

French **developments**



France's International Environment

In Q4 2012, activity fell back in the advanced economies (-0.2% after +0.3%), when it had been forecast to be stable in *Conjoncture in France* in December 2012 (0.0%). It stagnated in the United States and Japan and contracted in the United Kingdom and all the Eurozone countries.

Except for Spain and Italy, final domestic demand in the advanced economies held up, but activity was hit by pronounced destocking and by the sharp fall in exports.

In early 2013, according to the optimistic business tendency surveys in most countries, activity should accelerate in H1 2013. The upturn in the emerging economies, in particular in Asia, would also appear to be confirmed.

Activity should therefore rise again in the advanced economies. In H1 2013, the upturn should be pronounced in the United States, Germany and Japan, thanks to strong domestic demand. In Italy and Spain, however, activity is set to continue contracting.

In the emerging economies, activity accelerated in Q4 2012, resulting in very strong imports. Over the forecasting period, easing of fiscal and monetary measures should continue to buoy up domestic demand.

Ever-more expansionist monetary policies

The Central Banks of the advanced economies have limited room for manoeuvre. The level of their reference interest rates is at all-time lows in the United States (0.25%), United Kingdom (0.5%), Japan (0.1%) and the Eurozone (0.75%). They are making increasingly extensive use, however, of unconventional instruments. In the United States, the Fed is buying \$45 billion in long-term Treasury bonds every month, plus \$40 billion in mortgage-backed securities, without sterilising¹ its operations. It is also promising not to increase rates as long as unemployment does not drop below 6.5%. The Bank of England is continuing to buy up public debt and now holds the equivalent of 25% of British GDP in Gilts. It is also paying the interest produced by these debts to the Treasury. In Japan, the Central Bank has resumed its government securities purchasing programme, causing the Yen to fall by almost 13% against the US Dollar in two months.

In the Eurozone, the ECB is not currently buying sovereign securities because no country has called upon the OMT programme. However, the three-year refinancing operations (VLTRO)

(1) that is to say that these purchases is not accompanied by an equivalent amount for sale

1 - Inflation should stabilize at a low level in the advanced economies



Source: National Statistical Institutes, INSEE calculations

triggered in early 2012 are continuing to supply liquidity to banks which had only repaid a small proportion of the amount at the beginning of 2013. Lending is continuing to fall in the Eurozone, however, in response to the weakness of expected demand. In addition to this, the easing of tensions combined with the acceleration in unconventional measures in other advanced economies has led to a sharp rise in the single currency since the start of 2013.

In the emerging countries, Central Banks have significantly eased their monetary policies since the beginning of 2012, further to the slowdown in activity and fall in inflation. Despite the slight rise in inflation recently in Brazil, India and Russia, they are likely to pursue their accommodating policies.

Fiscal consolidation on both sides of the North Atlantic, stimulus elsewhere

In the United States, the agreement at the end of December between the President and Congress succeeded in limiting the scale of the "fiscal cliff" to around 1.5 points of GDP at the beginning of 2013 (against 4.7 points failing an agreement). The burden on households still comes to 1.6 points of their income in 2013, mainly through a 2-point rise in wage contributions on 1st January 2013. Also, with the implementation of automatic spending cuts in March, US public consumption is set to fall.

In Europe, States are still conducting restrictive fiscal policies to try to ensure the sustainability of their public finances. The measures announced or passed for 2013 represent about 1.1 points of GDP for the four largest economies in the Eurozone and 1.2 points of GDP for the United Kingdom. However, in Spain and especially in Italy, fiscal adjustment should be less intense in 2013 than in 2012.

In Japan, meanwhile, the new government of Shinzo Abe voted in in December 2012 has decided on a vast economic stimulus plan (the fifth since the March 2011 earthquake) for a total amount of 10.3 billion Yen, or 2.2 points of GDP. The fiscal stimulus should therefore be clearly positive over the forecasting period.

Inflation to stabilise at a low level in the advanced economies

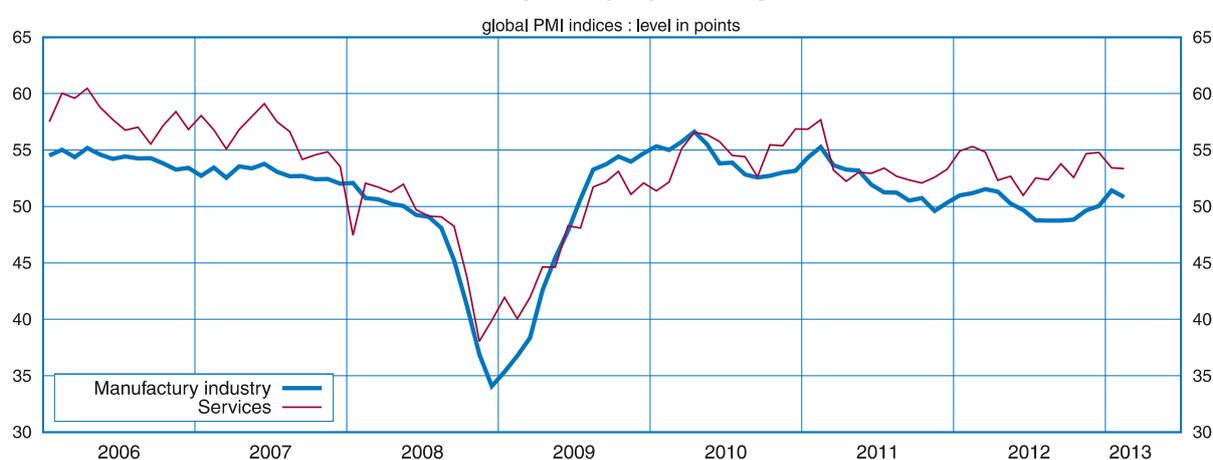
Since the end of 2011, inflation has eased thanks to the fall in commodity prices (see graph 1). After reaching a peak at 3.1% in mid-2012, the rise in consumer prices in the advanced economies was down to 1.6% year-on-year in December 2012. The increase in oil prices in early 2013 should cause a slight rise in energy prices and inflation should stand at 1.7% over the forecasting period.

The rise in industrial and energy commodity prices in 2010 was passed on with a time lag to core inflation in 2011. But since the beginning of 2012, core inflation has been falling, especially as the still-high level of unemployment weighs down on the bargaining power of employees. The core index should therefore continue to fall (from 1.4% in Q4 2012 to 1.2% year on year in Q2 2013). Inflation should be comparable in the United States and Eurozone.

In the emerging countries, the acceleration in activity is confirmed

In Q4 2012, activity in the emerging countries accelerated, resulting in strong imports (+4.5% after +1.5% in Q3 2012). In early 2013, according to business tendency surveys, the acceleration should continue in the manufacturing sector, in particular in China, India and Brazil. The emerging Asian countries should continue to profit from Sino-Japanese tensions to develop their exports and should be particularly dynamic.

2 - The economic climate is improving significantly since the summer 2012



Source: Markit

Clear rebound in the advanced economies in H1 2013...

In Q4 2012, the advanced economies contracted (-0.2% after +0.3%). In these economies overall, private domestic demand progressed slightly but the drop in public consumption made a sharply negative contribution to activity, especially in the United States and Southern Europe. In addition to this, destocking trends held activity back and exports fell sharply, despite the upturn in world trade.

However, the overall short-term climate has improved significantly since its low point in the summer. In manufacturing industry, the business climate is currently above the expansion threshold and in services it is still showing dynamic activity (see graph 2). Activity in the advanced economies should therefore rebound clearly in H1 2013 (+0.4% then +0.2%).

... but still sharply-contrasting outlooks

This overall situation hides some widely diverging situations (see graph 3). In the United States, domestic demand should continue to stimulate activity. Despite tax rises weighing down on household purchasing power, households should benefit from increases in their earned income and a rise in the price of their assets. Financing terms should also remain favourable and the property market should show a marked upturn. The Japanese economy should rebound sharply in H1 2013, under the effect of the sharp fall in the Yen and the stimulus plan passed by the Abe government. In the United Kingdom, strong employment should buoy up household consumption, despite fiscal consolidation.

Activity in the Eurozone should stop contracting, but the situations of the different countries remain contrasted. In Germany, activity should rise

significantly under the effect of the upturn in investment and exports. Spain and Italy should benefit more modestly from the brighter world outlook as their exports suffer from the rise in the value of the single currency and as their domestic demand continues to fall. However, investment should gradually stop falling. In France, activity is likely to progress modestly as domestic demand remains somewhat lacking in dynamism.

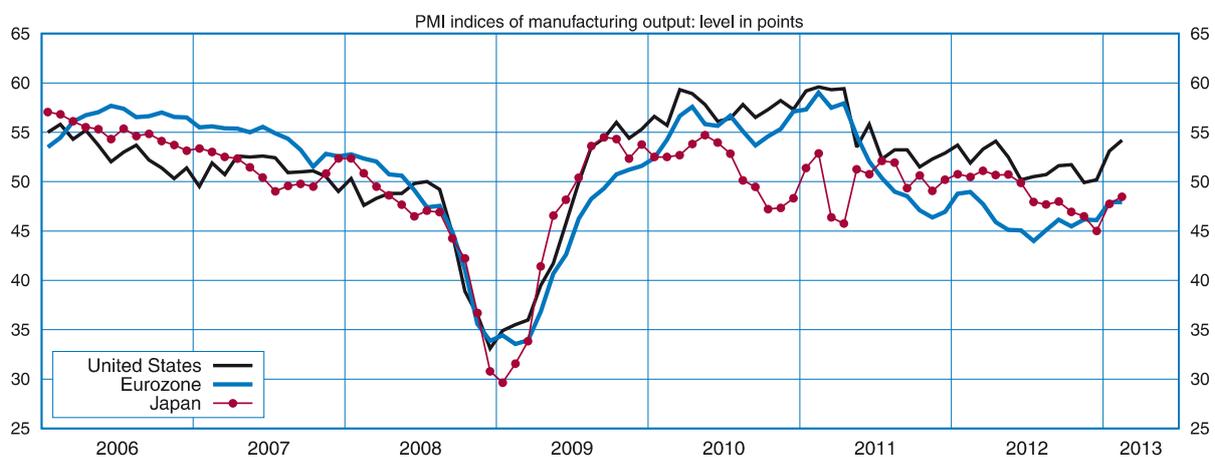
World demand for French products set to accelerate in H1 2013

In Q4 2012, world trade rebounded (+0.9% after +0.1%), when we had been forecasting stability. The trends diverged widely between advanced and emerging countries: imports and exports of advanced countries fell back significantly, while trade was very strong between the emerging economies, notably in Asia.

For the world economy as a whole, the new export orders component in PMI surveys has risen clearly since its low point reached in July 2012 and was close to the expansion threshold in February 2013 (see graph 4). Also, according to the Asian Customs data available for January 2013, trade in that zone remains dynamic. World trade should therefore accelerate in early 2013: imports from emerging countries should grow, while the acceleration in activity in the advanced economies should bring an upturn in their imports. World trade is likely to progress by 1.3% in Q1 and Q2, a rate quite close to its average growth between 2000 and 2007 (+1.6% per quarter).

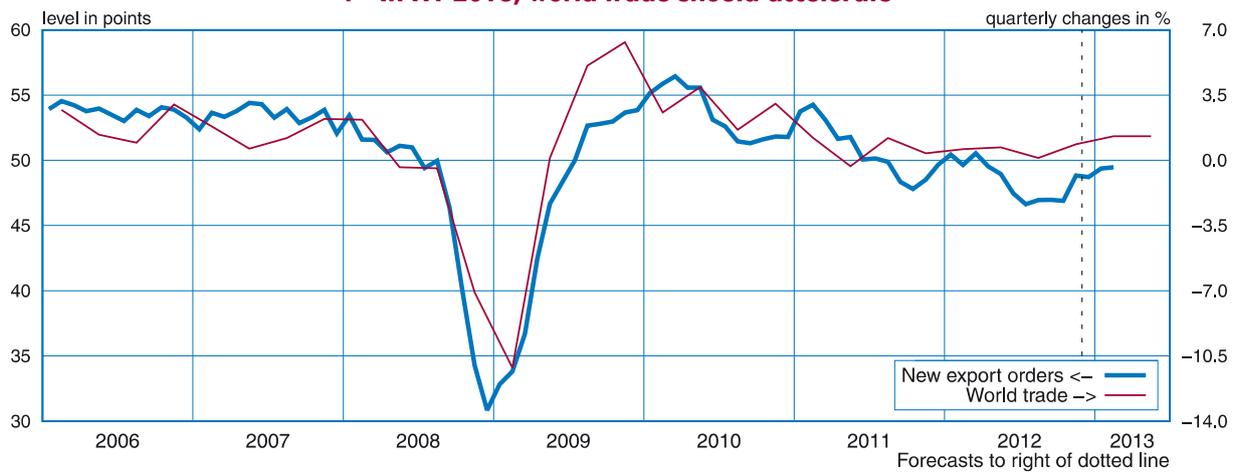
The rise in the imports of advanced countries, notably in Europe, should bring an acceleration in world demand for French products in H1 2013 (+0.9% then +1.0% in the first two quarters of 2013, after +0.3% in Q4 2012). ■

3 - Very divergent economic situations



Source: Markit

4 - In H1 2013, world trade should accelerate



Sources: Markit, Central Plan Bureau, INSEE forecasts

Table 1 Balance of resources and uses of the advanced economies by volume

	Quarterly changes in %										Annual changes in %		
	2011				2012				2013		2011	2012	2013 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
GDP	0.0	0.2	0.6	0.4	0.4	0.0	0.3	-0.2	0.4	0.2	1.3	1.1	0.6
Private consumption	0.1	0.0	0.5	0.1	0.4	0.1	0.1	0.2	0.2	0.1	1.1	0.9	0.5
Public consumption	-0.9	0.0	-0.4	-0.2	0.1	-0.1	0.5	-0.7	0.0	-0.2	-1.3	-0.3	-0.4
Investment	0.3	1.2	1.8	1.5	0.6	0.3	-0.4	0.9	0.6	0.7	3.6	3.3	1.8
Exports	1.3	-0.4	2.3	0.0	1.0	1.1	0.0	-1.4	1.2	1.3	5.5	2.4	1.4
Imports	0.9	0.0	1.1	0.5	0.5	0.8	-0.1	-1.2	0.7	1.0	4.5	1.7	0.6
Contributions to GDP growth													
Domestic demand excluding inventories	0.0	0.2	0.4	0.3	0.3	0.0	0.1	0.0	0.2	0.1	1.0	0.9	0.4
Inventories	-0.1	0.1	-0.1	0.1	-0.1	-0.1	0.1	-0.3	0.1	0.0	0.0	-0.2	-0.1
Net exports	0.1	-0.1	0.2	0.0	0.1	0.1	0.1	0.0	0.1	0.1	0.3	0.4	0.2

Forecast

Sources: National statistical institutes, IMF, INSEE forecasts and calculations

Foreign trade

Despite the recovery of world trade, exports fell in Q4 2012 (-0.6%), penalised by the contraction in demand from the Eurozone countries. At the start of 2013 demand for French products should pick up thanks to the rise in imports from the advanced countries, particularly Germany, while the adverse effects of the recent appreciation of the euro should be restricted. In H1 2013 exports are likely to grow by 0.6% in Q1, then 0.7% in Q2. At the end of H1 the growth overhang in exports of goods and services for 2013 should be 1.1%.

After two quarters of sharp decline, imports should pick up in H1 2013. They should be sustained by exports but still lack in dynamism bearing in mind the decline in corporate investment. The growth overhang in imports for 2013 should be small at the end of H1 (+0.4%).

All in all, between weak French demand and the recovery of foreign demand, the contribution of foreign trade to growth should remain slightly positive at the start of 2013 (0.0 point in Q1 then +0.1 point in Q2).

At the start of 2013, exports likely to be sustained by the rebound in demand from the advanced economies

In Q4 2012, French exports contracted (-0.6% after +0.7%, see Table). They were hit by the fall in demand from the USA and European countries, despite the global recovery of world trade. Indeed

this rebound was of little benefit to French exports or to the advanced economies in general; French exports excluding the European Union stagnated, while sales to European Union countries shrank by 1.0%.

Exports of manufactured goods slipped back by 1.5%, after +1.3% in Q3 2012. This drop can mainly be explained by the sharp fall in sales of transport equipment (-6.8% after +7.7%), particularly in the automobile industry. However, exports of agricultural products leaped thanks to several major cereal contracts (+14.4%), while those of energy-water-waste increased sharply (+4.5%). Additionally exports of services continued to grow (+0.7%).

At the start of 2013, exports should pick up, growing by 0.6% in Q1 then 0.7% in Q2. They should be sustained by the growth in world trade (see Graph 1), which in H1 2013 should return to a rhythm close to its average of 2000-2007. World demand for French products should however remain less dynamic than world trade (see Graph 2). Indeed, demand from Spain and Italy should continue to fall in H1 2013 and it is mainly the rebound in German and American imports that will contribute to the recovery of world demand for French products. Furthermore, the effects of the past euro depreciation should start to fade within the forecasting period, while its appreciation since the end of 2012 should slow exports slightly (see Graph 3).

Foreign trade growth forecast

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

	Quarterly changes						Annual changes	
	2012				2013		2012	2013 ovhg
	Q1	Q2	Q3	Q4	Q1	Q2		
Exports								
All goods and services	0.1	0.3	0.7	-0.6	0.6	0.7	2.3	1.1
Non-energy industrial goods (75%*)	1.0	0.3	1.3	-1.5	0.8	0.9	3.3	1.0
Imports								
All goods and services	0.2	1.4	-0.5	-0.8	0.6	0.5	-0.3	0.4
Non-energy industrial goods (77%*)	0.8	2.3	-1.3	-1.7	1.2	0.7	0.2	0.3
Contribution of foreign trade to GDP	0.0	-0.3	0.3	0.1	0.0	0.1	0.7	0.2

Forecast

* Part of exports (resp. imports) of non-energy industrial goods in exports (resp. imports) in a whole in 2012.

Source: INSEE

Conjoncture in France

Sales of manufactured products are likely to benefit from the upswing in foreign demand and should grow by 0.8% and 0.9% in Q1 and Q2 2013. Exports of services are likely to maintain the growth rate observed at the end of 2012, at 0.7% per quarter. However, exports of agricultural and energy products should remain stable through to mid-2013.

All in all in mid-2013, the growth overhang in exports should be +1.1%. France's market share is likely to slide slightly over the forecasting period (see Graph 4).

Imports picking up slightly at the start of 2013

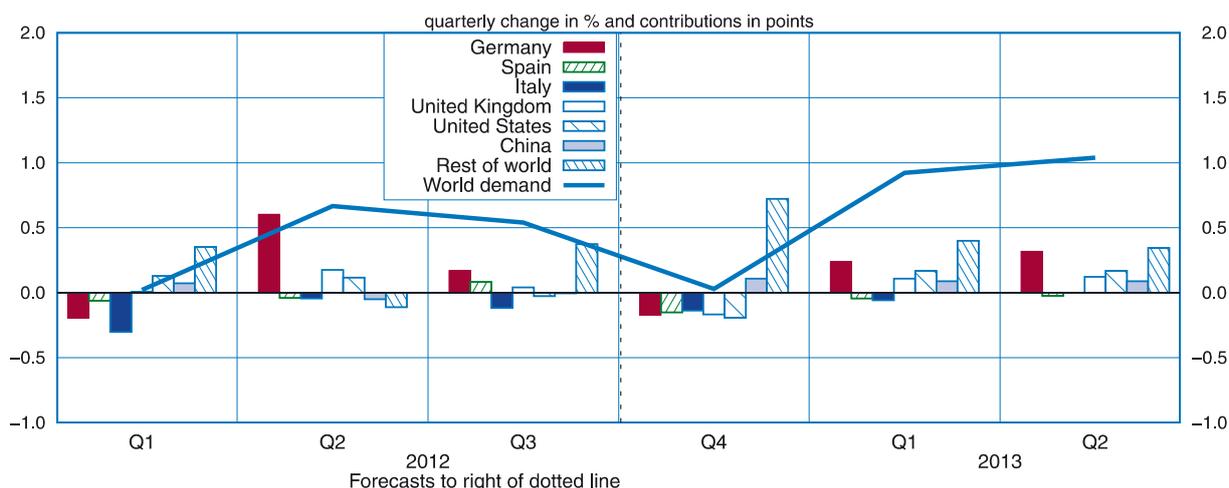
In Q4 2012 the decline in imports gathered pace (-0.8% after -0.5%), due to the sharp fall in purchases of manufactured goods. This decline affected all manufactured goods except for

agrifood products, which increased. Imports of "other industrial products" in particular fell back (-2.5%), mainly pharmaceuticals. Elsewhere, imports of agricultural products and market services each dropped by 0.6% after two quarters of growth. All in all purchases from the European Union dropped sharply but those from other countries rose slightly.

In H1 2013 imports are likely to pick up, sustained by the growth in exports¹. This rebound is likely to remain moderate (+0.6% then +0.5% per quarter) because of weak domestic demand, most notably weak corporate investment. Imports of manufactured goods should rebound after two quarters of decline. Purchases of agricultural products should be stable over the forecasting

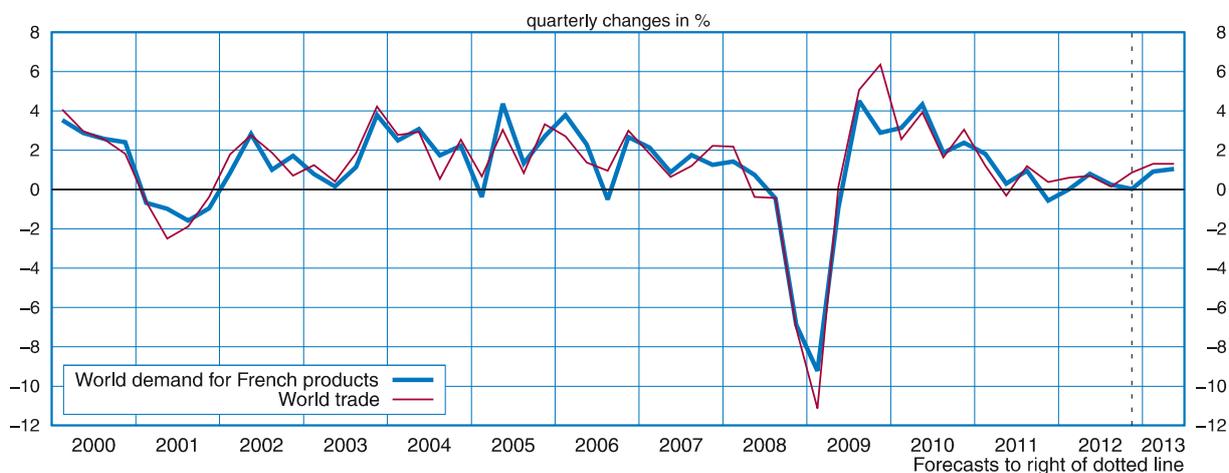
(1) via the import content of exports

1 - World demand for French products and contributions of the main partners



Source: INSEE

2 - World demand for French products and world trade



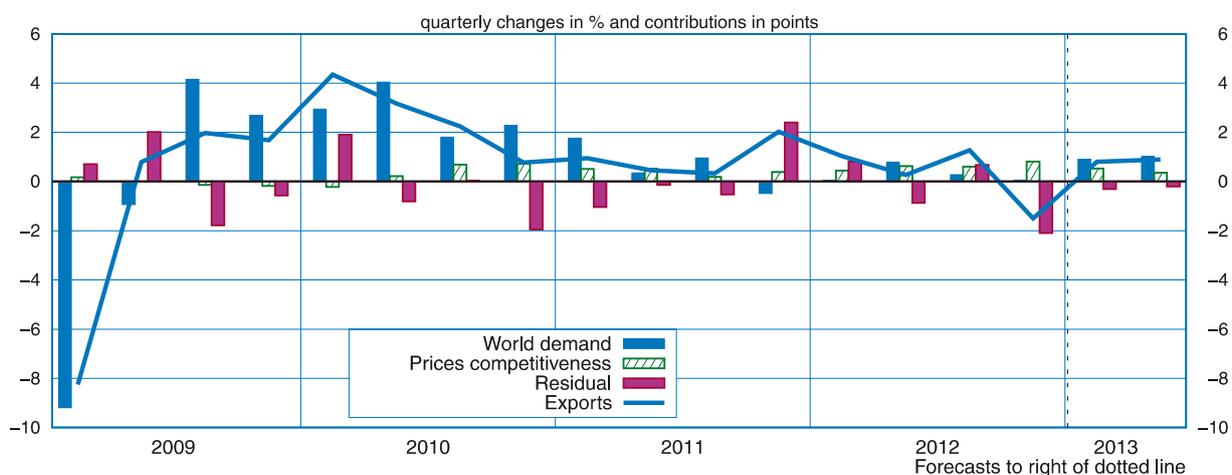
Source: INSEE

period, while energy purchases are likely to contract in Q1 (-2.5%) in reaction to the very strong trend towards destocking observed in Q4 2012.

In 2013, the growth overhang in total imports at the end of H1 should be +0.4%. In 2012 imports slipped back slightly (-0.3%). Indeed, purchases from non-EU countries fell back (-3.4%).

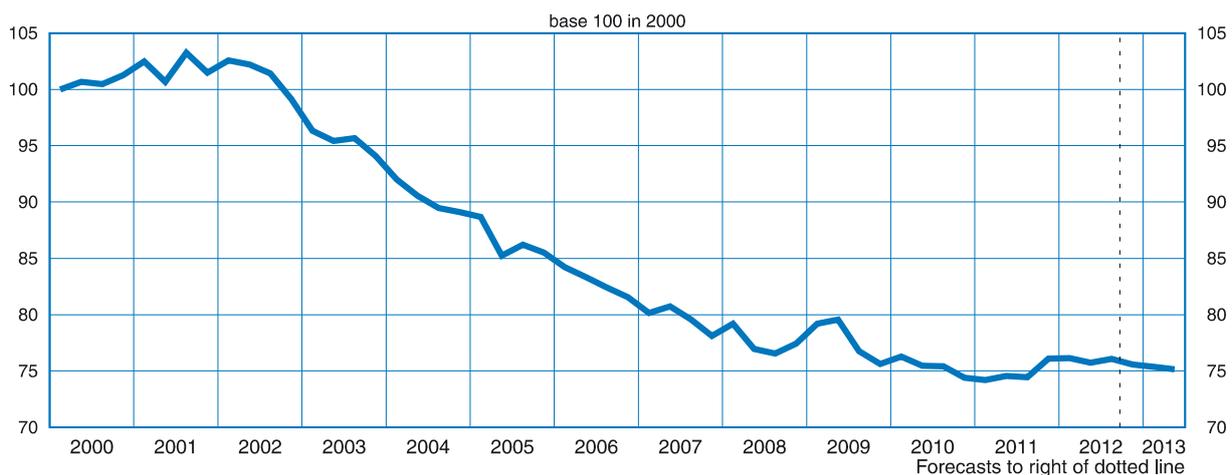
All in all, at the start of 2013 the contribution of foreign trade to growth should be nil in Q1 then +0.1 point in Q2. Over 2012 as a whole, the contribution of trade to growth was clearly positive, +0.7 point, thanks to a carryover effect in Q4 2011. However, over the four quarters of 2012 the contribution was virtually nil, illustrating the sluggishness of the economic situation in France and among its trading partners. ■

3 - Manufactured exports and econometric contributions



Source: INSEE

4 - Market share of France



How to read it: Market share is defined here as the report between French exports and world demand for French products

Sources: INSEE, Tresor

Oil and raw materials

Tensions on the physical oil market are expected to remain limited into mid-2013. Oil production in Saudi Arabia dropped off sharply in late 2012, with the additional capacities of the OPEC producers increasing. Over the forecasting period the international oil supply should be sustained by the dynamism of American output. Demand should remain subdued in developed nations, as is to be expected as winter comes to an end, but this lack of dynamism is also linked to the poor state of economic activity in Europe.

In H1 2013 the price of oil should remain high, fluctuating around \$110 per barrel of Brent crude. Lively geopolitical tensions remain an issue in Iran, but also in Mali and the risks for oil companies operating in the major oil-producing countries of the region (Algeria, Libya, Nigeria), have increased.

After the sharp rises seen in the summer due to droughts in the USA and the Ukraine, prices of agricultural commodities have been falling almost continuously since September 2012 thanks to strong harvests in the southern hemisphere. The prices of industrial commodities recovered slightly in late 2012, due to improved growth perspectives in China and the emerging Asian markets, as well as the USA. These prices are expected to stabilise in early 2013.

Rise in OPEC countries spare capacity in Q4 2012

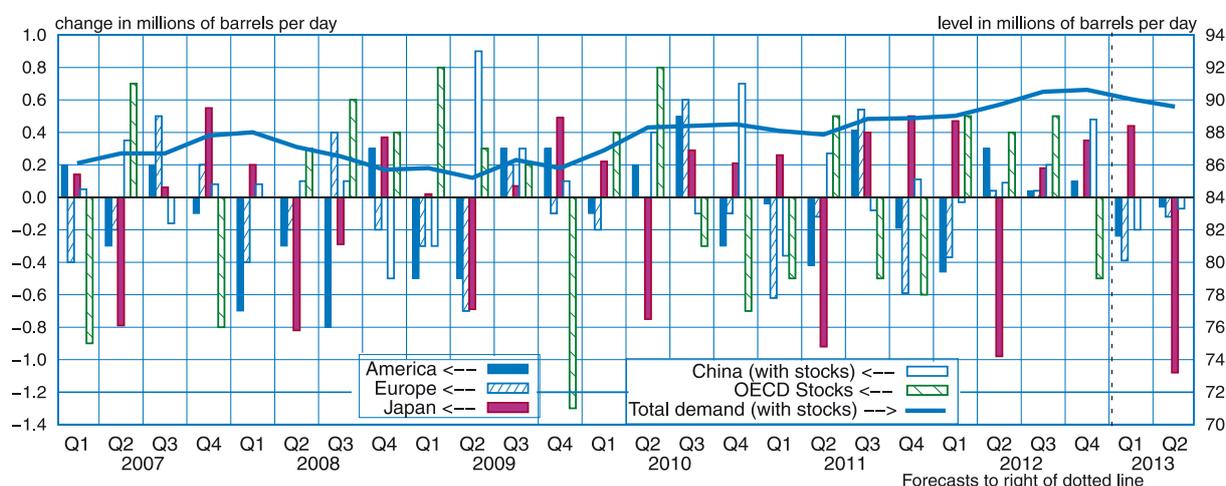
In Q4 2012 non-stock demand for oil rose by 400,000 barrels per day in OECD countries. American consumption remained highly dynamic despite the end of the "driving season", with demand sustained by unseasonably low temperatures. The cold also sparked a consumption spike in Japan. On the other hand, demand stagnated in Europe due to the decline in economic activity. In the advanced economies the increase in consumption was fully satisfied by a reduction in oil stocks. These stocks had increased considerably over the three previous quarters (see Graph 1).

In non-OECD nations, demand for oil was particularly dynamic in China (+500,000 bpd including stocks, see Graph 1) and the emerging Asian economies (+400,000 bpd including stocks), due to the acceleration of economic activity and some harsh temperatures. Chinese oil consumption was also sustained by advance buying ahead of a tax rise in January 2013. These increases were partially offset by the seasonal decline in demand in the Middle East and, all in all, demand for oil outside the OECD nations (not including stocks) rose by 400,000 bpd.

World oil production¹ rose by 700,000 bpd in Q4 2012. With the end of seasonal constraints in the

(1) Demand data (including stocks) and production data are those of the International Energy Agency. They do not coincide at the global level due to measurement inaccuracy.

1 - In H1 2013, seasonal drop in oil demand



Sources: IEA, INSEE forecast and calculations

Gulf of Mexico and the enduring dynamism of extraction from non-conventional sources, American oil production grew strongly in Q4. However the recovery of oil production remained limited in Europe, with maintenance work in the North Sea taking longer than usual.

At the same time, production declined strongly in the OPEC nations (-600,000 bpd), particularly since Saudi Arabia decided to significantly reduce production. Spare capacity from OPEC producers therefore increased (see Graph 2), a sign that tensions on the physical market have eased.

The physical market should ease further in H1 2013...

In Q1 2013 the situation in the physical market should remain positive: oil supply and demand should decrease together, and OPEC spare capacity should not be diminished.

Slow economic growth should aggravate the seasonal decline in consumption in Europe. Having been sustained by temperatures which were lower than usual in late 2012, demand should also drop off in the United States and, to a lesser extent, in China, since in the latter market some consumption was anticipated in Q4 2012

According to the available production data (up to January 2013), oil production should drop off again in the OPEC nations in Q1. In Saudi Arabia in particular, production in January remained close to the low point reached in December 2012, while its spare capacity remained stable. On the other hand, reduced production in Iraq and Iran reflect supply constraints (see Graph 3). In Iraq, the oil supply should continue to be disrupted in the north of the country by tensions with the Kurdish government. In the south, technical incidents at the port terminals in December 2012 and January 2013 have affected the country's exports and production, as the storage capacities of these ports

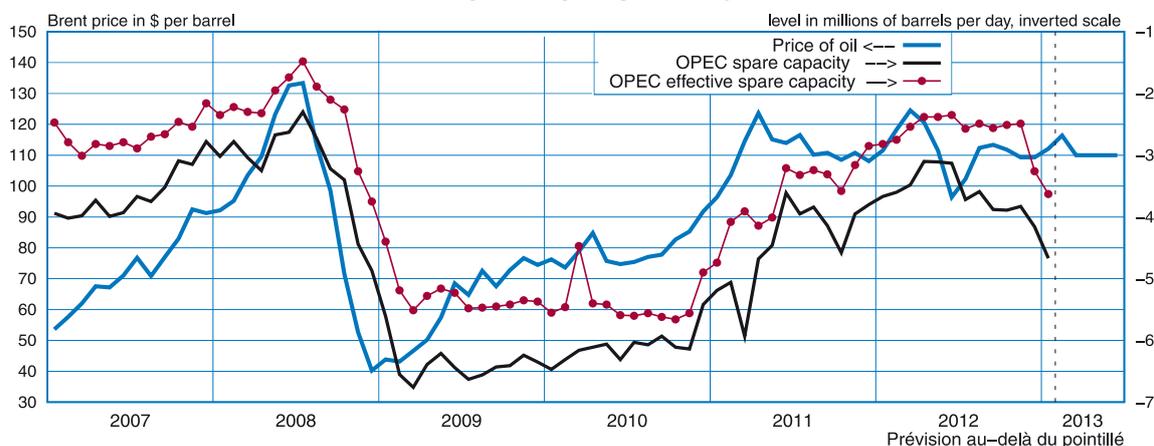
are insufficient. In Iran enhanced American economic sanctions came into effect at the start of February 2013, with the freezing of oil revenue in importing countries, and these measures are expected to further weaken the country's crude oil exports. Meanwhile the supply of liquefied natural gas should stagnate in Q1 2013, adversely affected by the terrorist attack on Algeria's In Amenas complex.

Supply and demand should thus drop off in Q1 2013, while conditions on the physical market remain positive.

In Q2 2013, tensions in the physical markets should remain low: demand should subside, and total additional production capacity should increase. Indeed as winter comes to an end, oil consumption in the advanced economies should drop off considerably, particularly in Japan (-1.1 million bpd) following the usual pronounced seasonal trend (see Graph 1). Nonetheless, demand should remain dynamic in non-OECD countries, particularly in the Middle East where it will be sustained by seasonal consumption and increased public spending.

At the same time supply should grow slightly, thanks to the OPEC nations where the production of liquefied natural gas should recover after suffering in Q1 2013 from the fallout of the hostage siege at the In Amenas gas complex in Algeria. Moreover, after significantly reducing production in late 2012 Saudi Arabia has enough spare capacity to rapidly increase its oil production. Outside of the OPEC producers oil supply should remain stable; the decline in European production, with the beginning of maintenance work in the North Sea, and the stagnation of American production due to the beginning of the bad weather season in the Gulf of Mexico, should be offset by the seasonal increase in biofuel production.

2 - OPEC spare capacity at a high level



Sources: IEA, Financial Times, INSEE forecast

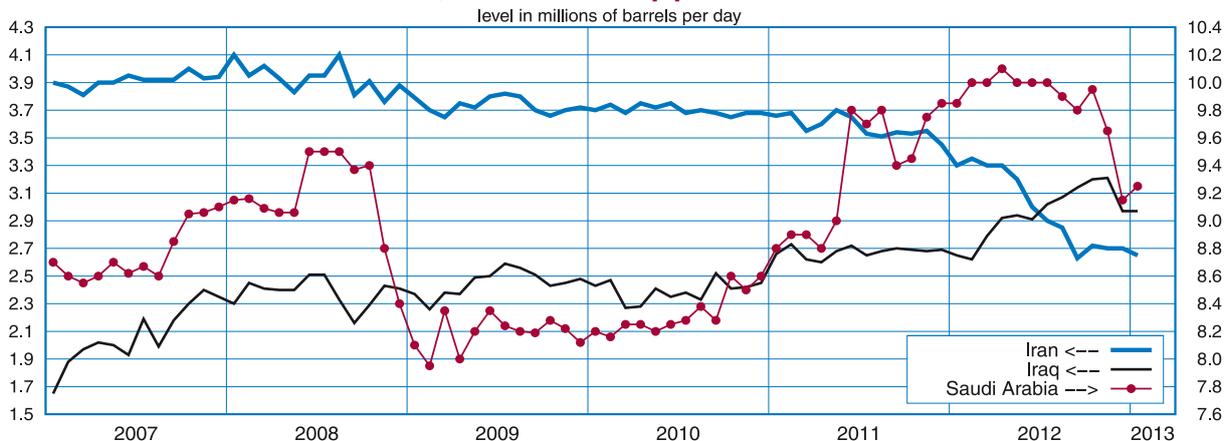
... but the price of Brent should remain high at \$110 per barrel

Having remained relatively stable in late 2012, fluctuating around the \$110-per-barrel mark, oil prices are up again in early 2013. Prices rose by 2.6% in January then 3.8% in February, reaching \$116 per barrel (see Graph 2). Despite the increase in OPEC's spare capacity and in the stocks held by OECD countries, as well as economic forecasts which remain poor for Europe, prices should continue to be influenced by persistent concerns over OPEC supply. On the one hand, following the hostage drama in Algeria and the war in Mali foreign oil companies operating in Libya and Nigeria have updated their security policies. Moreover, with enhanced American sanctions taking effect Iranian production could fall sharply, and it seems unlikely that negotiations over the country's nuclear programme will reach a successful conclusion before the presidential elections scheduled for June 2013. In H1 2013 oil prices will remain high, fluctuating at around \$110 per barrel of Brent crude.

Excluding energy, agricultural commodity prices have continued to fall but metal prices are on the rise

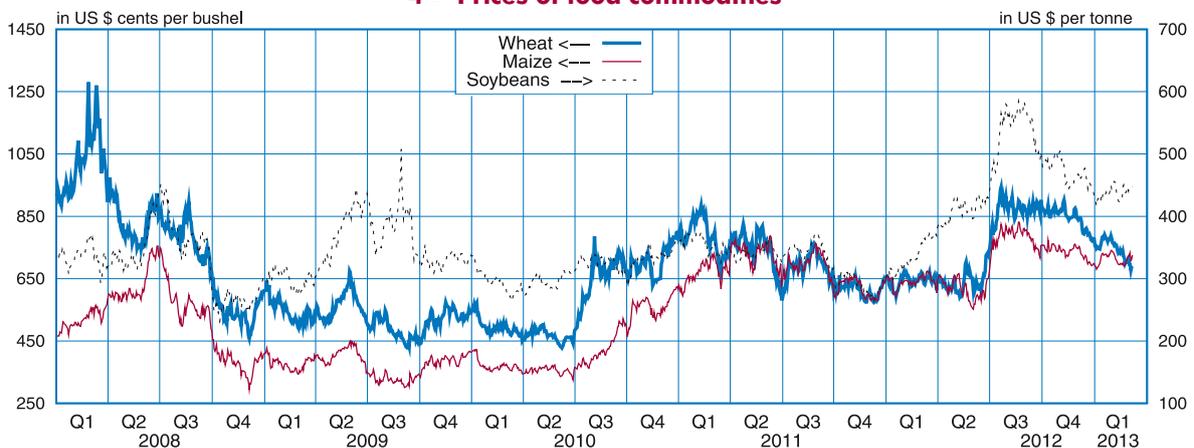
Agricultural commodity prices are still on a downward trajectory in early 2013. Abundant cereal grain and soybean harvests in the southern hemisphere partly compensated for the drop-off in American and European production, which suffered as a result of drought. After the rapid price rises seen in Q3 2012 (+35.9% for wheat, +26.7% for corn and +30.8% for soybeans), cereal and soybean prices have been falling almost continuously since September 2012 (see Graph 4). At the end of February 2013 the growth overhangs for Q1 2013 were clearly negative: down by 11.7% for wheat, 3.6% for corn and 7.3% for soybeans. The rain which arrived in early February assuaged the lingering concerns over soybean harvests in South America, and over the yield of the cereal crops sown this winter in the USA. Industrial metal prices rose in late 2012 (copper +2.6% and aluminium +4.1% in Q4, see Graph 5), in line with the upturn in China and the positive signals coming from the American real estate market. At the end of February 2013 the growth overhang for Q1 2013 was +2.0% for copper and +2.3% for aluminium. ■

3 - Saudi, Iranian and Iraqi productions down



Source: IEA

4 - Prices of food commodities



Source: DataInsight

5 - Prices of industrial metals



Source: London Metal Market

Consumer prices

Headline inflation reached 1.0% in February 2013 and, after a slight drop in March, should rise slightly to 1.2% in June 2013. The cause of this profile is energy inflation, which should decrease through to April then pick up again.

Core inflation is likely to fall to 0.4% by June 2013, after 0.6% in February. High unemployment should continue to limit inflationary pressure. The spread of imported industrial commodity price rises should come to an end: the year-on-year growth in prices of manufactured goods should thus diminish through to June. However, the year-on-year change in prices of services should rise slightly, as the drop in telecommunications prices are likely to be smaller than those of last year. Non-seasonal food prices should pick up, sustained by the spread of price rises in imported food commodities in 2012.

Energy inflation on the rise

The year-on-year energy price rise stood at 2.4% in February 2013. It should fall to 0.6% in April and then rise again to 4.8% in June. Against a backdrop of the stabilisation of the Brent price at €84.0 over the forecasting period, the exit of the sharp increases observed over the first few months of 2012 from the year-on-year figures should mechanically contribute to the drop in energy inflation until April. It should then rise under the effect of the exit of the rises of May and June 2012

from these figures. Overall, the contribution of this item to headline inflation should diminish in H1 2013 (see Graph 1).

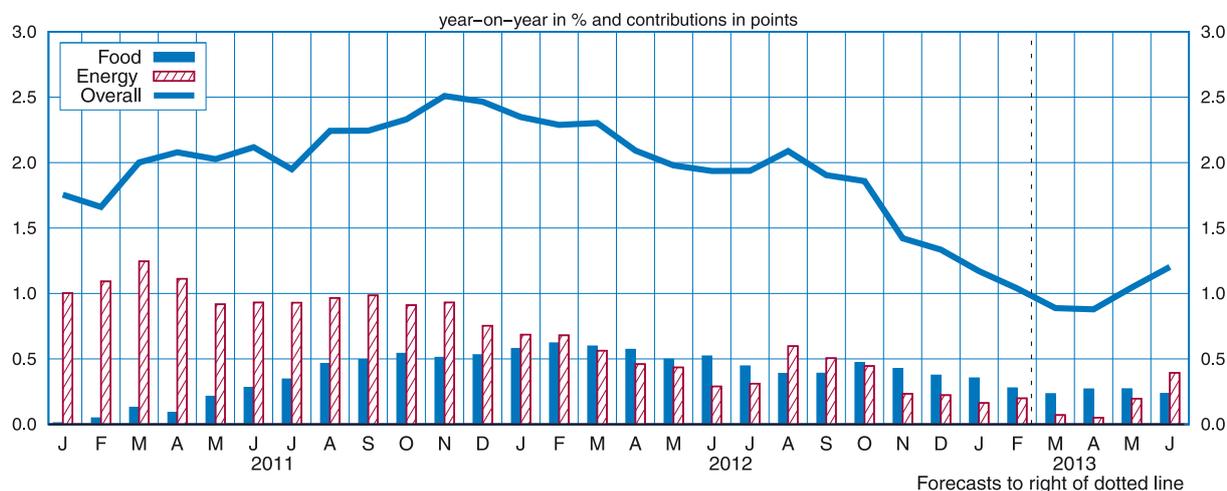
Inflation in manufactured goods falling

The year-on-year change in the prices of manufactured products should fall to -0.5% in June 2013, after -0.2% in February (see Table). The low production capacity utilisation rates and the high unemployment rate should contribute to moderating inflationary pressure in the manufacturing sector. Additionally, the year-on-year change in the prices of clothing and footwear should fall to -0.4%, after 0.3% in February, under the effect of the drops in cotton prices since the end of 2011. Similarly, the year-on-year change in the prices of other manufactured products is likely to fall to 0.1% in June 2013, after 0.7% in February, because past rises in the prices of industrial commodities should have stopped spreading.

Inflation in services likely to rise

The year-on-year change in the prices of services should increase to 1.3% in June 2013, after 1.0% in February (see Table). As in the manufacturing sector, the high level of unemployment should continue to take its toll on wages, contributing to a moderation of the prices of services. However, the price cuts in telecommunications (see Focus) should be lower than in 2012, and the year-on-year change in the prices of transports and communications should rise.

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



Source: INSEE

Inflation in foodstuffs down slightly, "non-seasonal" products on the rise

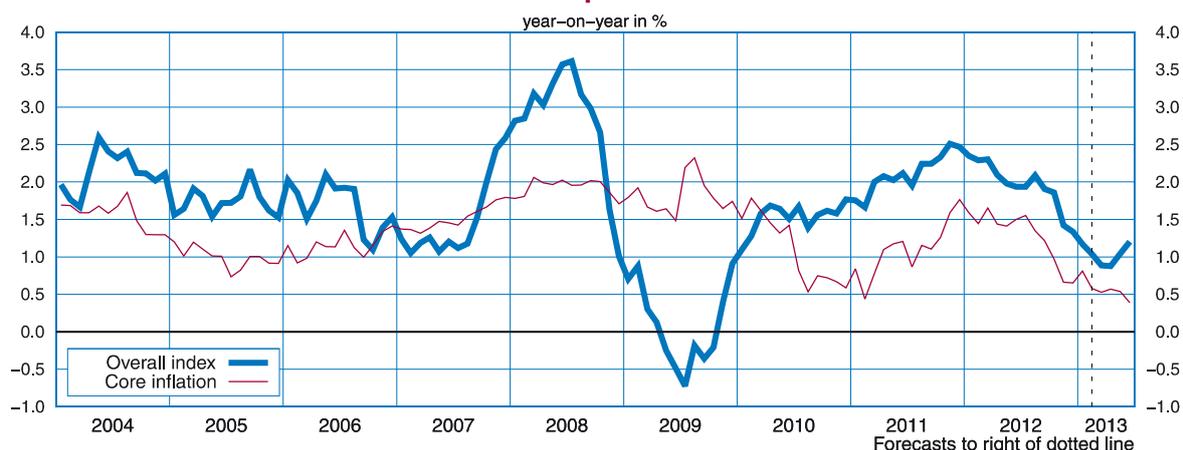
The year-on-year change in the prices of foodstuffs should drop slightly to 1.4% in June 2013, after 1.7% in February (see Table), with divergences between seasonal and non-seasonal products. On the one hand, the year-on-year rise in seasonal products, which was high in February (5.6%), should come down to 0.7% over the forecasting period. Conversely, the increases in food commodity prices since the start of 2012 should filter through to consumer prices of non-seasonal food products; the year-on-year changes in these prices should increase to 1.6% in June 2013, after 1.1% in February.

A fall in core inflation, headline inflation stable

Core inflation is measured by taking all prices of energy and seasonal food products and public prices out of the headline index and correcting for any fiscal measures. Over the forecasting period, the year-on-year figure for core inflation should fall to 0.4%, after 0.6% in February (see Graph 2). Generally speaking, in a context of high unemployment the bargaining power of employees tends to weaken, thereby slowing wages and moderating inflationary pressure. The changes in the various items of core inflation should contrast, however: inflation in manufacturing goods should decline; and the prices of non-seasonal foodstuffs should pick up.

Headline inflation stood at 1.0% in February 2013. It should fall to 0.9% in April and then stand at 1.2% in June 2013. This trend is likely to be the result of the energy inflation profile. ■

2 - Consumer prices in France



Source: INSEE

Consumer prices

changes as %

CPI* groups* (2012 weightings)	December 2012		February 2013		March 2013		June 2013		Annual means	
	yoy	cyoy	yoy	cyoy	yoy	cyoy	yoy	cyoy	2011	2012
Food (16.4%)	2.3	0.4	1.7	0.3	1.4	0.2	1.4	0.2	1.9	3.0
including: seasonal food products (2.1%)	7.7	0.2	5.6	0.1	2.6	0.1	0.7	0.0	-1.2	5.2
excluding seasonal food products (14.3%)	1.5	0.2	1.1	0.2	1.2	0.2	1.6	0.2	2.4	2.7
Tobacco (2.0%)	6.9	0.1	7.0	0.1	7.0	0.1	6.9	0.1	5.9	6.2
Non energy industrial goods (29.9%)	0.2	0.1	-0.2	-0.1	-0.2	-0.1	-0.5	-0.2	0.1	0.7
Energy (8.7%)	2.6	0.2	2.4	0.2	0.9	0.1	4.8	0.4	12.3	5.2
including: oil products (5.2%)	1.0	0.1	0.2	0.0	-2.3	-0.1	4.0	0.2	15.8	5.8
Services (43.1%)	1.3	0.5	1.0	0.4	1.1	0.5	1.3	0.5	1.7	1.6
including: rent-water (7.4%)	2.1	0.2	2.1	0.2	2.0	0.1	2.0	0.1	1.8	2.0
health services (5.3%)	1.3	0.1	1.3	0.1	1.3	0.1	1.0	0.1	1.1	0.9
transport-communications (5.2%)	-5.2	-0.3	-7.4	-0.4	-6.9	-0.4	-5.1	-0.3	-0.5	-3.7
other services (25.2%)	2.3	0.6	2.3	0.6	2.4	0.6	2.3	0.6	2.2	2.7
All (100%)	1.3	1.3	1.0	1.0	0.9	0.9	1.2	1.2	2.1	2.0
All excluding energy (91.3%)	1.2	1.1	1.4	1.3	1.4	1.3	1.4	1.3	1.3	1.6
All excluding tobacco (98.0%)	1.2	1.2	0.8	0.8	0.7	0.7	1.0	1.0	2.1	1.9
"Core" inflation (60.9%)¹	0.7	0.4	0.6	0.4	0.5	0.3	0.4	0.2	1.0	1.3
All HCPI*	1.5	1.5	1.3	1.3	1.1	1.1	1.4	1.4	2.3	2.0

Forecast

yoy : year-on-year

cyoy : 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

Consumer price index: how are new products integrated?

Around a thousand varieties of products are tracked in order to measure consumer prices

This Focus presents the mechanism used to include new products in the calculation of the consumer price index (CPI) and illustrates the process with the visible consequences of the arrival on the market of a new mobile phone operator in January 2012.

The CPI is based on an internationally standardised methodology which for the most part is inscribed in the European regulations governing calculations of the harmonised indices of consumer prices. For the requirements of calculating the CPI, INSEE tracks a basket of around a thousand varieties of products (goods and services) which are representative of household consumption, involving around 200,000 monthly readings of the prices of the relevant items. Each variety contributes to the consumer price index proportionally to the weight it represented in household consumption expenditure over the previous year. As well as the data collection performed by the field investigators, the INSEE performs centralised readings and, where necessary, works in conjunction with institutional partners to track consumer prices in specific sectors. This is most notably the case with mobile telephony services, which are tracked in close collaboration with the French Telecommunications and Posts Regulator (ARCEP).

Product offerings and consumer preferences are ever-changing

Consumption evolves continually: old products give way to new ones as product offerings and consumer preferences change. The inclusion of new products is an important issue for consumer price indices. It has already been widely studied, most notably by the Boskin Commission in the USA at the end of the 1990s. This commission concluded that the basket of goods and services used for consumer price indices should be regularly adapted to take changes in consumer behaviour into account, as otherwise measured inflation could be overestimated. The risk appears to be less serious for the French CPI, because like most developed countries France conducts an annual revision of the list of product varieties tracked in the CPI.

Products that disappear from the basket of goods are replaced

New products are included in the CPI either to replace an item that can no longer be tracked or as a brand new product. A replacement occurs when an item that used to be tracked in a given outlet disappears. In this case the INSEE replaces it, generally in the same outlet, selecting the new item from among those available for sale and similar in purpose to the previous one. The replacement must therefore belong to the same product variety. Where necessary, the INSEE corrects the price of the new item in order to neutralise the proportion of the price difference between the two items that is linked to the differences in characteristics between

them. For example, each year an econometric model is determined describing the price of washing machines according to product characteristics such as brand, drum rotation speed, capacity, or type of opening. If the investigator proposes to replace a washing machine that offers 1 000 RPM by one with 1 200 RPM, all else being equal, the price variation included in the price index is that actually observed between the two washing machines, corrected for the price difference predicted by the model and conditional upon the difference in characteristics between the machines. This correction serves to measure inflation at constant product characteristics.

New products are included annually

Newly consumed goods which do not belong to one of the 1,000 varieties making up the basket of goods and services tracked for the year are introduced into the CPI basket during the annual renewal. The new varieties are included in the consumer price index basket without generating any variation in index.

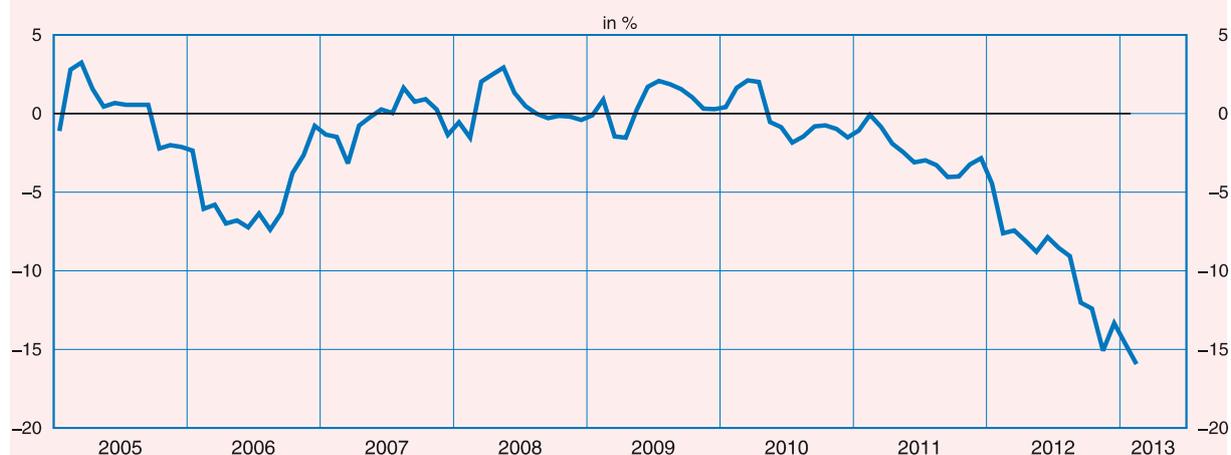
When a new product arrives on the market, its consumption generally rises gradually over a period of several months, so the fact that the CPI basket of goods and services is updated annually allows the inclusion of new products at the moment when the share they represent in household consumption expenditure has become significant. However, some goods such as technological products which are highly fashionable as soon as they enter the market immediately represent a significant share of consumption. By definition, in the year that they appear on the market the prices of these goods are not directly tracked in the consumer price index. And yet in the first year their appearance has an indirect impact on measured inflation, via the competitive pressure that these new products exert on similar goods that do feature in the CPI basket.

The case of mobile telephony in 2012 and 2013

The arrival of a new mobile phone operator in January 2012 is a good illustration of this mechanism, and its impact on the consumer price index of telecommunication services was very marked. In this index in 2012, mobile telephony weighed around 50% in the grouping that also covers landline telephony, internet services, and multi-play services. As regards mobile telephony, the index is based on the tracking of a set of services, each one associated with a particular operator. In this system, a new operator that arrives on 1st January 2012 is associated with new services. However, these services cannot be included in the CPI basket until January 2013, when the market share associated with the new services, if it is significant, is known.

Since January 2013 the new operator has been included in the CPI basket: the price variation of the new operator observed between December 2012 and January 2013 contributed directly to the calculated variation in the index. ■

Year on year index of telecommunications services between 2005 and 2013



Source: INSEE

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Employment

Non-agricultural market employment fell once again in Q4 2012 (-45,000 jobs). Employment dropped sharply across all sectors.

Through to mid-2013, the decline in employment is likely to continue in the market sectors: 74,000 jobs likely to be lost in H1 2013, after 91,000 in H2 2012.

In the non-market sectors however, employment should climb once again, most notably due to the increase in the number of newcomers to the «future jobs» scheme: 30,000 jobs should be created in the non-market sectors in H1 2013. All in all, market and non-market employment is likely to continue to fall in H1 2013. Job losses should nonetheless be far less extensive than in H2 2012 (-37,000 jobs after -88,000), thanks to the increase in subsidised employment schemes.

In the market sectors, employment set to continue to fall in early 2013

Dynamic until mid-2011, the labour market has since turned. Market employment declined in 2012 (-99,000 jobs) after progressing over 2011 as a whole (+55,000, see Table 1). Up to mid-2011, market employment was surprisingly dynamic given the level of growth in activity

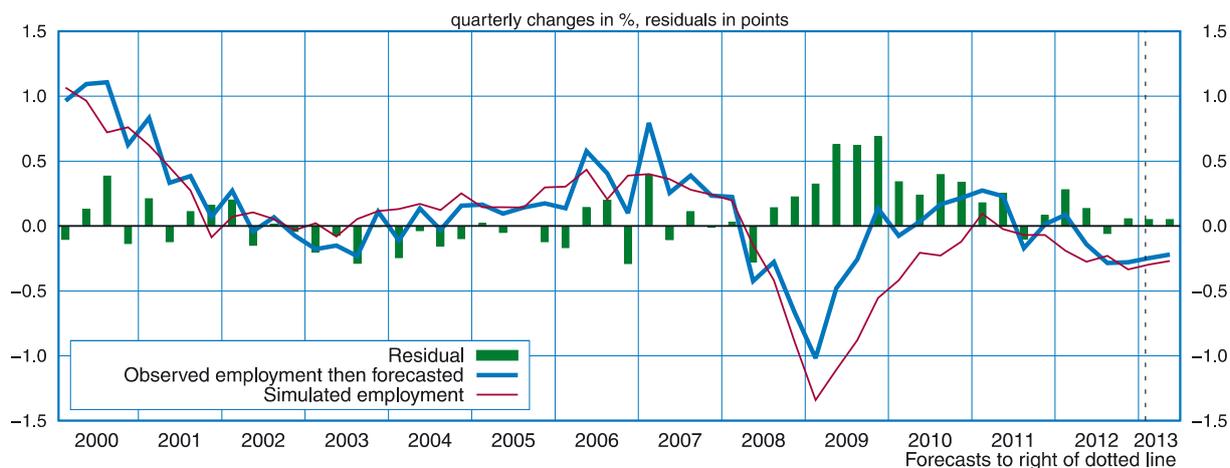
(see Graph 1). Since then, this differential with its pre-crisis behaviour has narrowed but is still there: the simulated decline for 2012 using an econometric model of market employment is even higher (-158,000 jobs).

Over the forecasting period, market employment is likely to continue to suffer due to weak activity and the decline is set to continue, even though the first effects of the tax credit for competitiveness and employment should temper this drop somewhat (15,000 jobs in H1 2013). All in all, market employment should shed 74,000 jobs in H1 2013 and, in mid-2013, return to its level of mid-2005 (see Graph 2).

In the tertiary sector job losses should slow

In H2 2012 employment in the tertiary sector declined, with 64,000 jobs losses after a moderate rise in H1 (+8,000 jobs). The drop in temporary employment, which is counted in the tertiary sector regardless of the sector in which the work is performed, was significant (-38,000 jobs). Temporary employment seems to be the first component of employment adjustment: in 2010, after activity picked up once again, growth in employment was mainly down to temporary work; since 2011 however, the stability of activity has led

1- Employment observed in the non-agricultural market sector, simulated and residual



How to read it: The equation residual for employment is the spread between the observed employment growth rate and the simulated employment growth rate. A positive residual, such as that observed at the beginning of 2012, indicates that observed employment showed better growth than past behaviour would lead us to expect.

Source: INSEE

once again to a sharp decline in temporary employment. After 61,000 job losses in 2012, temporary employment is set to lose another 24,000 jobs in H1 2013.

In the tertiary sector excluding temporary work, employment also slipped back at the end of 2012 (-25,000 jobs in H2). In H1 2013, employment is likely to fall less markedly in this sector (-11,000).

All in all, the drop in market-sector tertiary employment including temporary work should be smaller in H1 2013 than at the end of 2012 (-36,000 jobs, against -64,000 jobs in H2 2012).

Fall in industrial employment

While it held up in 2011 (-6,000 jobs), industrial employment slipped back in 2012 (-29,000) in the wake of the sharp downturn in industrial activity (see *Graph 3*). Industrial job losses are likely to continue further in H1 2013 (-25,000).

The deterioration in industrial employment looks even more marked when the changes in numbers of temporary staff working in the sector are taken into account. While the rate of recourse to temporary employment in mid-2011 almost returned to its pre-crisis level (7.8% in Q2 2011, see *Graph 4*), it has since slumped and stood at 6.2% in Q4 2012. As early as H2 2011, as is usually the case in an economic slowdown, the number of temporary workers in industry fell back (-20,000 jobs) and the drop continued in 2012 (-41,000 temporary workers). The rate of recourse to temporary employment in industry should fall slightly in early 2013. All in all, industrial employment including temporary labour used in the sector should decrease once again by 36,000 jobs at the start of 2013, after shedding 39,000 jobs in H2 2012. This decline in industrial employment is globally comparable to the average observed since the start of the 2000s, despite a particularly poor current economic environment.

This shows a certain resistance on the part of industrial employment, which has been visible since 2009.

The decline in employment has gathered pace in construction

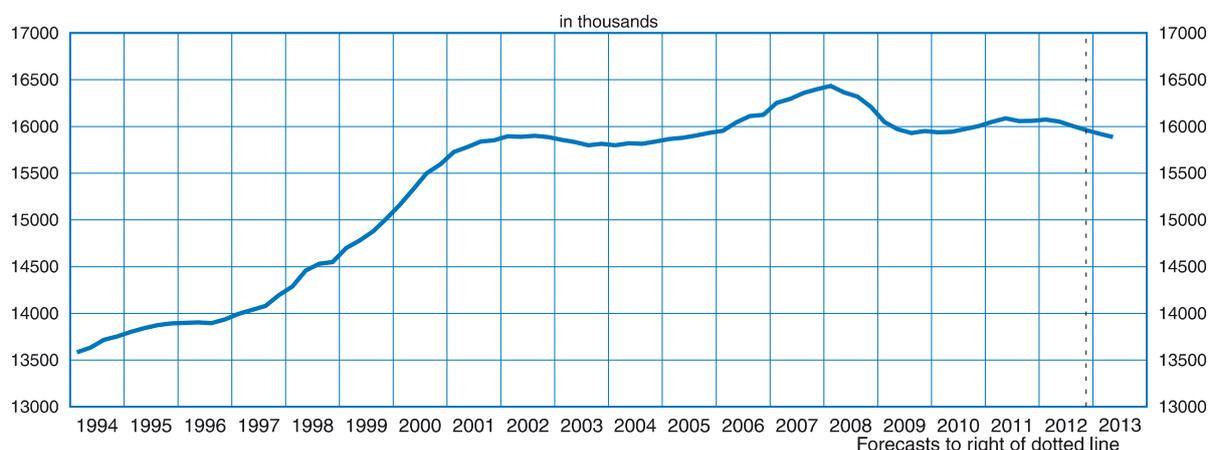
In construction there has been no employment recovery phase since the start of the crisis in 2008. Job losses continued throughout 2011 (-11,000 jobs in the year) while the other market sectors were creating jobs. In H1 2012, although activity was picking up slightly in the sector, employment remained in a downward trend (-3,000 jobs over the half-year). The decline of the labour force was sharper in H2 2012 (-11,000 jobs) and is set to gather pace once again in H1 2013 (-14,000 jobs) due to deteriorating activity in this sector.

Non-market employment likely to rise once again thanks to subsidised jobs

In 2012, 17,000 jobs were created in the non-market sector. This weak progress partly stems from the drop in the number of subsidised work contracts (-6,000 beneficiaries in the non-market sector in 2012, see *Focus*, "Subsidised labour contracts in 2012"). While the number of beneficiaries increased in H1 2012, it slipped back in H2.

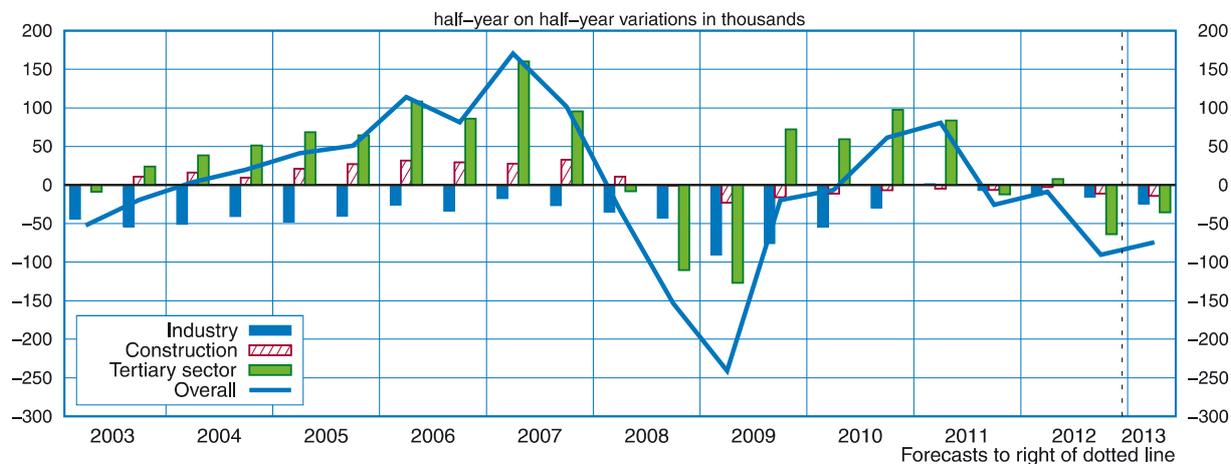
The Finance Law for 2013 provides for 403,000 newcomers to the subsidised contract scheme, including 92,000 for "Future Jobs" contracts, after 395,000 observed in 2012 in Metropolitan France. These newcomers should be evenly spread over the year and the number of subsidised contract beneficiaries should increase significantly in H1 2013 (+35,000, see *Table 2*). All in all, after a drop in H2 2012 (-8,000 jobs), non-market employment should climb once more in H1 2013 (+30,000 jobs). ■

2- Non-agricultural market paid employment



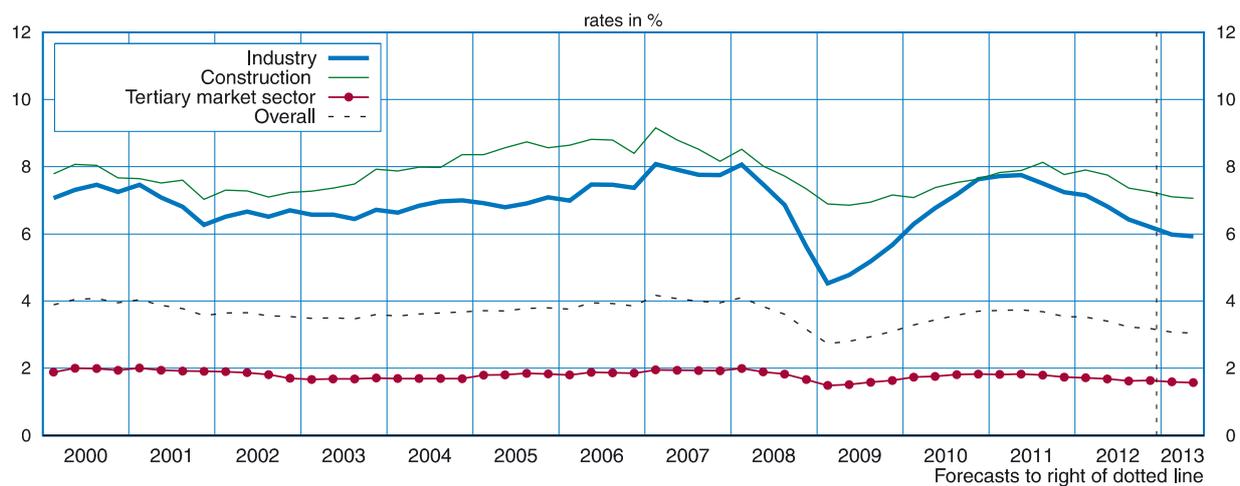
Source: INSEE

3 - Paid employment in the non-agricultural market sectors



Source: INSEE

4 - Rate of use of temporary employment by sector



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 of the end of the period (in thousands) seasonally adjusted				
	2011	2012	2012 H1	2012 H2	2013 H1	2012	2012	2012 H1	2012 H2	2013 H1	2011	2012	2012 H1	2012 H2	2013 H1
Market sector employees (1)+(2)	70	-77	4	-81	-62	0.4	-0.4	0.0	-0.5	-0.3	17993	17916	17997	17916	17854
Mainly non-agricultural market sectors (1) (private establishments only)	15	23	13	10	12	0.8	1.2	0.7	0.5	0.6	1933	1955	1946	1955	1967
Mainly non-market sectors (2)	55	-99	-9	-91	-74	0.3	-0.6	-0.1	-0.6	-0.5	16060	15961	16051	15961	15886
Industry	-6	-29	-14	-16	-25	-0.2	-0.9	-0.4	-0.5	-0.8	3268	3238	3254	3238	3214
including: Manufacturing industry	-11	-34	-17	-17	-22	-0.4	-1.2	-0.6	-0.6	-0.8	2901	2867	2884	2867	2845
Construction	-11	-14	-3	-11	-14	-0.8	-1.0	-0.2	-0.8	-1.0	1435	1421	1432	1421	1407
Tertiary market sector	72	-56	8	-64	-36	0.6	-0.5	0.1	-0.6	-0.3	11357	11301	11365	11301	11265
including: Trade	20	-20	-3	-17	-3	0.7	-0.7	-0.1	-0.6	-0.1	3028	3008	3025	3008	3005
Market services (including temporary work)	52	-36	11	-47	-32	0.6	-0.4	0.1	-0.6	-0.4	8329	8293	8340	8293	8261

	Job creations over the period (in thousands)					Change in employment over the period (in %)				
	2011	2012	2012 H1	2012 H2	2013 H1	2011	2012	2012 H1	2012 H2	2013 H1
Mainly non-agricultural market sectors	55	-99	-9	-91	-74	0.3	-0.6	-0.1	-0.6	-0.5
Agricultural employees	-4	-4	-2	-2	-2	-1.6	-1.8	-0.9	-0.9	-0.9
Mainly non-market ser- vice sectors (including private establishments)	-32	17	25	-8	30	-0.4	0.2	0.3	-0.1	0.4
Self-employed	60	24	12	12	10	2.5	1.0	0.5	0.5	0.4
Total Employment	80	-62	26	-88	-37	0.3	-0.2	0.1	-0.3	-0.1

Forecast

(1) Sectors OQ (private workers)

(2) Sectors DE to MN and RU

How to read it: 62,000 jobs should be destroyed in the market sector during H1 2013. This corresponds to a decrease of 0.3% over the half-year. This sector should employ 17,854,000 workers at June 30th 2013

Source: INSEE

Table 2

Change in subsidised employment in the non-market sector

in thousands

	2010	2011	2012H1	2012H2	2012	2013H1
Employs for the future	0	0	0	1	1	44
(CUI-CAE replaces CAE+CAV on 01/01/10)	241	-37	25	-31	-7	-9
Contract to Support Employment (CAE)	-163	-8	0	0	0	0
Contract for the Future (CAV)	-63	-5	0	0	0	0
Young worker's contract	-2	0	0	0	0	0
Total	13	-50	25	-30	-6	35

Forecast

Note: Including renewal addenda

Source : DARES, INSEE

Subsidised labour contracts in 2012

Via direct and indirect aid, subsidised contracts reduce the cost to employers of hiring or training certain employees. These subsidised jobs are usually destined as a priority for targeted populations such as the long-term unemployed or young people. In 2012, excluding sandwich courses, virtually all the new beneficiaries of subsidised contracts were given a "single integration contract (*contrat unique d'insertion, CUI*). This contract which came into force on 1st January 2010 replaced the contracts that existed previously. Additionally, the "future jobs" scheme was set up in November 2012, although at the end of 2012 the number of beneficiaries of such contracts remained low (1,000).

"Future jobs" are destined for people aged 16 to 25 with few or no qualifications, and as a priority in sensitive urban areas or rural development zones. They are mainly in the non-market sectors (social careers such as teaching or personal assistance), but may also concern the green, digital and tourism industries. Both market-sector CUI and non-market sector CUI are offered to a broader population of people who have difficulty joining the labour market (job applications repeatedly rejected, etc.), irrespective of age or place of residence.

Subsidised contracts are often used counter-cyclically: when an economic downturn occurs the volume of subsidised contracts can be increased rapidly in order to temper the effect of job losses and the resulting rise in unemployment. In the short term, the effect of these contracts on employment differs depending on whether they apply to the market sector or the non-market sector. In the non-market sector the number of jobs created is simply equal to the difference between the contracts signed or renewed and the number of people leaving the contracts in the course of the year. In the market sector however, some of the jobs in an aid scheme would have been created even if the scheme had not existed. So there is a "deadweight" or substitution effect, the scale of which may differ from one contract to the next. The effect on employment of subsidised contracts in the market sector is thus smaller than the variation in the number of beneficiaries. This effect is estimated through empirical studies (Dares, 1996).

Additionally, these evaluations are only valid in the short term. Long-term assessments would require taking into account:

- all the consequences of such schemes on the labour market (adjustment of wages, of labour force participation rates...),
- their effects on human capital, in particular changes in the beneficiaries' ability to integrate the labour market,
- the impact of the financing method on the economy.

The inclusion of these various long-term effects would be likely to alter the evaluations presented here substantially.

(1) Single integration contract (CUI), sandwich courses, (professionalization, apprenticeship), exemptions from social charges (ZRR and ZRU)

The number of beneficiaries of subsidised contracts in the non-market sector was stable in 2012

In 2012, subsidised employment in the non-market sector was almost stable, with 199,000 beneficiaries of subsidised contracts at the end of 2012 (205,000 at the end of 2011), after a drop of 50,000 in 2011. The total number of non-market subsidised contracts signed or renewed did indeed increase sharply over 2011, with 395,000 contracts in 2012 against 356,000 in 2011 (see *Table*), in particular because the authorised number of CUI was raised twice in the course of 2012. The number of people leaving the contracts remained at an equivalent level to that of 2011, however. Among these subsidised contracts, 1,000 are "future jobs" set up on 1st November 2012.

Drop in all subsidised contracts in the market sector in 2012

At the end of 2012, the number of beneficiaries of subsidised contracts¹ in the market sector was 622,000, i.e. a drop of 24,000 against 2011. This diminution is due to the simultaneous fall in contracts allowing lower wage costs (CUI in the market sector) and in sandwich courses, particularly professionalisation contracts. The global effect of market-sector subsidised contracts on employment growth is likely to have been slightly negative: 2,000 jobs appear to have been destroyed in 2012 when the deadweight and substitution effects are taken into account.

More than 90% of subsidised contracts in the market sector are sandwich courses: at the end of 2012, apprenticeship or professionalisation contracts had 591,000 beneficiaries, 5,000 jobs fewer than in 2011. There were slightly fewer newcomers to these schemes in 2012 than in 2011: 449,000 newcomers against 459,000 the previous year. The number of newcomers increased for apprenticeship contracts (294,000, a rise of 4,000), but slipped back for professionalisation contracts (155,000, a drop of 14,000).

The other market-sector subsidised contracts are contracts that lower wage costs. There were 31,000 beneficiaries at the end of 2012, i.e. 19,000 fewer than at the end of 2011. Among them, the CUI is still predominant, although in 2012 the number of beneficiaries of this contract fell by 17,000 to stand at 26,000 at the end of the year. The recorded newcomers to the market-sector CUI (51,000) were indeed fewer than the number of leavers (68,000). Additionally, the number of beneficiaries of schemes allowing social contribution exemptions in rural development zones and in urban rehabilitation areas has been virtually stable since 2009 (5,000 beneficiaries at the end of 2012). ■

Subsidised employment contract schemes: flows and number of beneficiaries

in thousands, raw data

	Flows of newcomers (including contract renewals)					Variation in number of beneficiaries (y-o-y, end of year)					Number of beneficiaries (end of year stock)				
	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012	2008	2009	2010	2011	2012
Subsidised employment in the non-market sector	276	359	377	356	395	-63	57	13	-50	-6	184	241	255	205	199
including:															
<i>Non-market CUI</i>	0	0	377	356	395	0	0	241	-37	-7	0	0	241	204	198
<i>Contract to Support Employment (CAE)</i>	169	260	0	0	0	-48	70	-163	-8	0	102	172	8	0	0
<i>"Future jobs"</i>	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1
<i>Contract for the future (CAV)</i>	106	98	0	0	0	-10	-10	-63	-5	0	78	68	5	0	0
<i>Youth Worker's Contract</i>	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subsidised employment in the market sector*	543	550	547	519	505	-118	-69	-34	9	-24	740	671	637	646	622
Reduction in wage costs	75	124	119	60	56	-101	-35	-32	-19	-19	137	101	69	50	31
Market CUI	0	0	113	53	51	0	0	55	-11	-17	0	0	55	44	26
Exemptions from social charges (ZRR and ZRU)	13	7	6	6	5	-2	-6	-1	0	-1	12	7	6	6	5
Youth Work Contract	0	0	0	0	0	-77	-54	-3	-1	0	58	4	1	0	0
<i>Employment Initiative Contract (old and new formula)</i>	36	100	0	0	0	-19	33	-74	-6	0	48	80	6	0	0
CI-RMA (old and new formula)	26	17	0	0	0	-4	-8	-9	-1	0	19	10	1	0	0
Sandwich training courses	468	425	428	459	449	-17	-34	-1	28	-5	603	569	568	596	591
Apprenticeship	293	284	284	290	294	2	-4	0	9	5	407	403	403	412	416
Professionalization	175	141	144	169	155	-19	-30	-1	20	-10	196	166	165	184	174

* Excluding general measures such as general reductions in social contributions and reduction of working time

Sources : DARES, Agence de services et de paiement

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Unemployment

In Q4 2012, the unemployment rate settled at 10.2% of the active population in Metropolitan France (10.6% including overseas departments), 0.3 point up on the previous quarter. Since mid-2011, it has increased by 1.1 point in Metropolitan France.

The unemployment rate should keep on rising over the forecasting period. In mid-2013, it should stand at 10.6% in Metropolitan France (11.0% including overseas departments).

In Q4 2012, the unemployment rate stood at 10.2% of the active population

In Q4, the unemployment rate increased for the sixth consecutive quarter (see Graph 1), reaching 10.2% in Metropolitan France (10.6% including overseas departments). In one year the number of unemployed people increased by 266,000. On the one hand total employment has dropped, by 40,000 jobs between December 2011 and December 2012. On the other hand, the active population has increased sharply, by 226,000 people in one year. The effects of retirement reform, and particularly the raising of the legal retirement age from 60 to 60 years and nine months, have contributed to this dynamic expansion of the active population.

Youngsters, the first victims of unemployment

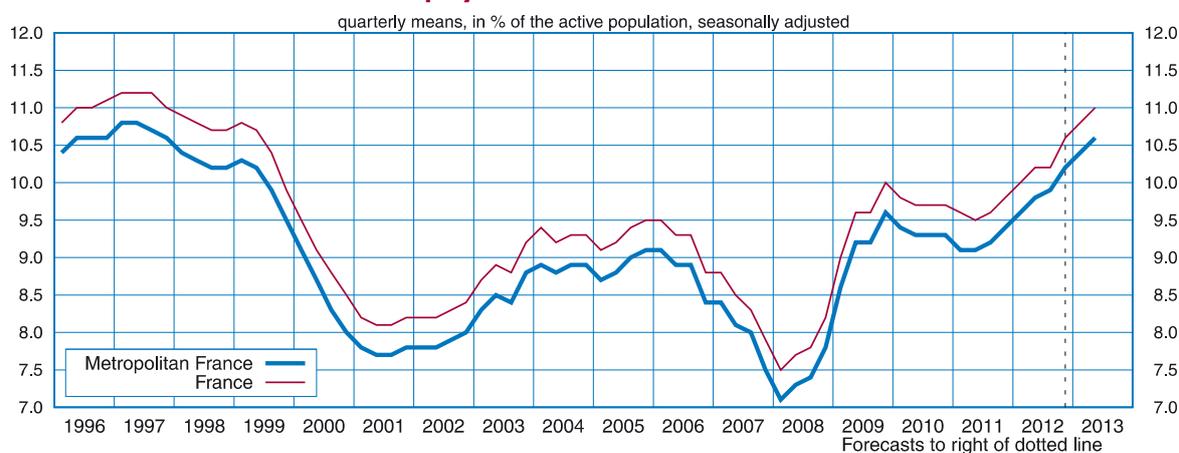
In 2012, the unemployment rate grew across all age categories, but the rise was much higher among people aged under 25: +1.6 point in Q4 2012, and +3.4 points over one year (see Graph 2). The unemployment rate among young men started to increase as early as end 2011; and that of young women since mid-2012. All in all, 25.7% of young active people were unemployed at the end of 2012. Since mid-2011, a further quarter of unemployed people have been under 25, while they only represent 19% of the 15-64 age bracket.

The unemployment rate among people aged 50 or over increased by 0.4 point in Q4 2012, and that of people aged 25 to 49 by 0.1 point. It stands at respectively 7.2 and 9.1% of the active population. Since mid-2011, the rise has been equal in scale for the two age groups, that is, +1.0 point.

Men and women affected equally by the rise in unemployment over one year

At the end of 2012, the unemployment rates of men and women were once again very similar (respectively 10.2% and 10.3%). The unemployment rate among men dropped in 2010 before rising sharply again in 2011 following the fluctuations in

1 - Unemployment rate in the sense of the ILO



temporary work, where men are very much in the majority (see *Employment note*). Conversely, the unemployment rate among women remained globally stable in 2010 and in 2011. However, since the start of 2012 the unemployment rates among men and women have been rising in similar fashion.

Unemployment likely to carry on rising through to mid-2013...

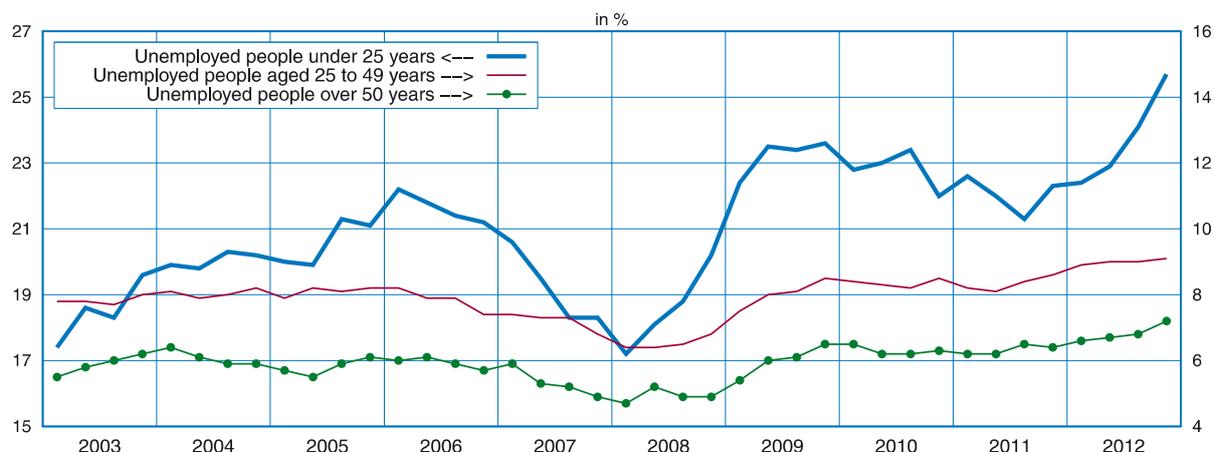
Over the forecasting period, the unemployment rate should keep rising. It should reach 10.6% in Q2 2013 (11.0% including overseas departments). Indeed, there are likely to be many job losses: total employment is set to fall by 49,000 between end December 2012 and end June 2013 (see *Table*).

... however, the active population should grow less rapidly over the forecasting period

On the one hand the short-term growth of the active population should be lower: an increase of 59,000 people in H1 2013, after 72,000 in H2 2012. Indeed since 2011 the first wave of the baby

boom generation have now passed the full retirement age (65 years and 4 months), meaning that the general demographics of the active population are less dynamic: those generations entering the 15-64 age group are smaller in number than those leaving this group. In 2013, this trend has accelerated. Moreover, two further effects could potentially impact on the underlying trend. The entry into force, as of November 2012, of the decree of 2nd July 2012 introducing new measures which allow for retirement at age 60 for those who have worked for a certain number of years is expected to slow down the growth of the active population. On the other hand, the decree of 29th December 2011 postponing by one month the age of entitlement to pensions for people born after 1st January 1952 is likely to increase the number of older workers on the labour market, starting from the second half of 2012. The estimated effects of these two measures balance each other out. They have been accounted for as consequences of public policy decisions (see *Table*). Lastly the "flexion" effects, which have become non-significant since 2008, have been revised: they therefore no longer contribute to variations in the active population (see *Focus*). ■

2 - Unemployment rate in the sense of the ILO by age ranges



Scope: Population of households in Metropolitan France, people aged 15 or over

Source: INSEE, Labor Force Survey

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

Quarterly means, in thousands

	2011 Q1	2011 Q2	2011 Q3	2011 Q4	2012 Q1	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2009	2010	2011	2012	2013 H1
	Quarterly changes										Annual changes				
Population of the 15-64 age group	31	17	2	-9	-16	-15	-15	-15	-14	-14	110	150	41	-61	-28
Population of the 15-59 age group	-21	-16	-12	-9	-10	-13	-14	-13	-9	-6	-120	-102	-58	-49	-15
Active population	7	24	50	61	73	72	0	80	24	37	252	-7	142	226	60
<i>including:</i>															
(a) Contribution of the population and the trend participation rate	41	41	41	41	36	36	36	36	30	30	148	159	164	144	59
(b) Estimated bending effects	-9	-2	-1	-5	8	-2	2	1	-6	7	49	-57	-17	9	1
(c) Other short-term fluctuations (residual)	-24	-15	9	25	29	38	-38	43	0	0	55	-109	-5	73	0
Employment	44	49	10	-9	20	13	-29	-44	-30	-18	-279	75	94	-40	-49
<i>Reminder: End-of-period employment (see "Employment" note)</i>	54	44	-23	5	34	-8	-50	-38	-23	-14	-213	76	80	-62	-37
ILO unemployment	-37	-25	39	70	54	59	29	124	54	55	531	-82	48	266	109
	Quarterly means										Means at the last period of the quarter				
ILO unemployment rate (%)															
Metropolitan France	9.1	9.1	9.2	9.4	9.6	9.8	9.9	10.2	10.4	10.6	9.6	9.3	9.4	10.2	10.6
France (including overseas departments)	9.6	9.5	9.6	9.8	10.0	10.2	10.2	10.6	10.8	11.0	10.0	9.7	9.8	10.6	11.0

Forecast

How to read it: Employment and unemployment are not estimated here within strictly equivalent scopes: total population for employment, population of households (excluding collective) for unemployment. As the impact of this difference is very minor (the population outside of households represents less than 1% of the active population), it is neglected here for the unemployment forecasting exercise.

Source: INSEE

The crisis has modified cyclical effects on labour market participation

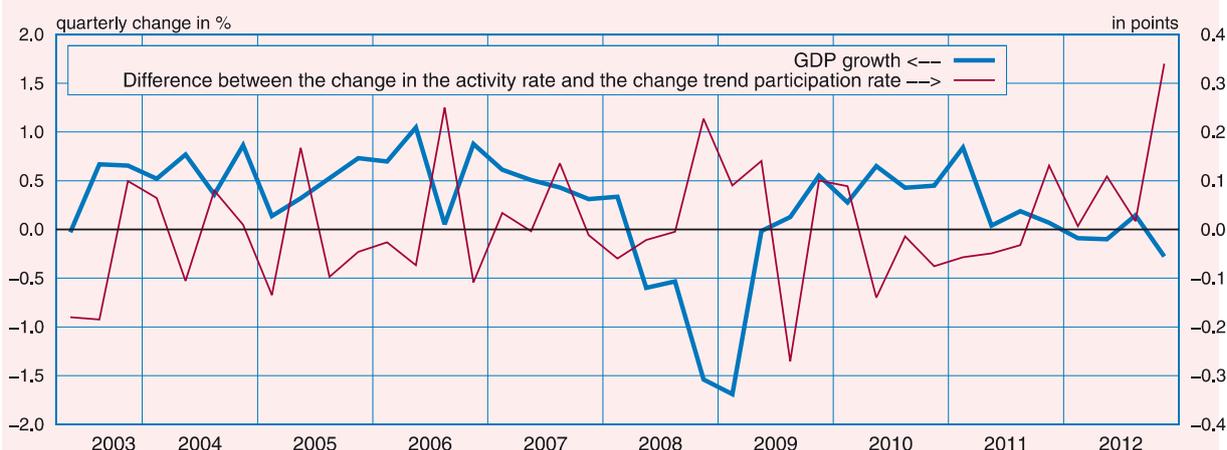
Changes in the active population in Conjoncture in France: the "flexion effects" question

Changes in labour force participation rates depend both on structural factors and on cyclical mechanisms. The quarterly trend in the gap between observed labour force participation rates and trend labour force participation rates (*Filatriau O. Insee Première n°1345, April 2011*) represents the cyclical component of the change in activity behaviour. At the height of the crisis in 2008-2009 and since mid-2011, this cyclical component has shown a considerable rise (see graphs 1a and 1b).

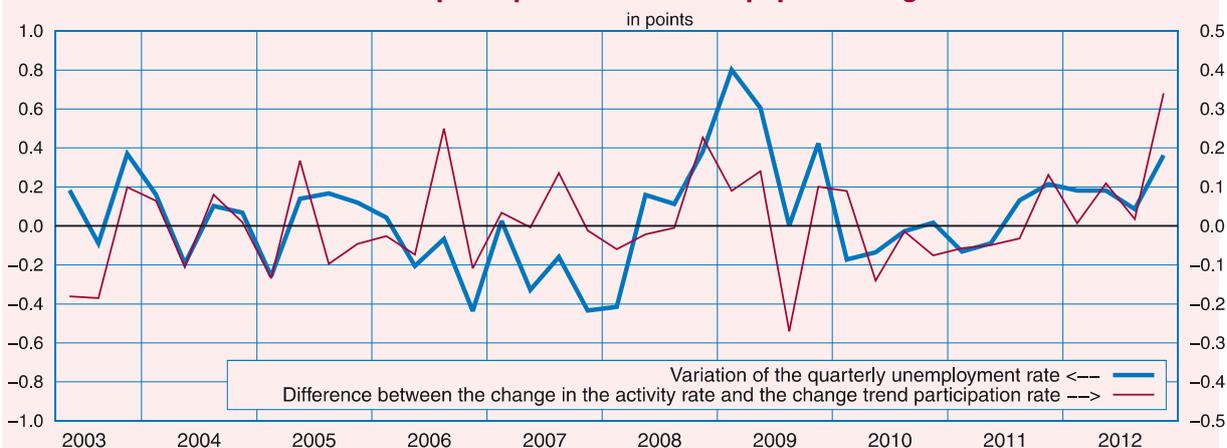
It is important to take account of this cyclical component when analysing unemployment. In *Conjoncture in France*, for example, the forecast of the active population and the employment forecast determine the unemployment figure forecast. The active population forecast is based primarily on the trend projections prepared by INSEE.¹ For the outlook forecasts, short-term effects are then added to these long-term trends. These short-term effects show the effects of public policies that were not taken into account in the baseline scenario, and also "flexion effects". Flexion effects express the idea that the individual's decision to be active or inactive is influenced by the short-term economic situation. It can therefore be imagined that, in a poor economic situation, unemployed people feeling discouraged by their inability to find a job might withdraw from the active population, meaning that they stop actively looking for a job or no longer make themselves available for one. This is called the "discouraged worker effect". But there is also a second effect known as the "added worker" effect that can influence

(1) These projections appear in line (a) of the table, tracing changes in the active population, employment and unemployment in the note on "Unemployment".

1a - GDP Growth and differences between the variation of activity observed and the variation trend participation rate for the population aged 15 or more



1b - Variation of unemployment rate and differences between the variation of activity observed and the variation trend participation rate for the population aged 15 or more



Scope: GDP, whole France, activity rate and unemployment rate, metropolitan France, population of households

Source: Quarterly National Accounts, Labour Force Survey

changes in the active population: when the economic situation is poor, the loss of earnings or a job by one member of a household may lead another member to increase the work they offer². These two effects are opposite to each other.

In recent years, activity among seniors has been influenced more by pension reforms than by the economic situation

For seniors, the labour force participation rate has taken an upturn and been increasing since 2008 (see graph 2). This rise is largely due to the pensions reform of 2003, increasing the required contribution period from 40 to 41 years, by a rise of one quarter a year as of 2009. However, the progression that has been observed is greater than the effect expected in

(2) Symmetrically, in a positive cyclical phase, the "discouraged worker" effect causes individuals to become part of the active population because the probability of finding a job improves, while the "added worker" effect becomes a disincentive to participate as the probability of another member of the household working becomes greater.

(3) A slowdown was expected, given the likelihood that activity among women in this age bracket would reach a ceiling level, but the observed slowdown is much sharper than forecast.

The "discouraged worker" effect seems predominant for intermediate age groups

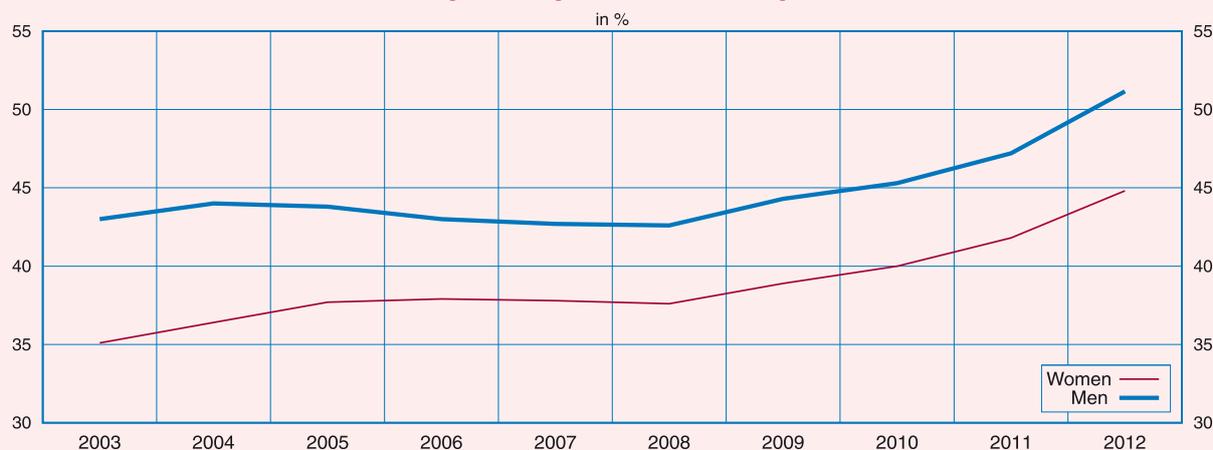
From 2003 to 2012, the intermediate age brackets followed quite regular activity trends without any very sudden shifts, although with a few turning points (see graph 3). The labour force participation rate of men aged 25 to 49 has fallen slightly since 2008, while that among men of ages 50 to 54 dropped significantly in 2011 but seems to be increasing again in 2012. For women aged 25 to 49, the continuous rise recorded for several decades has slowed down noticeably since 2008³ while for those of ages 50 to 54, the labour force participation rate continues to increase, despite a slight drop in 2011.

Activity among young people has been particularly volatile since the beginning of the crisis

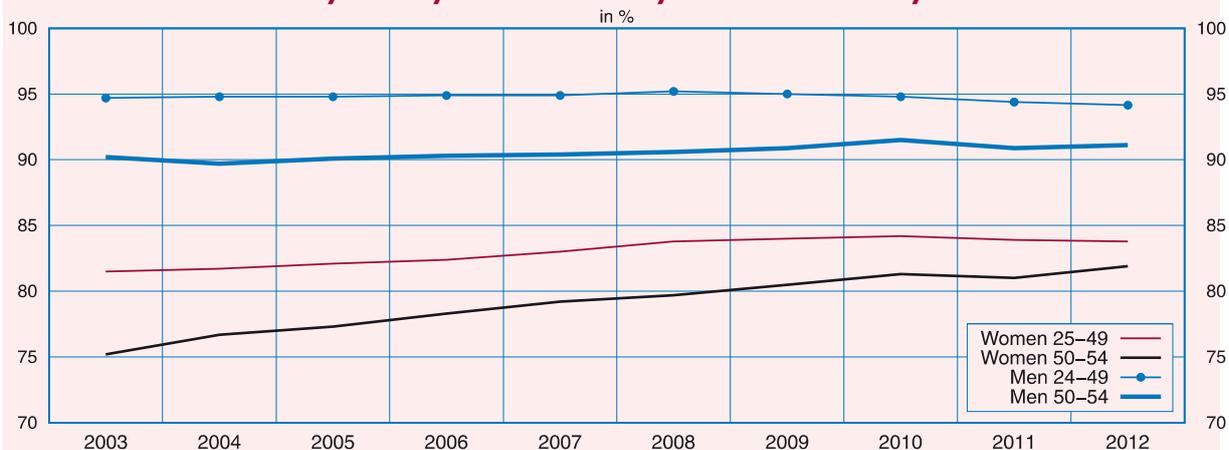
Among young people, labour force participation rates since the beginning of the crisis have been significantly different from those prior to 2008 (see graph 4). After remaining more or less stable since 2003, the activity of young people, in particular women, increased notably between 2008 and 2009, at the height of the crisis. These progressions have

the active population trend projections.

2 - Activity rates by sex of the 50-54 years old



3 - Activity rates by sex of the 25-49 years and the 50-54 years old



Scope: Metropolitan France, Population of households

Source: Quarterly National Accounts, Labour Force Survey

been offset, however, by later falls and the labour force participation rate of the 15-24s has today returned to its pre-crisis level for women, and is even lower for men.

Since 2008, the econometric estimation of flexion effects according to the employment rate has no longer been significant

For *Conjoncture* in France, flexion effects are traditionally estimated with a specification that takes account of the link between the change in the gap between observed labour force participation rate and trend labour force participation rate on the one hand, and the change in the employment rate on the other⁴. This relation is written:

$$\Delta TA - \Delta TA^* = \alpha + \beta \Delta TE + \varepsilon$$

where TA is the labour force participation rate, TA* the trend labour force participation rate and TE the employment rate.

A positive coefficient is interpreted as a predominance of the discouraged worker effect and a negative coefficient as a predominance of the added worker effect.

Prior to 2008, a discouraged worker effect can be estimated clearly. By estimating the specifications for the whole of the 15-64 years bracket between 2003 and 2007⁵ a coefficient is obtained that is equal to 0.43 and significant to 5%. The coefficient estimation is non-significant, however, when the crisis period is included, indicating that flexion effects have been modified since 2008. The Chow predictive failure test also rejects the stability of the relation after 2008 (to a 10% threshold).

The following part proposes alternative specifications.

(4) See the Dossier in *Conjoncture* in France, March 2008: "Employment, Unemployment and Activity: from observation to forecast"

(5) The period considered starts in 2003 as labour force participation rates at quarterly intervals have only been available since that date.

Disaggregated approaches or those with other explanatory variables are not conclusive

The first possibility consists in making finer estimations of the age and gender classes, while the second consists in examining a formulation of flexion effects not according to the employment rate, but to the unemployment rate.

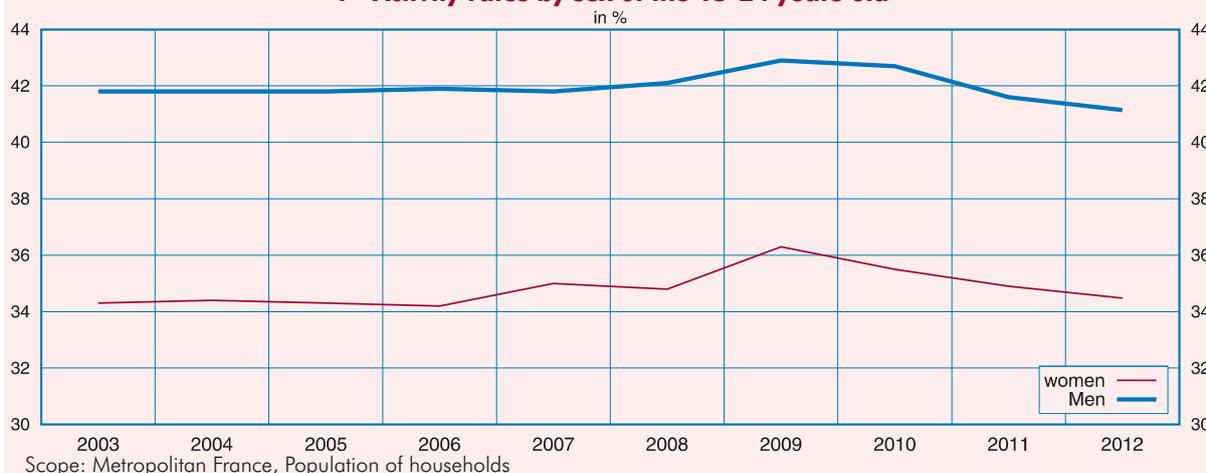
A distinction was made in this way between different age and gender groups: 15-24 years, 25-49 years, 50-54 years and 55-64 years. The quarterly data from the Labour Force Survey was used. For each group, indexed by *i*, the specifications were estimated over the period from Q2 2003 to Q2 2012:

$$\Delta TA_{ij} - \Delta TA^*_{ij} = \alpha_i + \beta \Delta TE_i + \varepsilon_{ij}$$

$$\Delta TA_{ij} - \Delta TA^*_{ij} = \gamma_i + \lambda \Delta u_i + v_{ij}$$

where *u* is the unemployment rate. We preferred to use ΔTE_i (Δu_i respectively) as explanatory variable, rather than ΔTE_{it} (Δu_{it} respectively), as due to the size of the Labour Force Survey, employment, unemployment and labour force participation rates are measured with a non-negligible sampling error. This being the case, an error on the employment or unemployment rate within a group will have an automatic effect with the same sign on the labour force participation rate of the said group, thereby wrongly inducing a positive correlation. Another reason is that it is far from easy to determine the relevant variable to take account of the added worker effect in each group. For example, for women of ages 50 to 54, should it be the rate for men of ages 50 to 54 that is taken? By default, we preferred to use global variables, although one drawback of this is that we did perhaps not take as full account of the discouraged worker effect, as people who are likely to give up actively looking for a job, for example, might be more sensitive to the unemployment rate in their age bracket than to the overall unemployment rate.

4 - Activity rates by sex of the 15-24 years old



Source: Quarterly National Accounts, Labour Force survey

Finally, the estimation was also made using the instrumental variables method for the specification with the unemployment rate. The instrument used was the growth rate in GDP by volume⁶

For each group and for 15-64 as a whole, the β_i and λ_i coefficients that were obtained are presented below (see table).

On the whole, few coefficients were significantly different from zero. The results differ according to the specification that is taken, both within each bracket and on the aggregate level, except for men of ages 55 to 64, for whom the added worker effect appears to prevail⁷ : for the specification with the employment rate, the discouraged worker effect appears to dominate the added worker effect, whereas for specifications with the unemployment rate (with or without an instrument), the dominant effect would appear to be the added worker effect. All in all, it therefore does not seem possible to provide

any robust evidence of a discouraged worker effect and added worker effect since 2003. These effects have probably become negligible. ■

(6) This was not possible for the specification with the employment rate, as the explanatory power of the growth rate in GDP is not sufficient to be used as an instrument for variations in the employment rate. Likewise, household purchasing power could not be used as an instrument for the unemployment rate or employment rate.

(7) The latter point is somewhat surprising, as it is not this group that is the focus of the theoretical models explaining the added worker effect. It is probable that the simultaneous occurrence of the coming into force of pensions reform and the crisis explains this result.

Results of flexion effect estimation by gender and age

	Men				Women				All
	15-24	25-49	50-54	55-64	15-24	25-49	50-54	55-64	15-64
β_i	0.00	0.30	0.22	-0.75*	0.59	0.50**	0.43	0.14	0.25*
λ_i	0.65	0.16	0.21	0.73***	0.55	-0.09	0.08	0.50	0.26***

How to read it : these results correspond to the estimation by the Ordinary Least Squares method (OLS). When GDP is used as instrument, the coefficient for the 15 to 64 years group as a whole is equal to 0.40***.

*** means significant 1% , ** 5%, * 10%

Estimation period: 2003 Q2 - 2012 Q2.