

2007, a transition year

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INSEE Divisions:

- **Short-Term Economic Analysis**
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The year 2007 witnessed a series of major economic shocks. The barrel of Brent crude (North Sea oil) topped \$95 at year-end, up from around \$50 in January. The surge in food-commodity prices was both unexpected and spectacular, driven by the sudden acceleration in emerging-country demand combined with supply shortages due to weather incidents and the crowding-out of food crops to make way for biofuels. The currency market propelled the euro from \$1.31 to over \$1.47. And, in the summer, the real-estate crisis—beyond its direct impact on U.S. growth—sparked an international financial crisis. Despite all these shocks, world growth held firm in 2007, mainly thanks to three factors: U.S. personal consumption did not sag, the emerging economies performed vigorously, and euro-zone growth exceeded its average of recent years.

French growth proved rather resilient as well. The growth gap with our European Union partners, which had widened in 2006, nearly disappeared during the year, although the differential did persist on an annual-average basis in 2007. France and Germany, for example, posted identical quarterly growth rates. The French economy benefited from vibrant domestic demand. The labor-market improvement resulted in the creation of over 350,000 jobs in 2007. By contrast, France's competitiveness deficit still weighed on its external trade. In particular, the manufacturing trade deficit with our euro-zone partners soared. The sharp increase in oil and unprocessed-food prices began stoking inflationary pressures in mid-2007.

Just as for the world economy, 2007 may prove a transition year for France. While French economic growth was consistent with its 2006 profile, the shocks that began to affect it in 2007 should have a stronger impact in 2008.

U.S. real-estate crisis and international financial crisis

In the U.S., the real-estate crisis has deepened...

Despite a mild rebound in housing starts early in the year, the U.S. real-estate crisis begun in late 2005 worsened in 2007. In annual-average terms, residential investment shed nearly 17%, after a 4.6% loss in 2006. Above all, the swift and massive slippage in the real-estate market sparked fears of a hard landing for the U.S. economy¹ through contagion to other domestic-demand components.²

...and sparked a financial crisis

The increasing problems in the subprime segment of the U.S. mortgage-loan market triggered a financial crisis in mid-August. Because of the growing complexity of financial instruments and the diffusion of risk to so many participants, the rise in defaults in this narrow segment of the credit market eventually caused a nearly universal loss of confidence across all financial markets. Money-market liquidity plunged, driving up money-market rates, while a widespread flight to quality dragged down yields on government securities.

To cope with this crisis, central banks began by injecting liquidity, then loosened their monetary policies. The U.S. Federal Reserve (Fed) cut its key lending rate three times, bringing it down to 4.25% by year-end.³ The European Central Bank (ECB), meanwhile, decided against a rate hike.

Central banks have eased tensions on money markets

Nevertheless, financial turbulence persisted throughout H2 2007 and even increased in late November. The spreads between three-month money-market rates and central-bank key rates remained high in the U.S. and the euro zone. The U.S., British, Canadian, euro-zone, and Swiss central banks staged coordinated interventions on December 12. The Fed set up a "Term Auction Facility" that provided liquidity to all deposit institutions meeting criteria for borrowing at the discount rate. The move was decisive in easing tensions on money markets.

World inflation

Oil prices soared in 2007...

After a mild lull in January 2007, the Brent oil price soared in from around \$55 per barrel at the start of the year to nearly \$100 in December. After an initial surge in September, oil prices continued to climb in October-November. This increase was due to supply/demand tensions, as demand is growing briskly—in particular in the Middle East and China—and OPEC is not drawing on its spare capacity. The upswing was intensified by greater geopolitical tension and capricious weather, which disrupted oil extraction and transportation.

... as did food-commodity prices

Food-commodity prices, which had been rising since mid-2006, literally took off in early 2007 both for contingent reasons (weather incidents) and for structural reasons (brisk demand growth and biofuel production, which is reducing food-crop acreage).⁴ This phenomenon, coupled with rising oil prices, has driven up inflation in the developed countries and even more so in the emerging countries, despite the global economic slowdown.

1. See "Real-estate crisis and economic recession in the U.S.: is there a link?," *Conjoncture in France*, March 2007, box pp. 32-33.

2. See "Asset wealth and consumption: weakly correlated in France, strongly in the United States," *Conjoncture in France*, December 2007, pp. 11-25.

3. In January 2008, the further deterioration in the U.S. outlook led the Federal Reserve to cut the Fed Funds rate by another 125 basis points in eight days.

4. See "L'envolée des prix des produits alimentaires nourrit l'inflation," *Note de conjoncture* (French ed. of *Conjoncture in France*), December 2007, box pp. 94-95.

Emerging economies resilient

Emerging economies are holding fast

The Chinese economy stayed on a vigorous expansionary path in 2007, with GDP growth again topping 10%. Investment and exports continued to provide the main impetus, the trade surplus rising 47% to over \$260 billion. Economic activity remained extremely buoyant in India and Russia—where average annual growth reached about 8%—as well as Brazil, which posted 6% average annual growth. In other words, the global slowdown is attributable to the advanced economies more than to the emerging countries.

Gradual slowdown in the euro zone

In the euro zone, growth remains firm, but its content still diverges widely between countries

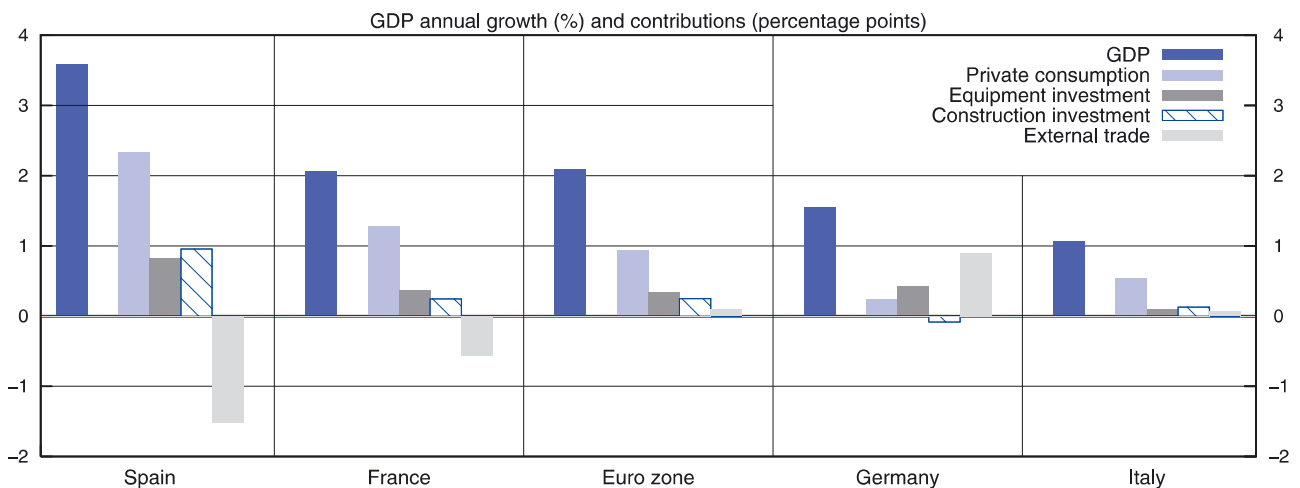
After a sharp acceleration from 1.6% to 2.8% in 2006, euro-zone growth remained practically steady in 2007, gaining an average 2.6%. But this near-stability masks a gradual slowdown during the year. The divergences in growth components between the area’s leading countries⁵ barely narrowed. Since the start of the cyclical upswing in late 2003, export performance has been highly uneven, ranging from very robust in Germany to far more moderate elsewhere. Domestic-demand growth varied widely as well: consumption was sluggish in Germany but vibrant in Spain and France, while construction investment grew briskly in Spain but was anemic in Germany (Chart 1). These gaps persisted in 2007, despite some progress including an improvement in the external-trade contribution in Spain and a mild rebound of construction in Germany (Chart 2).

Euro zone hit by three negative shocks

Three negative shocks have hit the euro zone: (1) the impact of Germany’s VAT hike on inflation and household consumption has been stronger and more long-lasting than expected, (2) business owners’ worries about demand prospects curtailed investment during the year, and (3) the slowdown in the U.S. economy and world demand for euro-zone goods and services dampened exports.

5. For a more structural analysis of the differences in growth dynamics in the euro zone and their medium-term profile, see “Should we worry about current-account imbalances in a monetary union?,” *Trésor-Economics*, no. 20, October 2007, published by the Treasury and Economic Policy General Directorate (Direction Générale du Trésor et de la Politique Économique: DGTPE), French Ministry of the Economy, Finance, and Employment.

1 - Contributions to GDP growth, 2004-2006 average



Sources: Eurostat; INSEE estimates

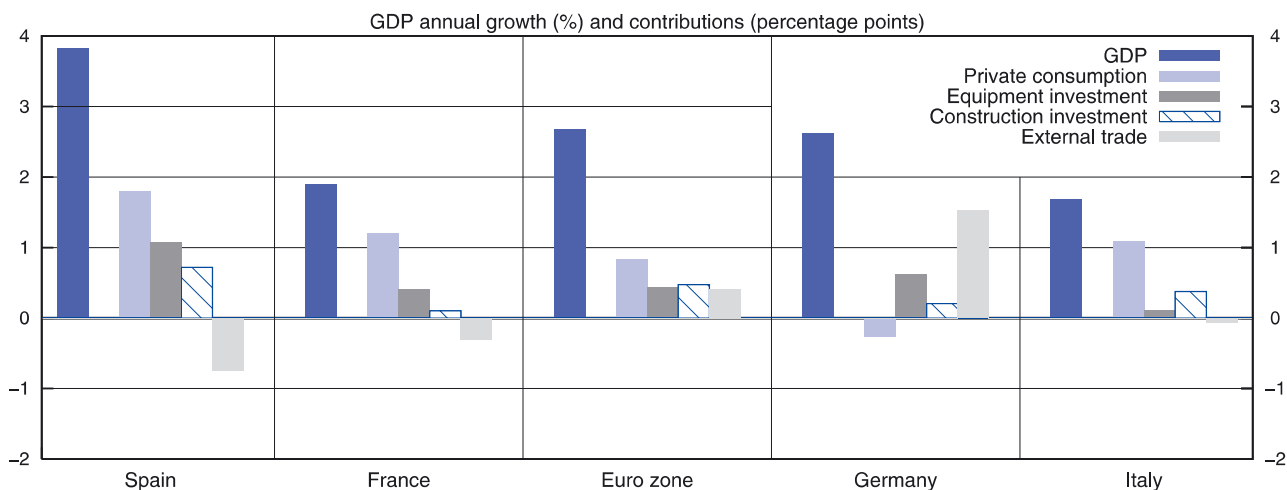
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The impact of the German VAT increase was heavier than expected

On January 1, 2007, Germany raised its standard value added tax (VAT) rate from 16% to 19%.⁶ As expected, German households boosted their expenditures at end-2006 in anticipation of the rise, causing their consumption to fall in Q1 2007. But the contraction was sharper than forecast. The near-stagnation of German consumers' purchasing power since the early 2000s may have constrained their ability to cushion the VAT shock. Moreover, their saving ratio continued to rise at year-end 2007, matching its level at the start of the cycle in 2004. Yet the traditional determinants of household saving—the public-finance position and job-market conditions—have been steadily improving for several quarters and should have incited households to dissave. In average annual terms, German household consumption therefore continued to lag the rest of the euro zone.

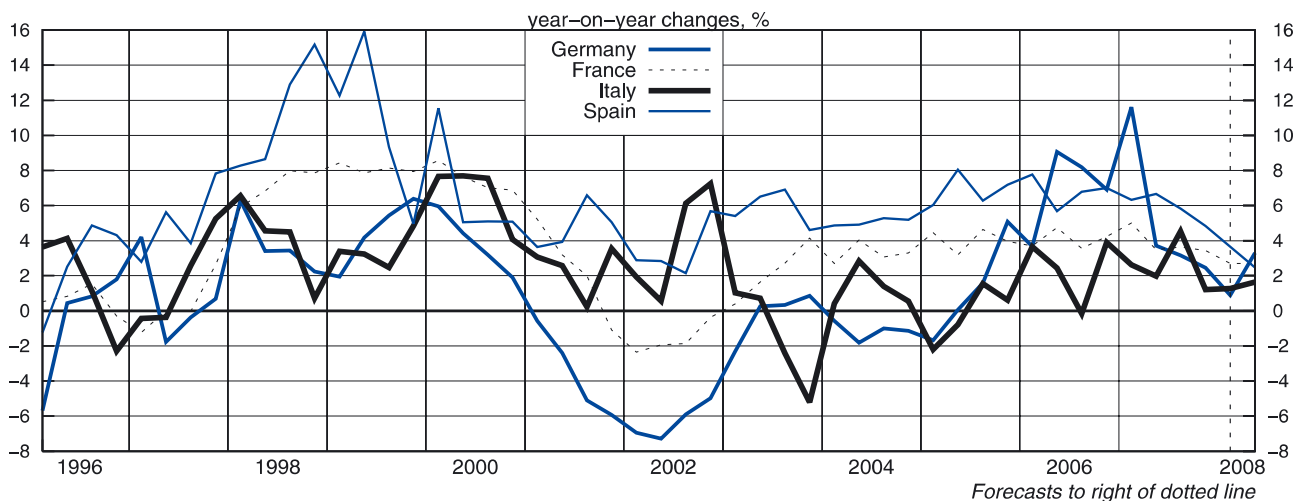
6. See "Effects of VAT increase on German household consumption" and "Impact of Germany's VAT increase on prices of selected key items," *Conjoncture in France*, March 2007, boxes pp. 38-39 and 43.

2 - Contributions to GDP growth, 2007



Sources: Eurostat; INSEE estimates

3 - Investment in main euro-zone countries



Sources: Eurostat; INSEE estimates

Investment slowed during the year

In 2007, euro-zone productive investment topped the peak of the growth cycle begun in 2003 (Chart 3). After several years of brisk growth, less investment was needed to match capacity to demand.⁷ At the same time, the real-estate market showed signs of weakness in several countries where high price levels were starting to inhibit demand.⁸ The turbulence sparked by the difficulties in the high-risk sector of the U.S. mortgage-loan market also led to tighter access to credit, discouraging investment. But this downswing, which began in Q2, had only a moderate effect on euro-zone growth, owing to Germany's brief acceleration in H2 2007 (see "Euro zone" chapter). Meanwhile, the countries where the productive-investment recovery had been relatively slacker—in particular, Italy—were the first to show signs of weakness.

Global demand slowed, but exports held firm, especially in Germany

Euro-zone trade weathered the global-demand slowdown and the euro's appreciation (Chart 4). This resilience owes much to Germany's still-outstanding performance outside the euro zone. As a result, the differences in external-trade contributions to GDP growth among the main euro-zone countries did not narrow significantly. The export slowdown was fairly consistent, but the negative external-demand shock mainly hit the economies that, for structural reasons, had least benefited from world trade growth in recent years—most notably France.

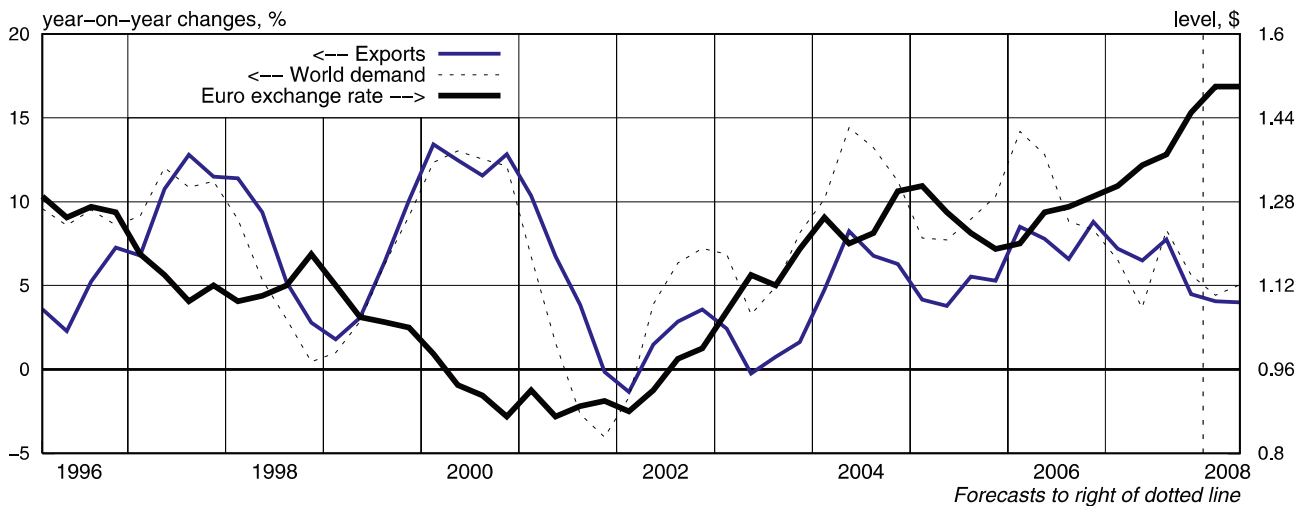
French trade deficit: further slippage

In 2007, the French trade deficit hit a record high

France's trade deficit widened for the fourth consecutive year in 2007, reaching an all-time high of nearly EUR40 billion (Chart 5). Imports of manufactured goods and commodities were robust, particularly owing to higher energy and commodity prices.⁹ In real terms, energy imports remained fairly stable, but imports of manufactured goods—especially consumer goods—rose sharply. On the export side, the downturn in automobile sales also contributed to the

7. See "Equipment investment in France and the euro zone: similarities and differences with respect to the previous cycle," *Conjoncture in France*, December 2006, pp. 9-23.
 8. See "Unbuilding castles in Spain?," *Conjoncture in France*, June 2007, box pp. 36-37. Residential investment has since declined in other euro-zone countries as well: Germany, Finland, Ireland, and Portugal.
 9. See "Une décomposition sectorielle et géographique de la dégradation récente du solde commercial français," *Note de conjoncture* (French ed. of "Conjoncture in France"), December 2007, box pp. 86-87.

4 - Exports, world demand, and exchange rate



Sources: Eurostat; INSEE estimates

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aggravation of the trade deficit in real terms. On a geographic basis, the main cause of the overall deterioration was France's deficit with the rest of the euro zone.

Foreign trade dragged down GDP growth

The rise in the French trade deficit occurred amid a slowdown in global trade in real terms. Growth in world demand for French products slowed sharply from 8.8% in 2006 to 5.5% in 2007. As in 2006, external trade contributed a negative 0.3 points to French GDP growth in 2007.

Services continued to drive French growth

The year-end strikes had a weak impact on growth

The output of French service industries rose nearly 3%, or slightly less than in 2006, providing a further robust contribution to total production growth. Transportation activity was affected by the late-2007 strikes.¹⁰ Labor disputes also had more limited indirect consequences in other economic sectors. However, the estimated impact of the strikes did not exceed 0.1 points of GDP in Q4, of which half concerned the transportation industry.

Construction activity remained robust

The French construction industry remained robust in 2007 despite a mild slowdown in its growth rate from 3.9% to 3.6%. The slowdown in households' building investment, begun in 2005, was offset by a sharp acceleration in civil engineering, traditionally stimulated in the run-up to the municipal elections (March 2008).

Manufacturing production slowed

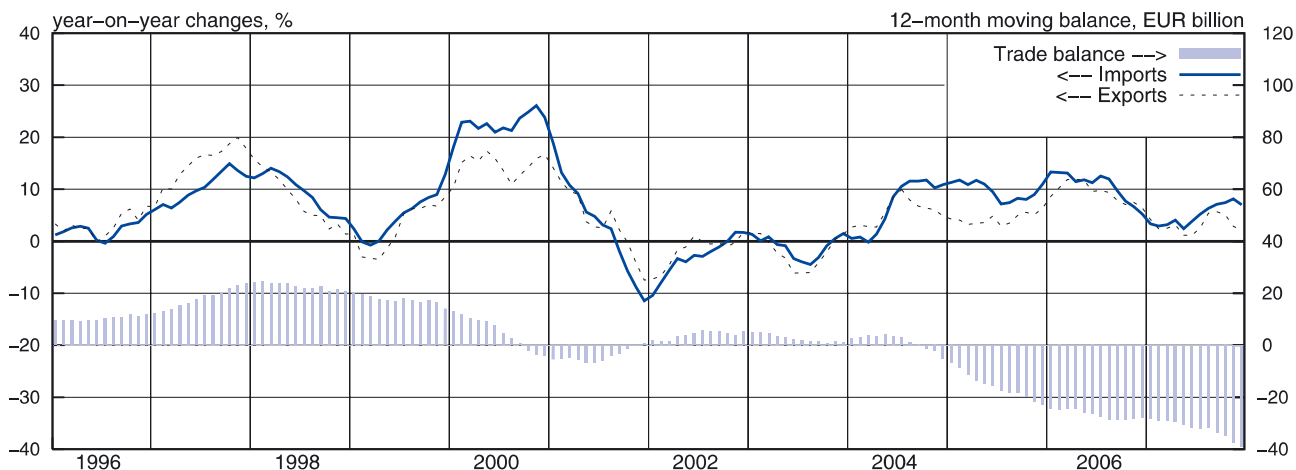
As in the previous year, manufacturing output grew at one-half the pace of the service industries, gaining 1.6% in 2007. However, because of the slower growth in manufacturing output in the main neighboring countries, France caught up with the euro-zone average after lagging in 2005 and 2006 (Chart 6).

Beyond these developments, the unusually mild winter of 2006-2007 caused consumption, production, and energy exports to follow a see-saw pattern, resulting in a limited impact on the average annual performance.¹¹

10. See "Impact des grèves dans les transports sur l'activité du quatrième trimestre de 2007," *Note de conjoncture* (French ed. of "Conjoncture in France"), December 2007, box pp. 16-18.

11. See "Aléas climatiques, aléas économiques: les effets du climat sur l'activité économique," *Note de conjoncture* (French ed. of "Conjoncture in France"), June 2007, pp. 33-42.

5 - Merchandise trade in nominal terms



Sources: Eurostat; INSEE estimates

French households channeled purchasing-power gains into savings instead of consumption

Consumption fundamentals stayed firm

Consumption fundamentals stayed firm, stimulated in particular by very solid gains in purchasing power. Employment growth quickened to a five-year high in 2007, the total economy adding over 350,000 jobs. Private-sector wage gains stayed above 3%, as in 2006. Gross wages and salaries paid to households accordingly rose almost 4% in 2006 and 2007. While earned income is the main driver of household income growth, the strongest boost to gross disposable income growth in 2007 came from tax cuts. Moreover, as consumer prices posted a milder average increase in 2007, purchasing-power growth jumped from 2.4% in 2006 to 3.1% in 2007.

The saving ratio, however, gained almost one point

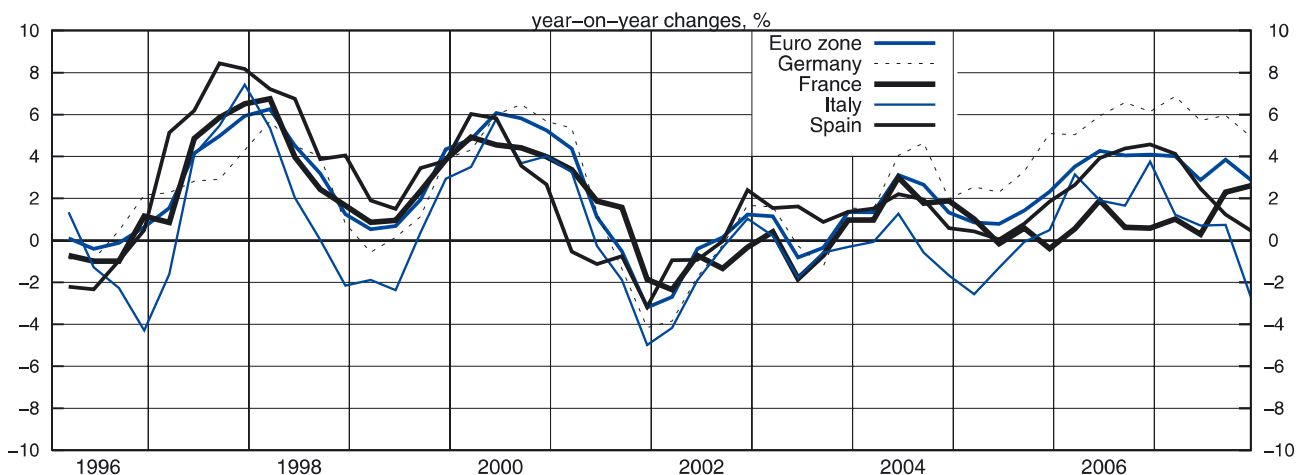
Yet consumption was less buoyant than forecast. Despite the acceleration in real income, consumption grew 2.1%, roughly equivalent to its 2006 gain of 2.3%. As a result, the saving ratio moved up by nearly a point from 15.4% to 16.2%. While the saving ratio is indeed expected to rise when real earnings are accelerating, the size of the increase was one of the surprises of 2007.

A mild slowdown of the French economy

French GDP growth registered a mild dip from 2.2% to 1.9% in 2007, owing to a moderate deceleration of household consumption and, to a lesser extent, of collective consumption by general government and total investment. Business-investment growth actually quickened from 4.5% to 4.9%, but this offset only part of the sharp decline in household-investment growth from 4.5% to 1.6%.

On balance, 2007 should be viewed as a transition year. While world growth was consistent with its 2006 performance, the factors responsible for the slowdown expected in 2008 were already at work—such as the surge in food-commodity prices during the year, and the financial crisis triggered by the subprime mortgage-loan market. ■

6 - Euro-zone industrial production index



Sources: Eurostat; INSEE estimates

Box 1: Post-mortem on French economic forecast in June 2007 “Conjoncture in France”

In June 2007, INSEE forecast 2.1% average annual growth for 2007.¹ The French economy actually grew 1.9%. In the sub-annual profile, the major differences between forecast and actual growth are concentrated in Q2 and Q4 2007. The Q2 growth rate published in the latest version of the quarterly national accounts is 0.4%, as against our 0.6% forecast in the June 2007 “Conjoncture in France.” Similarly, in Q4 2007, INSEE projected 0.5% growth, compared with the 0.3% subsequently measured by the quarterly national accounts. These forecasting errors are reasonably modest considering the volatility of the forecast series.

To understand the differences between forecasts and outcomes, we performed a retrospective analysis of the forecasts in the June 2007 “Conjoncture in France” for the year 2007 using the Mésange macroeconomic model. We analyzed the divergence between the June 2007 forecast and the actual figure published in the preliminary accounts in February 2008. The differences may be due to three distinct factors. First, the quarterly accounts may be revised between the forecast date (June 2007) and the current estimate. Second, our assumptions on the international environment and public policies may diverge from what was actually observed. Third, the behavior of economic agents may vary between the forecast and the outcome.

The final difference of -0.2 points in GDP growth for full-year 2007 breaks down as follows (Chart 1):

- -0.1 points due to the revision of the accounts
- -0.6 points due to the difference between assumptions and outcome regarding the international environment and public policies
- +0.5 points due to forecasting errors on agents’ behavior (Table).

The distinctly negative contribution of erroneous assumptions may be explained, in particular, by the sharp rise in the euro exchange rate, which we had specified as stable in our forecast,

and the global economic slowdown, which caused a sharper-than-expected deceleration in world demand for French imports.

If the international environment in 2007 had been perfectly forecast, the Q2 2007 economic slowdown would have been predicted, as well as a major share of the Q4 slowdown. Conversely, we would have underestimated the Q3 growth rebound (Chart 2).

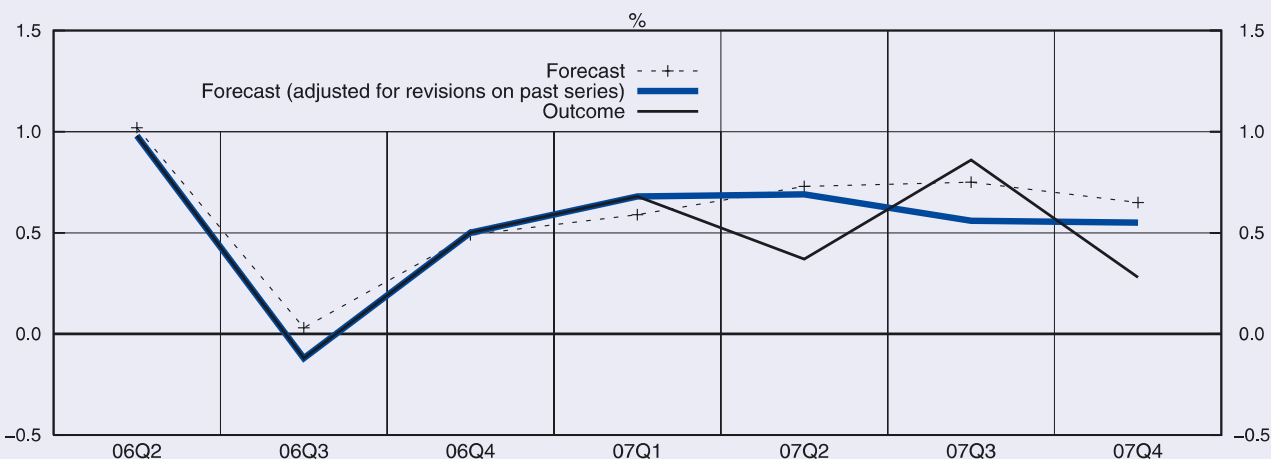
Lastly, the gap between the growth forecast with the known 2007 environment and its outcome is due to the gaps between agents’ behavior as projected in the June 2007 “Conjoncture in France” and as observed today from the complete quarterly national accounts for 2007.² On balance, the observed behaviors have enabled the French economy—with respect to the June forecast—to dampen by 0.5 points the negative impact of the adverse surprises in the international environment.

The most significant factor is external trade. First, the June 2007 forecast underestimated the “spontaneous” shifts in market share, i.e., excluding price-competitiveness effects. Without this underestimation, the June 2007 GDP growth forecast would have been 0.2 points higher. Second, we underestimated the vigor of imports within a given scenario for price-competitiveness and demand. Absent this underestimation, the June 2007 GDP growth forecast would have been 0.2 points higher. By contrast, we mildly overestimated the spontaneous vigor of household consumption. Without this overestimation, the June 2007 GDP growth forecast would have been 0.1 points lower. ■

1. See “Conjoncture in France,” June 2007.

2. Technical note: for each of the major behaviors modeled in Mésange, we compare the residuals implicit in the June 2007 forecast and the residuals reconstructed today from the quarterly national accounts. We then compute the gap between the two sets of residuals and simulate their impact on growth with the aid of the model.

1 - Real GDP growth (forecast and outcome)



Source: INSEE

Table
Breakdown of comparison between growth forecast and outcome

Points of GDP growth, unless otherwise indicated (%)

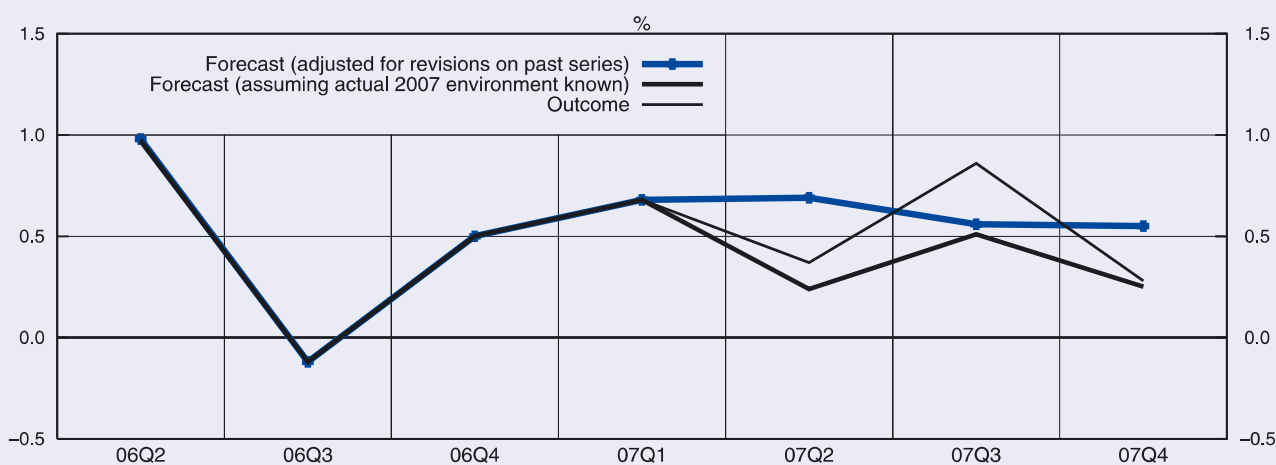
Real GDP growth (i.e., inflation-adjusted)	2007
June 2007 "Conjoncture in France" (%)	+2.1
Revision of national accounts (February 2008)	-0.1
International environment in 2007	-0.6
Of which: Competitiveness	-0.1
Oil	0.0
Global demand	-0.2
Exchange rate	-0.1
Other	-0.2
Agents' behavior	0.5
Of which: Household consumption	-0.1
Change in inventories	-0.2
Investment	0.0
Imports	0.2
Exports	0.2
Wages and salaries	0.3
Other	0.1
Outcome (%)	+1.9

How to read this table:

The June 2007 "Conjoncture in France" forecast 2.1% GDP growth for France in 2007. On the same assumptions but factoring in only the February 2008 revisions to the national accounts, the forecast growth figure should have been 0.1 points lower. If we also adjust for the forecasting errors on the 2007 international environment, the forecast growth figure should have been 0.7 points lower, i.e., 1.4%. The forecasting errors on agents' behavior add 0.5 points to growth. Summing the contributions of these differentials gives us the actual growth figure of 1.9%.

Source: INSEE

2 - Real GDP growth (forecast and outcome)



Source: INSEE

Box 2: Post-mortem on euro-zone forecast in June 2007 “Conjoncture in France”

This box reports our retrospective analysis of the 2007 forecasts published in the June 2007 “Conjoncture in France,” using the MZE euro-zone model.¹ In 2007, euro-zone GDP grew 2.6%, just 0.1 points below INSEE’s June 2007 forecast. However, the quarterly growth profile turned out to be more irregular than we thought (Chart). This unexpected volatility is due to exports: first, exporters did not behave as we had forecast in Q1-Q3; second, the euro-zone’s international-environment variables—mainly global demand and exchange rates—registered sharp unexpected swings from Q2 on.

In late 2006, exports rose far more steeply than standard determinants suggested they would. We thus forecast a sharp slowdown in Q1 2007 to compensate the gap observed in the previous quarter. In fact, the offset did not occur in Q1 2007, but was spread over Q2 and Q3 (Chart).

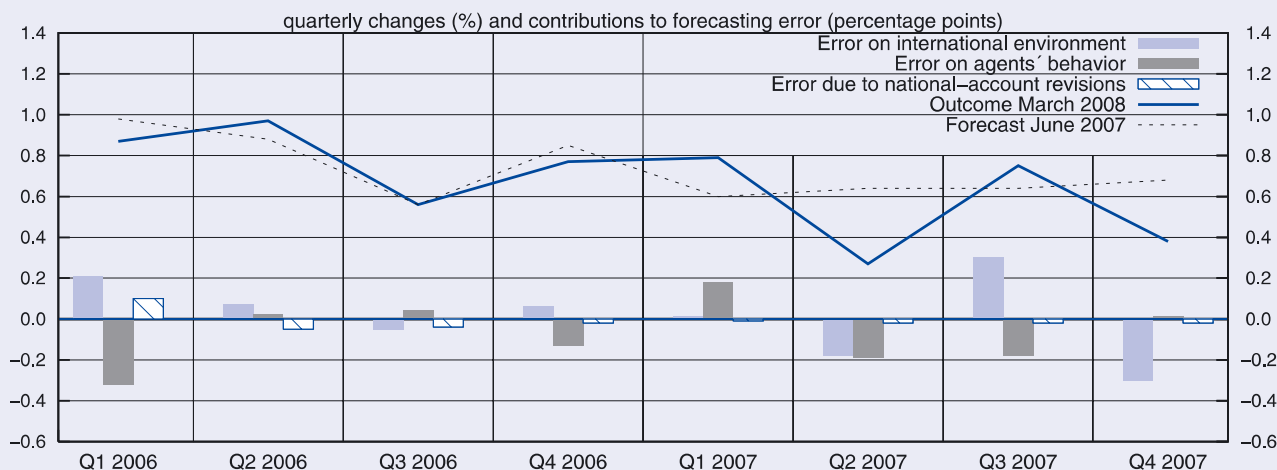
For H2 2007, our forecasts on changes in the euro-zone’s international environment led us to underestimate exports in Q3 and overestimate them in Q2 and Q4. During this period, global

demand proved to be more volatile than forecast. Moreover, the euro exchange rate—which, by convention, we posited as constant in our forecast—gained more than 5% in Q4.

The other demand components were relatively well forecast except in Q4. However, the forecasting errors on agents behavior canceled each other out in that quarter. First, we overestimated household consumption: food inflation, which was stronger than expected, eroded households’ purchasing power and their saving ratio did not follow the path predicted by fundamentals. Second, we overestimated imports, in addition to errors due to overestimation of domestic demand and underestimation of the exchange rate. ■

1. The MZE model (Modèle Zone Euro, i.e., Euro-Zone Model) was developed in cooperation by INSEE and the DGTPE. It is based on Eurostat data and comprises about twenty error-correction econometric equations, now estimated between 1980 and 2006.

Euro-zone gross domestic product (GDP)



How to read these charts:

The MZE model describes changes in the euro-zone economy as a function of two types of variables: (1) the model’s “exogenous” variables (mainly the euro-zone’s international-environment variables—such as foreign demand, the euro’s effective exchange rate, and the oil price—and public-finance variables), which the model takes for granted and does not seek to explain; (2) the “residuals” of “behavior equations” that reflect the differentials between major economic variables (such as consumption, investment, exports, and consumer prices) and their average behavior, as estimated by econometric techniques. By simulating the impact of each exogenous variable and each residual as measured today and as forecast in June 2007, we can estimate each item’s contribution to the forecasting error. For example, in Q2, the gap between actual growth of under 0.3% and the June 2007 “Conjoncture in France” forecast of over 0.6% is attributable to a less-favorable-than-expected change in behaviors (contributing a negative 0.2 points) and a less-favorable-than-expected change in exogenous variables, which reduced growth by 0.2 points.

Sources: Eurostat; INSEE estimates