects in this sector.

Over 2010 as a whole, the production of market services should grow by 2.5% after falling by 1.9% in 2009. At the end of Q2 2011, the growth overhang should be +2.2%.

Trade showing signs of flagging

In Q3 2010, trade accelerated slightly (+0.8% after +0.6% in Q2). According to retail and automobile repair firms, activity was sustained thanks to the dynamism of household consumption of non-energy industrial goods (+1.3% in Q3).

Activity should accelerate again in Q4 2010 (+0.9%). According to the November business tendency surveys, sales are still growing in the automobile trade: new private vehicles purchases have again rebounded, with the prospect of the end of the scrappage bonus on 31 December 2010. Moreover, the composite business climate indicator remains above its long-term average. In wholesale however there was no improvement in the business outlook in November, after almost two years of continual improvement: according to wholesalers, sales and deliveries received are not as positive as before.

In H1 2011, trade should level off significantly (+0.2% and +0.3% in Q1 and Q2). The end of the scrappage bonus should lead to a backlash in the automobile trade. Hence, ordering intentions and forecast sales are undergoing a downturn in the retail trade owing to a fall in household consumption of non-energy industrial goods (-1.2% forecast for Q1 2011). On the other hand, according to wholesalers, overall business prospects remain good and order books are filling up, particularly for capital goods.

By the end of H1 2011, trade should have a growth overhang of +1.7% for the year 2011, after growth of +2.0% in 2010.

Slowdown in transport

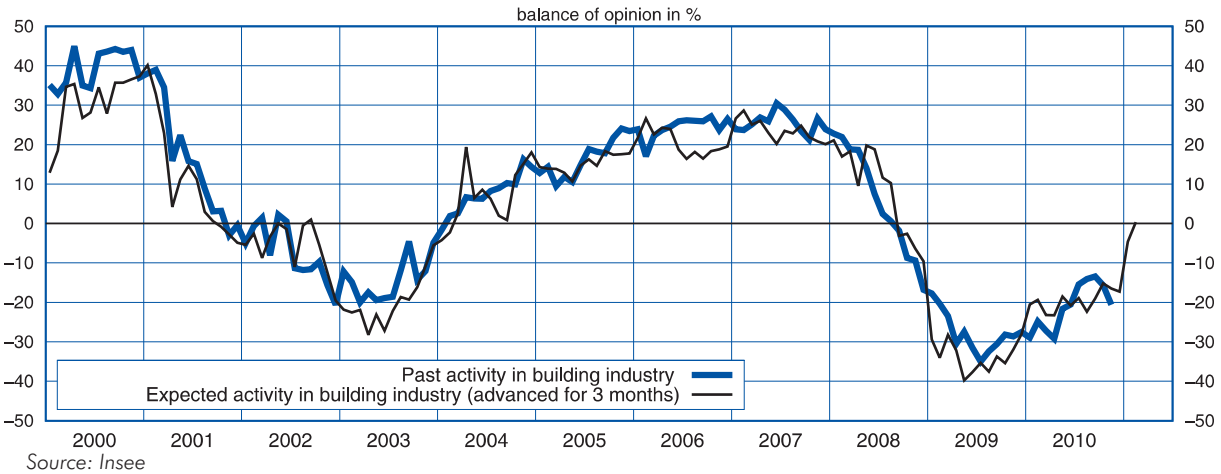
In transport, activity was strong in Q3 2010 (+1.7% after +1.0% in Q2). It looks likely to slow thereafter (+0.6% in Q4 then +0.5% in Q1 and Q2 2011). Over 2010, activity should increase by +2.9%; the growth overhang for 2011 at the end of Q2 should be +2.5%.

A less abrupt slowdown for energy production, and agricultural activity staying on course

The production of energy slipped back in Q3 2010 (-0.6%). It should drop sharply in Q4 (-4.0%): the autumn strikes weighed down heavily on the refineries. All in all in 2010, production should however grow by +1.1%. Energy production should recover in Q1 2011, partly because refineries should catch up with their production levels. In Q2 2011, production should then stagnate.

In Q3, output in the farming sectors picked up (+0.3%). Over the forecasting period, its growth should stabilise (+0.4% in Q4 2010 then +0.2% in Q1 and Q2 2011). ■

4 - Opinion about activity in building



Source: Insee

Focus - INSEE outlook surveys and PMI indicators: advanced tools for monitoring the economic outlook

The business outlook surveys published each month are early indicators of economic activity. They are used to forecast the main economic aggregates (GDP, production and employment per sector, investment etc...) pending publication of the quarterly accounts. In France in particular, the indicators that are published are those from the outlook surveys of INSEE and those from the surveys of the Markit Economics[1] institute. Month by month, the information conveyed by the two types of indicators may sometimes appear contradictory. In reality, once the nature of the questions that are asked is analysed, the two indicators actually appear to be somewhat complementary, and the apparent contradictions disappear when we think in terms of quarterly or annual, rather than monthly trends.

We will now go on to examine the type of information provided by each of these two indicators and the contribution each of them makes in terms of forecasting. This study will be limited to the manufacturing sector. It suggests that judging on the basis of the mean forecasting error, calibration models using INSEE balances of opinion show slightly greater predictive qualities than those based on PMI composite indices.

I. The information delivered each month by the INSEE and PMI indicators are not of exactly the same nature

The INSEE outlook surveys among business leaders are qualitative surveys providing information on the rate of activity in the recent past, during the current month and in the near future. They are available by sector and sub-sector. In particular, the detailed results of the monthly outlook survey in industry have been available since April 1976. This survey questions 4,000 entrepreneurs about recent and probable future trends in their production, about their total and foreign order-book levels, inventory levels and general output prospects (meaning those of the industrial sector as a whole). Generally, these questions call for three possible responses: "up", "no change" or "down". The balance of opinion, defined as the difference between the percentage of positive responses and the percentage of negative responses, is the most widely-used indicator by outlook analysts to summarise answers to a question. INSEE also publishes a composite indicator called the "industrial business climate": this is a weighted average of the six balances of opinion from the previous questions.

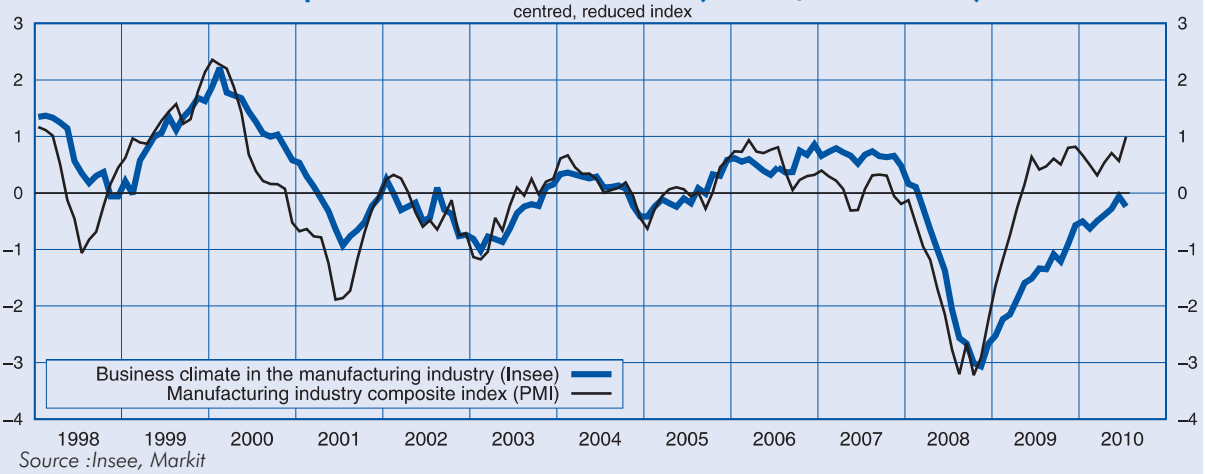
In parallel, since 1998 the Markit Economics institute has been carrying out outlook surveys among purchasing managers in private-sector companies in the advanced and emerging economies. In France, 750 companies are surveyed in industry and services. In industry in particular, purchasing managers are surveyed every month about changes in new orders, output, employment, delivery lead times and inventory, against the previous month, and for each question Markit publishes a composite index.[2] The possible responses to the questions are: "up", "no change" and "down". Markit Economics also publishes a composite indicator *(manufacturing industry PMI index)* which is a weighted average of the previous five indices.

The results of the INSEE monthly outlook survey in industry are generally published at the end of the third week of the month. At the same moment, Markit publishes a provisional "flash" estimate of its composite PMI indicator and it is one week later that the full and final version of the survey is published.

The information conveyed by the two types of indicators provides a comparable global trend of the past, but may

(1) The responses to the Markit Economics surveys are summarised as "PMI Indices" (Purchasing Management Index).
(2) For a given question, the PMI index is calculated using the following formula:
PMI= 100 * proportion of firms responding "up" + 50 * proportion of firms responding "no change" + 0 * proportion of firms responding "down". The balances of opinion of the INSEE outlook surveys and the PMI indicators compare the percentage of positive and negative responses. The opinion is deemed to be positive when the balance of opinion is greater than zero and when the PMI indicator is greater than 50.

1 - Composite INSEE and PMI indicators (centred, reduced data)



Source :Insee, Markit

sometimes give rise to contradictory interpretations from one month to the next *(see graph 1)*.

The reference period for the questions that are asked constitutes a major difference in the information delivered by the INSEE and Markit indicators

The results of the INSEE outlook surveys published in month M therefore translate the opinions declared by entrepreneurs in that month M, but also cover the past and future periods. Entrepreneurs are being asked to express their opinion of their output trends over the previous three months, as well as their future output trend over the following three months. Markit, meanwhile, asks purchasing directors to express their opinions only of the latest monthly change in their output. Therefore, at the date of publication of the results of a given month M, the PMI index of past output traces the change in output between month M and month M-1.

Aside from this difference between the reference periods of the questions, the business climate in industry constructed by INSEE includes an appraisal of output prospects, while the composite PMI index for the manufacturing industry uses only questions relating to the current month.

All in all, the INSEE industrial business climate indicator, which includes questions about the past and about prospects, is therefore something of an "economic feeling", while the composite PMI index for manufacturing industry provides more factual tracking of activity from one month to the next.

II. The INSEE and PMI indicators are closely correlated with changes in manufacturing output

To make a diagnosis of the performances of the INSEE and Markit indicators, we examined their ability to report trends in activity. We limited ourselves here to the activity indicators which are the most widely commented on.

The PMI indicators for past production are relatively closely correlated with the quarterly growth rate in manufacturing output *(see Table 1 and Graph 2)*. The INSEE indices relating to past or forecast production [3] appear to be particularly closely correlated with year-on-year changes in manufacturing output *(see Table 1 and Graph 3)*. The balances of opinion of the INSEE surveys thus trace a longer-term trend than the PMI indicators.

Table 1: Correlation coefficients between the change in manufacturing output and the (PMI and INSEE) indicators relating to activity in industry

En glissement	PMI: past activity	Insee : past activity	Insee : forecast activité
Quarter on quarter	0.75	0.55	0.67
Year on yearl	0.74	0.92	0.76

NB: the PMI and INSEE outlook indicators are taken in the second month of each quarter.

However, the linear correlation coefficients should be interpreted with precaution. Although they do give an idea of the nature of co-movements in manufacturing output and the qualitative indicators, they do not allow any judgement as to the ability of these qualitative indicators to predict changes in manufacturing output.

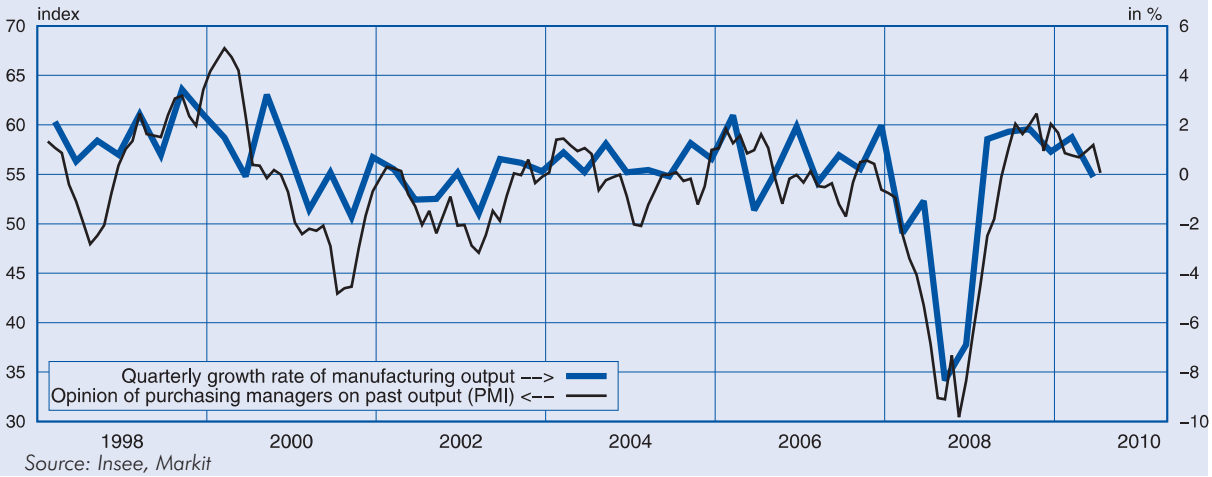
III. Predictive qualities of the INSEE and PMI indicators

To build their forecasts, the outlook analysts use "calibration" models linking quarterly growth in manufacturing output to the survey indicators [4]. These models can capture more complex statistical relations than the simple correlations presented in the previous part.

(3) These indices were taken in the second month of each quarter in order to obtain series with the same frequency as that of the (quarterly) manufacturing output series. Each quarterly series was therefore divided up into three further quarterly series, according to the position of the month in the quarter. The choice of the second month in the quarter (rather than the first or third) was due to the fact that most of the forecasts of the current quarter (notably for the INSEE Conjoncture in France) are made in the second month of the quarter.

(4) Calibration can be given, for example, by:
Prodmanuf(t) = α+β * I1(t) + ? * I2(t) + d * (I1(t) -I1(t-1)) + ? * (I2(t) -I2(t-1)) + υ(t),
Prodmanuf=quarterly growth rate in manufacturing output in quarter t;
I1(t) =survey indicator in the first month of the quarter;
I2(t) =survey indicator in the second month of the quarter.

2 - Quarterly growth rate in manufacturing output and opinion of past production (PMI)



Source: Insee, Markit

The predictive performance of the two indicators, INSEE and PMI, was analysed through two types of calibration models. In the first ones *(see Graph 4)*, models were compared for a constant field, meaning that only those indicators available for both surveys were taken into consideration: those relating to past output and to total and foreign order books. In the second ones *(see Graph 5)*, calibration models were compared in which the explanatory variables were chosen from among all the indicators available in each survey, which is to say: for the INSEE indicators, past and forecast output, total and foreign order books, and inventory; for the PMI indicators, output, employment, delivery times, total and foreign new orders, prices and inventory.

Each of the models was selected on the basis of its statistical qualities and its ability to predict beyond the estimation period ("out-of-sample").[5] To be comparable, the estimation of the models was carried out over the period commencing 1998Q4, the period for which both the INSEE and PMI indicators are available. The "out-of-sample" estimation was carried out over the period 2004Q1-2010Q2.[6]

This exercise suggests that on the basis of the mean forecasting errors, the calibration models using INSEE balances of opinion show slightly greater predictive qualities than those based on the PMI composite indicators.

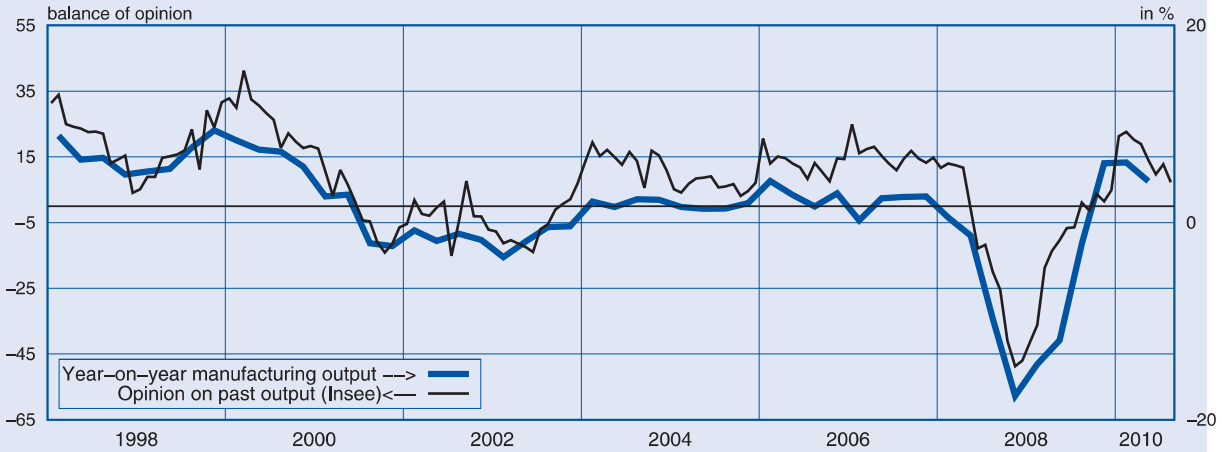
For a constant field *(see Graph 4)*, the models using INSEE balances of opinion would seem to have captured the scale of the fall in manufacturing output in Q4 2008 and Q1 2009 slightly more effectively. Likewise, over the year 2010, the INSEE balances of opinion followed trends in manufacturing output relatively well, and notably its levelling-out in Q3 2010.

By selecting all the explanatory variables among all the indicators available for each survey *(see Graph 5)*, the PMI indicators traced the scale of the decline during the crisis and the upturn starting in Q2 2009 slightly better. Over the year 2010, however, the INSEE balances of opinion tracked trends in manufacturing output more effectively.

Finally, the availability of the data over a longer period of time for the INSEE indicators can provide more effective models for forecasting *(see Graph 6)*. Thus, the calibration of quarterly growth in manufacturing output over the period 1990Q1-2010Q2 using all the survey variables can reduce mean forecasting error significantly (0.96[7]). ■

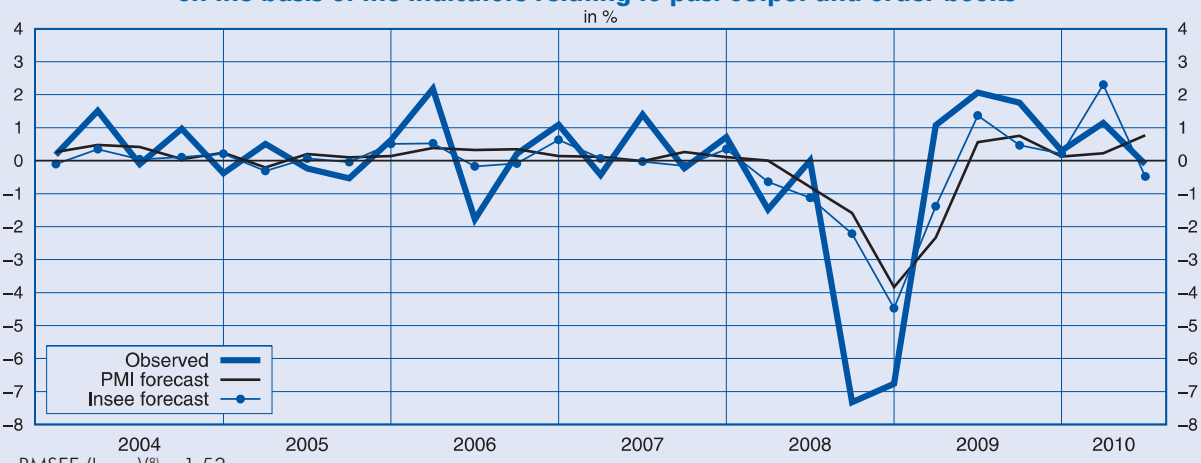
(5) The explanatory variables were selected and estimated using the Grocer Automatic procedure in Scilab (Dubois É. and Michaux E. (2008) : "Grocer : an econometric toolbox for Scilab" (http ://dubois.ensae.net/grocer. html))
(6) In other words, first the model was estimated over the period 1998Q4-2003Q4 and the growth in output was forecasted for 2004Q1; then one point was added to the estimate (now giving the period 1998Q4-2004Q1) and output was forecasted for 2004Q2; and so on through to the forecast for 2010Q3.
(7) Still out-of-sample over the period 2004Q1-2010Q2

Graph 3: year-on-year change in manufacturing output (YOY) and opinion of past production in manufacturing industry.



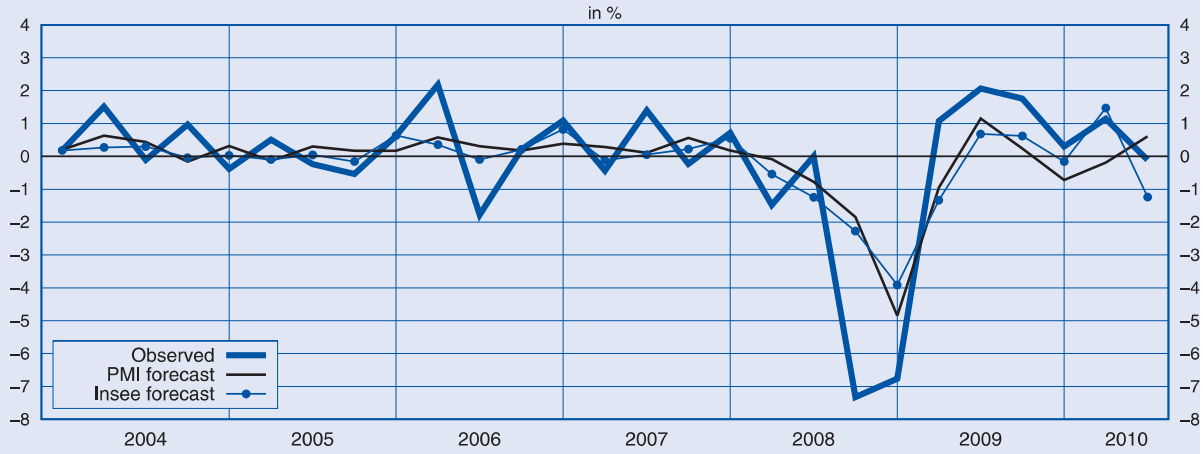
Source: INSEE

4 - Forecast of the quarterly growth rate in manufacturing output on the basis of the indicators relating to past output and order books



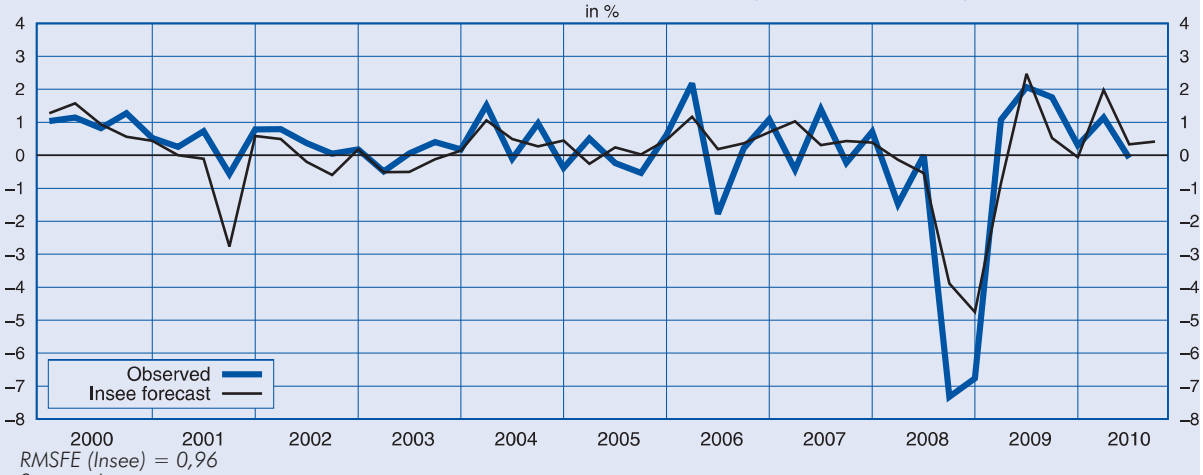
RMSFE (Insee)(8)= 1,53
RMSFE (PMI) =1,75
Source : Insee, Markit

5 - Forecast of the quarterly growth rate in manufacturing output on the basis of all the available indicators



RMSFE (Insee)= 1,48
RMSFE (PMI) =1,53
Source : Insee, Markit

6 - Forecast of the quarterly growth rate in manufacturing output on the basis of all the available indicators (1990Q1-2010Q2)



RMSFE (Insee) = 0,96
Source : Insee

(8) Root of the mean quadratic forecasting error. The lower it is, the better the predictive performance of the model.