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# BANQUE DE FRANCE BULLETIN

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# **ARTICLES**

# French companies in 2011: expanding activity but shrinking profits

# **Companies Directorate**

Companies Observatory

Activity picked up in French companies following the 2010 recovery. The surge in activity was driven by growth in export sales that exceeded 10%. In this positive environment, and despite the onset of a slowdown in the second half of the year, companies rebuilt their inventories and resumed investments, which climbed 5%.

This growth was not reflected in profits. Increasing production costs — rising commodity and labour costs — constrained net operating margin ratios, which stood at 23.7% and remained two points below their 2007 pre-recession level. Return on equity languished, dropping from 9.5% of equity in 2010 to 8.7%. Self-financing declined anew and was whittled down further by dividend payouts.

The falloff in profit-earning capacity was combined with a rise in not only short-term (working capital requirements) but also medium and long-term capital requirements (renewed investment), which led to a 4.7% increase in debt.

Though it remained satisfactory overall, capital structure lost some ground. The ratio of equity to total resources decreased, driving up the debt ratio, while net cash positions shrank. After a phase of steady improvement, balance sheets began to deteriorate in 2011: with declining self-financing capacity and escalating debt, payment periods lengthened slightly.

Overall, SMEs posted better profits than the other categories of companies. Unlike large enterprises, which saw their profits drop quite sharply, SMEs posted a slight increase in margins and stabilised their debt. However, the persistently large and widening disparities as well as the business environment, which had been less positive since the summer, are likely to depress SMEs' accounts in 2012.

Keywords: activity, profitability, debt, investment, groups, SMEs, MTEs

JEL codes: E22, G30, G33, L23, L25

# I | Activity expanded while operating conditions deteriorated

Overall surge in business activity

Following the slump of 2009, then the recovery in 2010, French companies' business activity gained momentum in 2011. Their nominal turnover increased by 7.2%, up from the 5.3% growth posted the previous year. Total production, which includes trade in goods ("enlarged production") surged by an even more rapid 7.4%, boosted by strong growth in inventoried production, especially in the manufacturing and construction industries. Inventory rebuilding was a real factor in growth in 2011, especially at the start of the year.<sup>2</sup>

Table I Trends in business activity

(as a %)													
	Sale	es reve	nue	o/v	o/w exports			Value added			Gross operating profit		
	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010	
SMEs	-5.4	3.5	7.9	-11.9	10.7	13.4	-3.9	3.3	5.8	-16.1	8.3	6.2	
MTEs	-9.6	4.8	8.0	-15.1	10.1	10.3	-5.6	4.5	4.5	-16.9	8.3	2.3	
LEs	-9.4	6.9	6.1	-8.0	15.6	10.0	-3.8	6.8	1.5	-13.9	25.3	-4.5	
Total	-8.4	5.3	7.2	-11.3	12.9	10.5	-4.4	5.1	3.6	-15.5	15.2	0.3	
o/w main sectors													
Manufacturing industry	-13.8	8.9	9.2	-11.2	15.5	11.6	-8.5	8.2	3.1	-32.9	46.3	0.2	
Energy, water and waste management	-3.6	6.3	1.7	-9.0	3.5	18.8	-0.3	8.1	-1.0	-1.3	15.7	-3.3	
Construction	-4.1	0.0	5.8	-17.7	13.0	-10.9	-2.0	-1.3	4.0	-9.5	-7.1	1.4	
Retail and wholesale trade	-7.4	3.3	7.3	-14.3	10.1	11.6	-3.2	4.0	3.9	-15.0	7.5	2.3	
Transport and warehousing	-5.8	4.5	6.8	-4.8	5.5	6.4	-4.2	2.3	1.2	-18.3	15.0	-7.4	
Information and communication	3.8	3.6	3.6	-14.5	12.3	7.3	4.2	3.2	3.7	5.5	1.8	-1.3	
Services to businesses	-7.2	5.0	6.6	-4.4	8.4	-1.2	-8.5	5.8	7.3	-22.3	7.7	1.7	

Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

Note: Variations are calculated based on a sample of companies whose balance sheets are recorded in FIBEN for two consecutive years (sliding sample). Entries and exits from the sample resulting from mergers, defaults or business start-ups are not taken into account. The size and sector used are those of year n-1, irrespective of the company's situation in year n (size and sector of 2010 are therefore used when comparing 2011 to 2010, and those of 2009 used when comparing 2010 to 2009).

For further details on FIBEN and the definition of company size according to the criteria laid down in the LME, see Annexes 1 and 2.

Source: Banque de France, FIBEN, November 2012.

I Enlarged production encompasses sales as well as production sold, inventoried and capitalised.

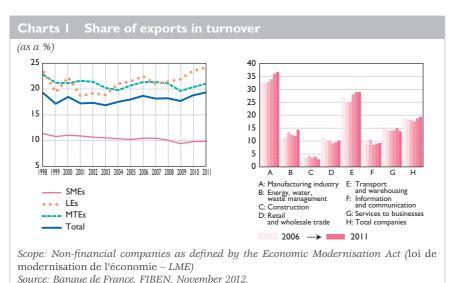
<sup>2</sup> These are nominal changes, subject to a degree of bias arising from the assessment of inventories in company accounts. However, according to Insee, in real terms, inventory growth contributed 1.2 points to GDP growth in Q1 2011, a 1.4 point rise from the previous quarter, and 0.8 of a point to yearly growth.

Growth in sales revenues was relatively uniform among the different company categories: it was 7.9% in SMEs, 8% in mid-tier enterprises (MTEs) and 6.1% in large enterprises (LEs). Though it grew unevenly across sectors, sales revenues increased across the board – and particularly in the manufacturing industry –, which rode the wave of a sharp rebound in 2010 to once again post the strongest growth (see Table 1).

However, this apparent growth was not steady and began to subside in Q3 2011. While companies that closed their balance sheets in Q2 2011 still posted very high growth rates, which were driven, admittedly, by favourable base effects,<sup>3</sup> those that closed their accounts in Q4, mostly in December 2011, posted significantly slower growth.

### Dynamic growth in exports

Following on from the previous year, foreign sales continued to increase in 2011, though the slowdown in global trade<sup>4</sup> caused them to stall somewhat. Exports by French companies increased overall by 10.5%, compared with 12.9% in 2010. Export share in sales revenue increased to 19.3%, a 0.5 point increase from 2010, which was simply a catch-up on the last two years after the drop in volumes in 2008 and 2009 (see Charts 1).



<sup>3</sup> Figures for this period in 2011 were compared to a period in 2010 that was still under the effects of the 2009 recession. The data covering the year from April 2010 to March 2011 were compared to those for the year from April 2009 to March 2010, a period still reeling from the effects of the poor performances of 2009.

<sup>4</sup> OECD figures show that global trade volumes grew by 4.7% in 2011, down from 12.5% growth in 2010.

Exports increased in all the sectors that were the most active on the international market, and especially the manufacturing industry, with an export rate of 36.7%. Worthy of special note is the "transport and aeronautical equipment" sector, in which 53% of sales were foreign sales. In transport, another business area in which exports make a significant contribution, foreign sales increased at the same rate as turnover and the export rate was stable at 29%.

All company categories benefitted from this resumed activity on foreign markets. While SMEs showed the strongest growth with 13.5%, their international sales remained limited – amounting to only 10% of their turnover – compared to MTEs' 21% and large enterprises' 24%. Almost all large companies and three-quarters of MTEs do export business. By themselves, they thus represented over 85% of exports in 2011. Only one-third of SMEs export abroad and even though this proportion increased in 2011 for the first time in over ten years, SMEs still accounted for only 15% of exports.

The rise in exports in 2011 and 2010 must therefore be qualified:

- in absolute terms, the share of exports in sales revenue remained limited (less than 20% of companies' total sales revenue) and did not grow over a long period;
- exports were concentrated in large enterprises and MTEs; the proportion of SMEs that report export sales revenue has dropped continuously since the end of the 1990s, sliding from 40% to less than 30%;<sup>5</sup>
- the rise was accompanied by even sharper nominal growth in imports, which led to further deterioration of the coverage ratio.

## Rising commodity prices hampered growth in value added

Growth in activity did not translate fully into an increase in value added. Value added grew by a mere 3.6%, half of the 7.2% rise in sales revenue and the 7.4% increase in enlarged production (see Table 2).

Production costs, i.e. purchases and consumption of inventories, goods and commodities, as well as external costs, climbed by 8.8%. This rise was mainly due to increased purchases of goods and commodities. While companies curbed their external costs, keeping them, at 4.8%, below total production growth, which was 7.4%, they all had to contend with rising commodity prices, and particularly energy costs, which impacted the prices

<sup>5</sup> These are SMEs whose balance sheets are recorded in FIBEN; taking very small enterprises (TPE) into account gives an even smaller proportion of less than 13%. See "Les PME en France en 2011 : malgré une activité bien orientée, la rentabilité stagne et les structures financières demeurent hétérogènes", Banque de France Bulletin, No. 189.

Table 2	Chane	σe in i	nrodu	ction	costs
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(as	$\alpha$	%	J

		Production and sale of goods	Total production costs	Purchases of goods	Purchases of commodities	Other purchases and external costs <sup>a)</sup>	Value added	Staff costs
SMEs	2008/2009	-5.8	-6.5	-5.8	-11.7	-4.6	-3.9	-0.3
	2009/2010	3.5	3.6	3.1	4.2	4.3	3.3	3.0
	2010/2011	8.1	9.0	8.6	13.0	7.5	5.8	5.6
MTEs	2008/2009	-9.9	-11.2	-9.9	-18.1	-7.7	-5.6	-1.4
	2009/2010	5.1	5.3	4.8	8.8	3.4	4.5	3.7
	2010/2011	8.2	9.5	10.6	13.0	4.7	4.5	5.5
LEs	2008/2009	-9.5	-11.4	-12.8	- 19.6	-3.8	-3.8	-1.1
	2009/2010	7.0	7.1	6.3	14.9	2.8	6.8	2.8
	2010/2011	6.4	8.1	8.5	14.1	3.5	1.5	5.0
Total	2008/2009	-8.6	-10.1	-9.6	-17.6	-5.2	-4.4	-0.9
	2009/2010	5.4	5.6	4.7	10.8	3.3	5. I	3.1
	2010/2011	7.4	8.8	9.3	13.5	4.8	3.6	5.4
o/w Manufacturing	2008/2009	-14.4	-16.1	-15.5	- 20.6	-9.3	-8.5	-2.1
industry	2009/2010	9.6	10.0	11.9	13.8	3.5	8.2	2.5
	2010/2011	9.5	11.6	14.5	14.6	5.1	3.1	5.1

Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

Note: See Table 1

a) External staff costs and finance leasing costs were deducted from other purchases and external costs.

Source: Banque de France, FIBEN, November 2012.

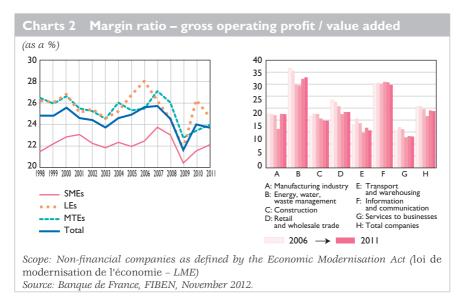
of supplies and inputs purchased. The cost of inputs purchased thus rose by 9.3% and that of commodities by 13.5%. Overall, increases in production costs lopped off almost half of the surplus income generated by the sale of goods and services produced and the sale of unprocessed goods. Value added rates declined in 2011, edging down from 26.6% to 26%.

Performance was uneven across sectors. In industry, value-added growth slowed significantly in 2011: after a sharp 8.2% upswing in 2010, it rose by only 3.1% compared with a 9.5% increase in total industrial production. This disparity was wholly due to growth in the consumption of inputs. After three consecutive years of decline, value added recovered in construction, rising by 4%, without however reaching its 2007 level. It increased by 7.3% in services to businesses, and by 9.2% in accommodation and catering, the only two sectors of the economy that saw their value added grow faster than turnover.

### Deteriorating operating margins

Gross operating profit increased by a nominal 0.4% only, thus bringing margin rates (gross operating profit/value added) down to less than 24%. They thus remained very much below their pre-recession level of

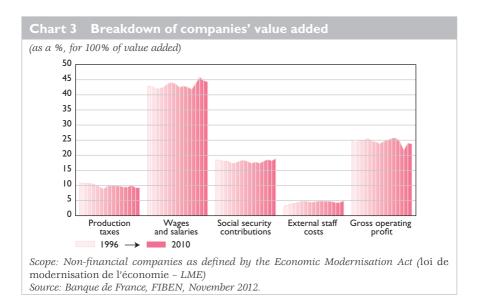
<sup>6</sup> A distinction is made between purchases and sales of unprocessed goods, which are purchased and sold without transformation by companies -essentially a trade activity- and purchases and sales of goods and services transformed in companies' production process.



25.7% in 2007. Insee records showed that, with the exception of 2009, they were at their lowest in 15 years. Margin ratios receded in large enterprises in 2011, after a sharp turnaround in 2010, and improved slightly in SMEs and MTEs. They were below 2007 levels for all categories of companies (see Charts 2) and for private as well as public companies (see Box 1 p. 8).

Another indicator of profitability, the gross operating profit margin (GOPM, gross operating profit/ turnover) shrank by 0.2 point in 2011 to 6.2%. This was a point below the 2007 pre-economic crisis level. In the manufacturing industry, it stood at 5.3% only, compared with over 6% in 2006 and almost 11% in 1996. The lowest level observed for this indicator was in the automobile industry where, at 0.4%, it barely peaked above zero. For all sectors, and with the exception of 2009, it was one of the lowest levels in 15 years. At the end of the 1990s, it exceeded 7%.

The cause of this decline in margin rates in 2011 was mainly rising staff costs, which grew by 5.4%, after 3.6% in 2010. As the main component of value added, their increase in 2011 absorbed almost all gains in value added, under the twofold effect of a 16.2% increase in external staff costs, due chiefly to temporary employment, and an 8.3% rise in social contributions. Wages and salaries increased by a more moderate 3.1%.



After dropping sharply in 2010 due to the repeal of the business licence tax, taxes on production also rose again in 2011, mainly as a result of the increase in employers' social contribution. Their impact nevertheless remained limited because their 3.3% increase did not exceed the 3.6% rise posted by value added (see Chart 3).

Companies' accounts reveal various factors that fuel labour costs, which mounted and weighed on companies' margin rates in 2011:

- a 2.9% increase in permanent staff after a slowdown in 2010;
- increased use of temporary employment, leading to a 16.2% rise in external staff costs;
- rising average gross wages and salaries; this resulted in the apparent cost of permanent staff (staff costs/permanent staff) rising twice as fast as labour productivity (value added per staff);<sup>7</sup>
- increase in employers' social security contributions, following changes that occurred in 2011 such as the annualisation of general tax cuts on low earnings and the rise in social contribution rates on work-related accidents.

<sup>7</sup> EUR 71,250 for apparent labour productivity, which was up 1%, EUR 48,100 for apparent labour cost, which was up 2%. For these two indicators, external staff costs are not deducted from value added and staff costs.

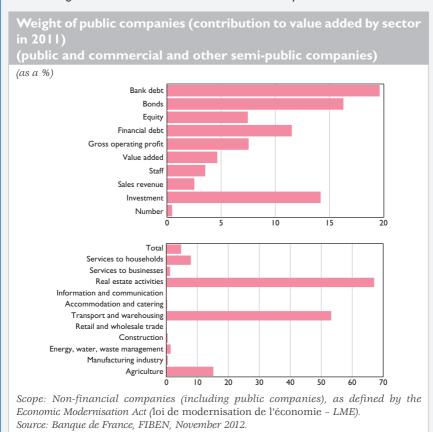
#### Box I

# Taking into account public and other semi-public companies

This study focuses on analysing private non-financial companies. Public companies (state-owned industrial and commercial companies — EPIC — and semi-public companies) were therefore neutralised, which meant excluding a few large public companies such as SNCF, RFF, RATP, etc.

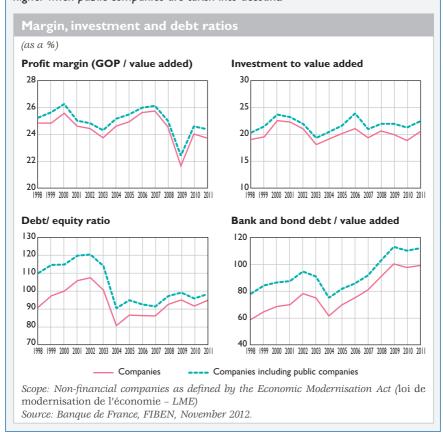
While re-incorporating these public companies into the base of study does not change the overall analysis of the situation of French companies, it provides further insight into certain economic variables.

Taking these public companies into account mainly increases investment and debt amounts. Nominal investment increases by close to 15% and bank debt by 20%. There is less of an impact on business activity, value added and staff (less than 5%). Two business sectors, transport and real estate, are more particularly affected, as their value added increases by over 50%. Agriculture and services to households are also impacted but to a lesser extent.



<sup>1</sup> Companies that underwent a change in status over the period (e.g. EDF, GDF or La Poste, which became public limited companies) were however re-incorporated.

In addition to the economic variables, the inclusion of state-owned companies modifies the levels of a few structural ratios, without necessarily changing their trends. Margin and investment rates improve slightly though their year-on-year growth does not change. The differences are a bit more marked for debt rates, which are always higher when public companies are taken into account.

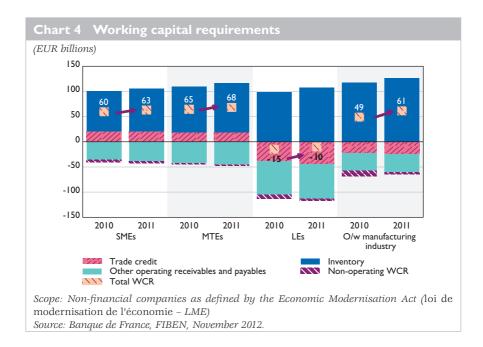


# 2 Rising working capital requirements and investment

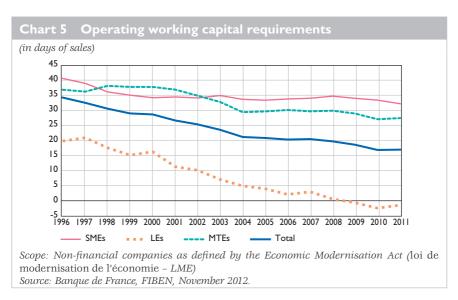
Good business performance in 2011 was accompanied, for the first time since 2007, by an increase in companies' operating capital, in these two areas simultaneously: working capital requirements and fixed operating assets.

## Rebuilding inventories and stability of trade credit

Working capital requirements increased by 10.8%, fuelled mainly by restocking. Operating working capital requirements (OWCR) alone



accounted for slightly over 17 days of sales. They levelled off in 2011 after having dropped regularly from the end of the 1990s – they accounted for 31 days of sales in 1998. This general trend nevertheless masked opposing developments. OWCR continued to decrease in SMEs but remained high at 32.3 days of sales (1 day less than in 2010). They increased slightly in MTEs to 27.5 days. In large enterprises, the negative balance (net resources) was close to 0, due to the increase in inventories (see Charts 4 and 5).



Inventories began to expand in 2010 and grew by 8% in 2011. These were mainly inventories in the manufacturing and R & W trade industries, two sectors that account for 80% of these requirements. The trade credit showed little change in SMEs and MTEs and declined slightly as a ratio to turnover. In large enterprises, it is structurally negative as trade payables are higher than trade receivables, and it increased slightly in 2011. It was therefore a resource or an external source of financing for these companies.

#### Investment recovered

Investment recovered in 2011 with a 5.1% increase, thus bringing to a close two years of sharp decline in 2009 and 2010. This was a general recovery that covered all company sizes and most business sectors. The recovery was nonetheless more marked in large enterprises than in MTEs and SMEs (see Table 3).

Several conditions, in the area of supply as well as demand, combined in 2011 to create this recovery:

- an improved production outlook up to summer 2011;
- regular rise, throughout 2010 and up to the end of the first half of 2011, of the industrial production capacity utilisation rate;
- following two years of sharp decline, need to increase investment spending in order to renew production facilities;
- favourable lending conditions: the average monthly rate of new loans with a maturity of over one year to non-financial companies, which peaked in autumn 2008 plummeted. From 5.6% in September 2008, it fell at the end of December 2010 to 103.4%, i.e. a 216-basis point drop in three years.

(as a %) o/w acquisition **Operating Self-financing** investment through leasing 2009 2010 2011 2009 2010 2011 2009 2010 /2008 /2008 /2010 /2008 /2009 **SMEs** -18.6 -14.0 2.8 -25.2 -10.1 22.8 -18.8 10.5 -3.1 **MTEs** -19.4 -2.8 3.8 6.4 -36.1 -9.6 -23.4 14.9 -8.4 LEs -14.4 -12.9 7.8 -22.3 -0.2 -16.8 24.0 -17.0 n.s. -17.4 -9.9 5.1 -16.8 -18.0 4.0 -19.0 18.8 -12.1 Total o/w Manufacturing -20.8 -0.6 -6.5 -24.3 -3.6 -27.1 51.3 -28.6

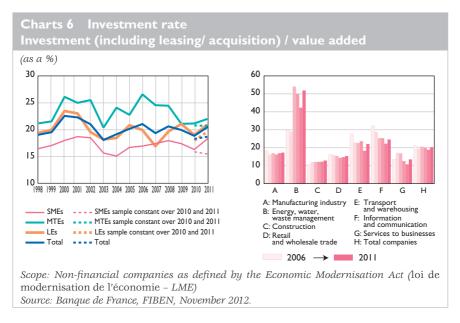
Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – *LME*)

Note: See Table 1

industry

Source: Banque de France, FIBEN, November 2012.

4.1



The investment rate, as a proportion of value added, rallied to 20.6%. SMEs continued to stand out with a rate of 18.3% that was lower than that of MTEs or large enterprises, but was up from 2010.8 Their propensity to invest remained erratic over time and few of them engaged in fixed capital expenditure. Investment rates thus exceeded 12% only for one quarter of SMEs, compared with 19% for MTEs and 22% for large enterprises.9

Capital intensity directly influenced investment rates across sectors. The energy sector stood out with a production facility to employee ratio of EUR 821 thousand, nine times higher than in construction. It was also the sector with the highest investment rate, while, conversely, construction had the lowest (see Charts 6).

# 3 Cash flow capacity languished while the savings rate deteriorated

Listless gross operating profits (see above) combined with other factors to contribute to a slide in indicators of companies' economic and financial profitability.

<sup>8</sup> SMEs' investments in 2011 currently appear to be higher, compared to the preliminary estimates published in September, on the basis of a partial sample of balance sheets filed over H1 2012 (see op. cit.).

<sup>9</sup> On SMEs' investments, see "Les PME en France en 2011 : malgré une activité bien orientée, la rentabilité stagne et les structures financières demeurent hétérogènes", op. cit.

# Declining margins and depreciation and amortisation charges weighed on profitability

Net economic profitability is calculated as the ratio of the net operating profit (NOP) to the net stock of operating capital, which is made up of operating fixed assets and operating working capital requirements. It assesses companies' economic performance in resource utilisation, without taking into account their capital structure. After taking account of charges to depreciation and provisions, which increased year-on-year, NOP declined nominally and net economic profitability of operating capital slipped slightly to 6.3%, largely below its 2007 level, which was close to 9%.

Taking into account non-operating items, mainly financial items, and corporate tax, does not change the analysis. Financial costs increased by 7.8% due to the upswing in debt (see below), but were largely offset by increasing financial income, especially in large enterprises.

Tax costs increased also leading to a slowdown in self-financing capacity.

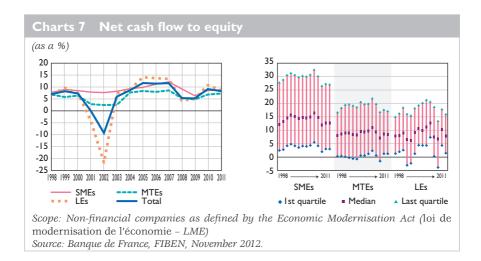
Several large French companies charged significant amounts to provisions. These were mainly for the depreciation of securities held in subsidiaries in France or abroad, particularly southern Europe, and to a lesser extent, treasury shares affected by the fall in stock prices. As a result, net cash flow, which recovered sharply in 2010, rising by 52%, fell once again, by a little less than 2% for the overall population of companies under consideration. It decreased mainly in large enterprises, but remained stable in SMEs and increased in MTEs (see Table 4).

Table 4 ( (as a %)	Table 4 Change in earnings of French companies											
	GOP NOP SFC Net SFC											
	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010
SMEs	-16.1	8.3	6.2	-23.8	16.0	5.7	-13.1	7.2	3.6	-22.7	25.3	1.5
MTEs	-16.9	8.3	2.3	-27.4	17.6	-0.9	-12.5	8.3	3.6	-21.3	38.7	8.5
LEs	-13.9	25.3	-4.5	-20.6	39.4	-10.3	-15.3	21.3	-1.2	16.5	65.3	-5.6
Total	-15.5	15.2	0.3	-23.7	25.6	-3.3	-14.2	15.4	0.7	-1.5	52.5	-1.6
o/w Manufacturing industry	-32.9	46.3	0.2	-45.7	95.7	-4.3	-21.7	29.2	-6.5	0.8	87.2	-11.5

Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

Note: See Table 1

Source: Banque de France, FIBEN, November 2012.



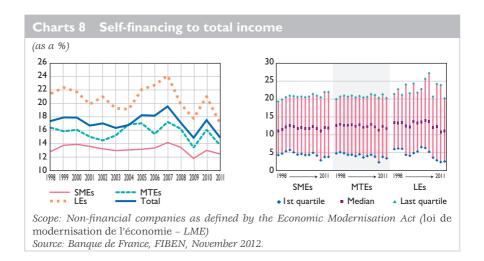
Equity increased moderately, net financial profitability (net cash flow/equity) shed 0.8 of a point to stand at an average of 8.7%. The decline was attributable to large enterprises, where net financial profitability dropped by 2 points to 9.1%, while profitability of SMEs and MTEs increased slightly. In all cases, it stood below its 2007 level (see Charts 7).

Disparities among sectors remained strong, with profitability ranging from negative 1.6% in transport to 15.9% in information-communication. Dispersion was also significant within each company category. One quarter of companies, irrespective of size, posted a net financial profitability of less than 5%. In general, and these overall results notwithstanding, a significant proportion of companies showed negative profits. Their share in numbers increased from 18% in 2007 to 25% in 2009 and remained above 22% in 2011, in SMEs as well as MTEs.

## Rising dividend payouts exacerbated the decrease in savings rates

The savings rate is the percentage that companies can devote to funding their own growth: self-financing (cash flow — dividends paid out) is set against total income generated by the company's business (total income is value added and non-operating income, particularly financial income). It is compared to the weight of other participants in the company's business: staff, lenders, government, partners and shareholders.

Against the backdrop of eroding corporate margins (3.6% rise in value added and stagnation of gross operating profit and cash flow), self-financing dropped by a significant 12.1%, following payouts to shareholders. The savings rate shrank, dropping from 17.5% in 2010 to 15% in 2011 (see Charts 8).



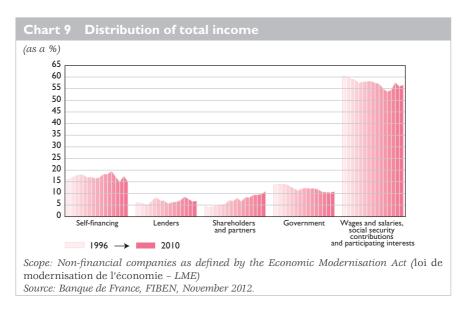
Disparities between company categories and also within larger companies were significant, even though they narrowed in 2011. Overall, over 18% of companies showed negative self-financing in 2011.

The investment self-financing ratio also fell below 75%. This decline is even greater when the rise in working capital requirements is taken into account – the ratio then falls below 70%.

Dividends paid out in 2011 rose significantly as a result of the good performances recorded in 2010 and accounted for close to 11% of total income. This rise was limited in SMEs, but present mostly in MTEs and large enterprises where payouts in 2011 amounted to 10.7% and 13.7% of total income respectively. This reflected groups' international presence, which generated significant financial flows between resident subsidiaries and parent companies located abroad. It should also be put into perspective because funds paid out to shareholders may be re-injected in the form of contributions to current accounts, capital increases or issuance premiums, and thus contribute to the financing of companies.

While corporate taxes increased significantly as a result of various tax measures that reduced access to tax cuts, the contribution of this increase to an overall rise in levies was mitigated by the predominant share of production taxes, which rose more moderately, in this total. The share of government levies thus climbed by 0.5 of a point to reach 10.8% of total income in 2011. Factoring in employer social security contributions, which are recognised as staff costs, would however paint a different picture, pushing the tax rate to 26%.

After peaking in 2008 to 8.6% of total income, the share of financial costs dropped significantly from 2008 to 2010 and edged up in 2011 from 6.5%



to 6.7% due to the renewed rise in debt (see below). It was twice higher in large enterprises than in SMEs.

Over the long term, the distribution of total income among companies' partners exhibits certain strong trends:

- the preponderance of staff costs, including employee profit sharing, amounting to 57% of income in 2011;
- the often changing share of lenders: correlated with changes in interest rates and debt, it swung between 5% and 9%;
- constancy of the government's share over four years at roughly 10%;
- increase in payouts to partners and shareholders: from 4% on average 15 years ago, for all types of companies, the share of dividends in total income rose almost continuously to reach a rate of close to 11%;
- overall, the residual component (self-financing) decreased and stood at one of its lowest levels since 1998 (see Chart 9).

#### Box 2

# Groups at the consolidated level

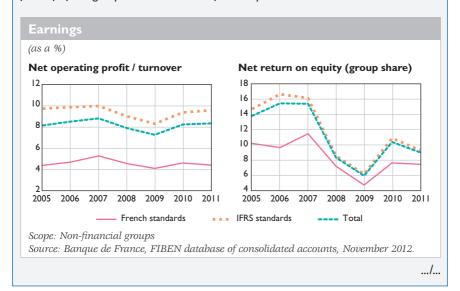
Analysis of the consolidated accounts provides further insight into the financial position of French companies. This data outlines the behaviour of the largest companies; it extends the scope to all business conducted within groups, including that conducted by non-resident subsidiaries when these groups are international (which is the case for the largest groups). Unlike company accounts, which are distorted by double counting when they are aggregated, consolidated accounts neutralise these effects.

The 4,000 groups that filed consolidated balance sheets generated a total of over EUR 2,100 billion in sales revenue in 2011 and EUR 87 billion in consolidated net profits.

# The operating margin remained stable while profitability flagged

In 2011, groups' consolidated turnover rose at a brisk pace of over 7% as it did in 2010 (it dropped by 7.2% in 2009). Close to 55% of groups' sales revenue was from foreign subsidiaries: up to 58% for the large groups, 33% for the mid-tier groups and 20% for the medium-sized groups.

With operating income that climbed at the same pace as turnover, the operating margin rate — or return on sales — (operating income / revenue) remained a little over 8%. It must be noted however that a few large groups pulled the average ratio upwards. Quartile distribution shows that the operating margin ratio was below 4% for half of the groups and below 1.6% for one quarter.

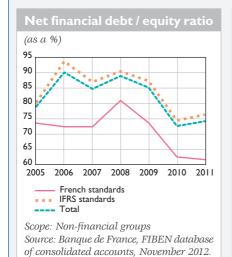


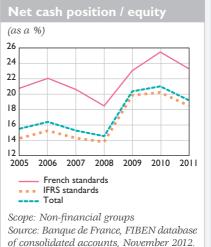
Consolidated net earnings dropped by 12%, weighed down by depreciation charges, particularly for goodwill. This led to a decline in return on equity, mainly for groups complying with IFRS standards. Overall, ROE remained satisfactory at 9%, down from 10.4% in 2010, but significantly below the plus 15% rates recorded in 2007.

In H1 2012, and on the basis of a sub-group limited to 70 of the 100 main listed non-financial groups, business continued to grow, with sales revenue rising by 6%, mainly boosted by business activity outside Europe. Certain sectors, such as automobile and telecommunications, nonetheless saw their situations deteriorate and a decline in margins. Overall, with net earnings of EUR 33 billion over the first six months, i.e. a 15% decline, the net margin ratio stood at 5% (down one point from June 2011).

#### Rise in debt

In terms of capital structure, the rise in working capital requirements and expanding investment, which grew by 12% for acquisitions of tangible and intangible fixed assets only, led to a 5% increase in debt for all groups. Net gearing levelled off at around 74% of equity. This represented a little over 30% of the balance sheet. The cash position, made up of cash and cash equivalents and short-term investments in marketable securities, shrank slightly in 2011, amounting to a little less than 8% of total assets. The cash position to equity ratio also dropped in 2011, sliding to 19.2%.





# 4 Capital structure: limited deterioration but strong disparities

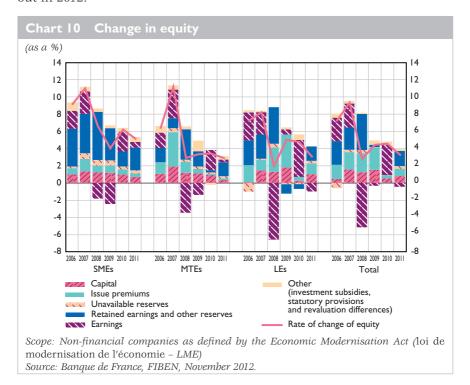
An increase in equity that should be put into perspective

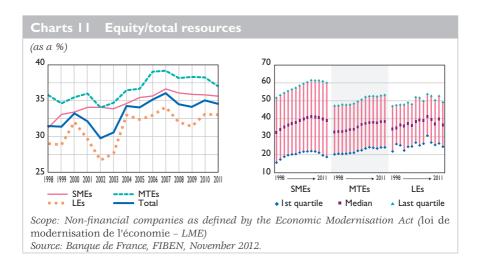
Equity increased by a further 3.5% in 2011, but the rate of increase slowed compared to previous years, 4.8% in 2010 and 4.7% in 2009. The increase was mainly fuelled by a sharp rise in income in 2010 allocated to retained earnings or reserves at the end of 2011, and by capital increases, and accompanying issue premiums in large enterprises, which were more prevalent than in 2010. Equity was however not boosted by the lacklustre earnings of 2011 (see Chart 10).

The slower increase in equity should be confirmed in 2012:

- allocations to reserves were limited by the slowdown of profits in 2011;
- the deteriorating business environment and the significant slowdown in activity in 2012 will lead to declining performance, which will inevitably affect equity.

As such, the level of reserves will depend on the level of dividends paid out in 2012.





As a ratio of total resources, the share of equity inched down in 2011 to 34.6%. The quartile breakdown of this ratio confirms this slight decline and highlights a consistently sharp disparity, particularly in SMEs. The share of equity in resources was above 40% in half of SMEs, but this rate has tended to decrease in the last four years. The lower quartile was situated below 20%. <sup>10</sup>

Situations varied widely and 10% of companies – almost all of these were SMEs – posted negative equity in 2011, i.e. cases in which accumulated losses had absorbed all the equity. Up to 2007, 7% of companies had negative equity but this proportion has risen constantly since then, attesting to the greater fragility of many SMEs (see Charts 11).

#### Debt rose further, especially in large enterprises

Financial debt increased by 4.7% in 2011 after 1.7% in 2010, as financing requirements were fuelled by the increase in working capital requirements and renewed investments, while self-financing shrank.

This increase in debt was more pronounced in large enterprises than in the other company categories. This hardly included bank debt, which gained only 1.2%, 11 but primarily concerned the other components of financial debt, bonds and other debt, including intra-group debt (see Table 5).

<sup>10</sup> Additional data on very small enterprises, which are not available in FIBEN, appeared to indicate even greater divergences, with very low levels of equity.

<sup>11</sup> According to Central Credit Register data, which cover a greater number of companies, outstandings of drawn loans were on the upturn in 2011: they increased year-on-year, boosted mainly by the recovery in large enterprises and holding companies. They nonetheless dipped in Q4 and the rate of growth slowed. In September 2012, outstandings of drawn loans grew by only 0.9% year-on-year.

Table 5	Table 5 Change in debt											
(as a %)	(as a %)											
Financial debt o/w I – Bank loans o/w 2 – Bonds o/w 3 – Other including growth and affiliate.									oups			
	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010	2009 /2008	2010 /2009	2011 /2010
SMEs	0.9	0.9	3.2	-1.8	-0.9	1.6	-4.7	-3.0	15.0	7.2	4.7	5.9
MTEs	1.4	1.4	2.4	-3.8	-5.6	-2.1	0.9	18.7	12.6	6.2	4.3	4.2
LEs	5.6	1.9	6.1	-4.7	-12.7	5.2	22.0	9.1	6.5	2.2	3.2	6.2
Total	3.8	1.7	4.7	-3.6	-6.7	1.2	18.7	10.2	7.4	3.7	3.6	5.6
o/w Manufacturing industry	-1.3	1.4	6.2	-9.1	-11.7	0.5	27.7	8.7	13.3	-2.8	4.8	6.4

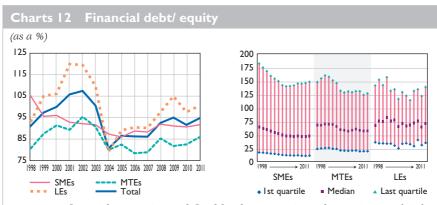
Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

Note: see Table 1

Source: Banque de France, FIBEN, November 2012.

The debt to equity ratio climbed by three points to reach 94.7%. It rose sharply in MTEs and even more in large enterprises (a little over 100% of equity), which by themselves held close to 58% of total financial debt. It levelled off in SMEs to a little over 91%. Net of cash and cash equivalents and short-term investments in marketable securities, the gearing ratio dropped to 73.1% of equity and to only 40.5% for SMEs.

2011 was characterized by the resurgent use of bond debt. Even though the pace of issuance slowed somewhat, bonds were an increasingly popular alternative to bank lending and a significant component of the external resources of large enterprises and, to a lesser extent, MTEs (34% and 11% of financial debt respectively). That said, still only a scant number of companies used the markets as a source of financing.



Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

Source: Banque de France, FIBEN, November 2012.

This type of financing remained very limited for SMEs. Three-quarters of their financial debt were made up of traditional bank loans, which had remained at a steady level over 15 years, but were characterised by a trend towards consolidation of standard short-term bank loans into medium or long-term loans. SMEs' share of short-term financing shrank consistently to fall below 9%, despite a nominal rise in 2011 due to the pick-up in business. It recovered slightly in the other corporate categories for the same reasons.

The proportion of "other debt", made up of specific types of financing (conditional advances, participating loans, contributions from groups and partners, etc.) increased according to company size. It climbed by one point in 2011.

#### Box 3

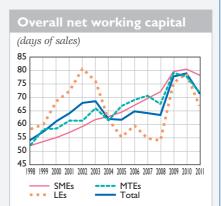
# Taking liquidity into account

Assessing the financial soundness of French companies also calls for analysis of their liquidity, gauged through balance-sheet equilibrium and cash position.

# Overall net working capital declined but remained high

For balance sheets to be healthy, long-term liabilities must cover at least non-current assets as well as permanent working capital requirements.

Analysis of the overall net working capital, assessed based on the ratio of overall net working capital to pre-tax sales revenue, highlights this balance-sheet equilibrium and its regular strengthening over the medium to long term. This reflects companies' ability to match growing business activity with increasing accumulation of stable assets. Though 2011 saw a decline, following 2010's peak, due to the 3.3% drop in overall net working capital, the latter



Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME) Source: Banque de France, FIBEN, November 2012.

still accounted for close to 72 days of sales, compared with 50 days some 15 years ago.

A similar rise in overall net working capital was observed for all company sizes. It is structurally higher in SMEs where the share of fixed assets is usually smaller than in MTEs and large enterprises.

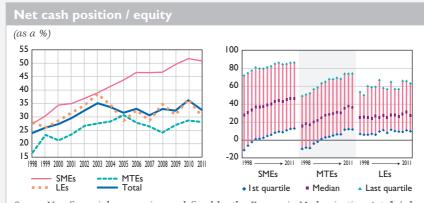
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The surplus was also enough to finance all working capital requirements. Average coverage ratio was 450% in 2011, marked by strong sector differences. With 250%, trade had the lowest coverage ratio while the Services to businesses sector generated working capital that was 30 times higher than its WCR and other sectors, such as transport, accommodation and communication had working capital resources.

#### Net cash assets declined in 2011

In 2011, the slight 3.3% decline in overall net working capital, while companies' total working capital requirements increased by a significant 10.8%, impacted companies' net cash position, which dropped by 6.7%. Companies stabilised their liquid assets, but at the same time increased their short-term financing — standard bank loans, discounted trade bills² and cash advances from their groups — by 15.8%.

The net cash position nevertheless remained comfortable as a ratio of equity, which itself rose slightly. From 2002, the net cash position accounted, on average, for one-third of equity. It was significantly higher in SMEs than in large enterprises: over 50% in SMEs, 28% in MTEs and 31% in large enterprises. SMEs stood out sharply from other categories: for one quarter of SMEs, the net cash position share exceeded 85%, while for another quarter of these companies the share was below 12%. The construction sector, which, traditionally, benefits from large advances and down payments on orders, boasted a net cash position of 56%, almost twice higher than the average. Within industry, agri-food ranked last, with a ratio of 11%.



Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

Source: Banque de France, FIBEN, November 2012.

- I The net cash position is the difference between cash and cash equivalents and short-term lending; claims with a maturity of up to one year and intra-group debts are attached to cash assets and cash liabilities respectively. The aim of this classification is to enable a better analysis of the cash position, particularly by taking trends resulting from the centralised management of cash at group level into account in these aggregates.
- 2 Factoring outstandings are not taken into account because they are not available in the form of a uniform series over the period and can therefore not be captured correctly in the company accounts.

.../...

With regard to cash assets, liquid assets (excluding short-term claims on the group and partners), make up 8% of balance sheet assets (16.8% in SMEs), an average that was relatively stable over the long term. Conversely, net cash assets as a ratio of days of sales improved significantly over ten years, climbing from 30 days in 2000 to almost 40 days in 2011. Companies thus demonstrated their ability to convert an increasing flow of their business into liquidity, with a peak in 2009 and 2010 (41 days), testifying to their responsiveness in periods of crisis.

With regard to cash liabilities, the increase in current operating requirements led to a 15.8% increase in standard bank loans. This type of financing was however curbed, limited to 1.4% of total company resources (from 0.9% of assets in large enterprises to 2.8% in SMEs), for an equivalent of 7 days of sales, i.e. half of what it was 15 years ago.

The ratio of short-term debt to medium or long-term debt, which is used to assess companies' financial autonomy vis-à-vis external lenders, also trended favourably over the 1996 to 2011 period. The share of short-term debt was halved. It dropped from 30% to 13% with an upswing in 2011, a year that was marked by a 1.2-point rise. All these trends appeared fairly uniform irrespective of company size. Differences between sectors were more pronounced. The share of short-term debt was highest, in nominal terms, in the transport equipment industry.

Companies also made use of significant volumes of loans and cash advances from groups and partners, some of which were non-resident. These transactions generated net positive flows, amounting to 4% of total assets. This means that resident companies extended more financing to their subsidiaries located outside France and their foreign parent companies than they received from the latter. <sup>3,4</sup>

- 3 This is confirmed in the 2011 Balance of payments Annual Report. http://www.banque-france.fr/en/economics-statistics/banking-and-financial-activity/frances-balance-of-payments/the-french-balance-of-payments-and-international-investment-position-annual-report.html
- 4 Even when required methodological reserves are met, given the complexity of adjustments required, these findings take into consideration the neutralisation of double counting resulting from intra-group transactions. The methodology for this is set out in Annex 3 of the paper "Companies in France in 2010: a mixed picture", Banque de France Quarterly Selection of Articles, No. 24, Winter 2011-2012.

# 5 Financial autonomy remained satisfactory despite a slight deterioration

The increase in financial debt, which went towards covering rising WCR and investment spending as well as decreasing overall earnings, affected the various measures of companies' financial autonomy. It did not however jeopardize their soundness or seriously increase their vulnerability. In addition to the reduction in the self-financing rate (see above), several indicators appear to show that companies were more dependent on external lenders.

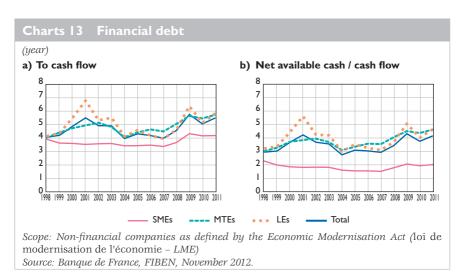
## Lengthening of payment periods (cash flow to debt ratio)

As a consequence of declining self-financing capacity, or cash flow, and rising debt, payment periods increased to stand at 5.5 years in 2011, i.e. 5 months longer than in 2010 (see Chart 13a).

Trends however varied in the different categories:

- In the medium term, SMEs focused on debt reduction, which stalled in 2008 and 2009, but subsequently resumed. Overall, this attested to a fairly good match between the level of their operating profit and their debt, but could also be analysed as the reflection of a situation of chronic underinvestment, as suggested by comparisons with MTEs and large enterprises;
- MTEs stood out with an investment rate that was structurally higher than that of other categories and also with the lowest self-financing rates. They therefore had to make greater use of debt to finance their development, which affected average payment periods (they had risen regularly in recent years);
- Large enterprises' ability to repay was more volatile. In 2011, renewed investment, declining internal resources and rising debt flows combined to push up this ratio significantly.

Taking debt, net of available cash (made up of cash and cash equivalents and short-term investments in marketable securities) into account, <sup>12</sup> does not change the rise in payment periods but casts financial autonomy in a more favourable light overall. Companies were theoretically able to repay



12 Short-term claims on the group and partners are not taken into account here in the calculation of available cash.

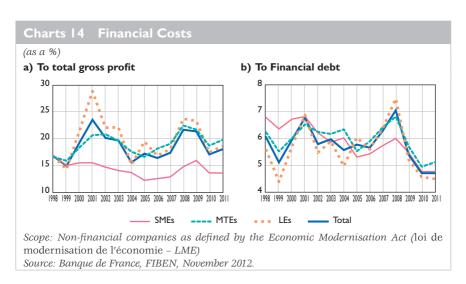
all their loans within a period of 4.2 years, which is a reasonable period in banking industry standards, even though it has risen since the recession. In SMEs, a category that on average has the largest cash position, this period was below two years (see Chart 13b).

#### Moderate rise in financial costs

Rising debt rates notwithstanding, financial costs only increased moderately, with the interest to total gross profit ratio or interest coverage ratio a edging up from 17.6% to 18.5%. This ratio measures the ability of a company to pay for the cost of its borrowing out of operating profits. It is particularly responsive to changes in the company's situation and therefore often serves as a pertinent and early indicator of difficulties. Though it increased significantly in value in large enterprises and MTEs, it remained virtually stable in SMEs (see Chart 14a). The ratio increased mostly in the manufacturing industry, transport and services to businesses.

The apparent cost of debt (ratio of financial costs to financial debt), which reflects the level of interest requested by lenders — banks, financial companies, stock markets, groups and affiliates — levelled off in 2011 at 4.7%, i.e. a record low (see Chart 14b).

It must be pointed out that the financial expense generated by the different types of debt could be offset by similar financial income received by companies, in particular through income received by French groups from their non-resident subsidiaries.



<sup>13</sup> Total gross profit is the gross operating profit plus the non-operating income, but excluding interest payments and capital gains and losses on sales.

Overall, in 2011, despite the renewed vigour of business and investment, companies faced persistent difficulties in bringing their operating margins and profitability back up to pre-crisis levels. This was particularly true for the largest companies. And, though overall their capital structure and financial autonomy remained firm, their situation worsened from 2010. While significant disparities remained among SMEs, the fact that French companies struggled to consolidate their margins and financial positions raises questions on their ability to adjust their operating conditions in the face of the cyclical downturn that has prevailed since last summer.

# Annex I

### **FIBEN** data

# Database of company accounts

The company accounts collected by the Banque de France represent one-third of all companies taxed under the "bénéfice industriel et commercial" (industrial and commercial profits), and "bénéfice réel normal" (real and normal profits) (BIC-BRN) regimes. The data covers all companies doing business in France, with a turnover exceeding EUR 0.75 million and bank debt surpassing EUR 0.38 million. In terms of staff, the data covers over 75% in most sectors and reaches or exceeds 80% in Retail and Wholesale Trade and Industry.

### Main ratios used

An explanation of the financial analysis methodology and the definition of ratios used are available at the following link:

http://www.banque-france.fr/economie-and-statistiques/entreprises/structure-and-performances-des-entreprises/la-situation-des-entreprises-dossier-statistique.html

### **Financial links**

The Banque de France records financial links and analyses capital interests held by other companies, classifying holders as non-financial companies (including holding companies), financial institutions (banks, UCITS and insurance companies), natural persons (individuals and employees), government or non-resident companies. The distinction is made between independent companies and those that belong to a group, irrespective of the size of the group.

### Database of consolidated accounts

Since 1992, the Banque de France has relied on its branch network to collect consolidated accounts drawn up by over 4,000 companies. This base includes the largest industrial and commercial companies doing business in France. The study eliminated sub-groups that are consolidated by parent companies.

The consolidation, carried out by the companies themselves, consists in aggregating the individual accounts of legal entities within the group, after eliminating intra-group flows and parent company interests. The companies considered all have parent companies whose head offices are located in France; the scope of consolidation may include subsidiaries or second-tier subsidiaries that are head quartered outside France.

#### **Failures**

Failures are identified as the initiation of receivership proceedings or direct liquidation, when liquidation is not preceded by receivership. However, when a business continuation plan or disposal plan is put in place between a receivership and a liquidation or second receivership, it terminates the initial receivership. The liquidation and the second receivership are therefore considered as the initiation of proceedings, i.e. a new failure of the legal entity.

The information is provided by registries of commercial courts, automatically in 90% of cases and manually in the remaining cases (companies within the jurisdiction of the *Tribunaux de Grande Instance* that are competent to rule on commercial issues). Once the data on proceedings is electronically recorded by the registries, it is transmitted to the Banque de France within 24 hours. To this data are added analyses by the Legal Notices Bulletin and the information transmitted manually by the *Tribunaux de Grande Instance*. Legal events concerning natural persons only, such as personal bankruptcy, are not recorded.

## The Central Credit Register

The Central Credit Register makes monthly records of the loans granted by credit institutions to their clients above a specific threshold (EUR 25,000 since January 2006). Loans recorded are classified as "drawn loans" — loans used — and "undrawn loans" — credit that is still available. Drawn loans include short, medium and long-term loans, finance leases and securitised loans.

#### Scope

All business activities are included save KZ (financial activities, excluding holding companies) and OQ (general government) sectors. Public and semi-public companies are also excluded.

# Annex 2

# Company size and sector categories

Each data source does not necessarily provide all the information required to define company size as defined by the Economic Modernisation Act of 4 August 2008 (LME). In some cases, sizes are approximated as best as possible based on the information available.

# 1 Attribution of sizes and business sectors for the analysis of company accounts

The decree implementing the LME published on 20 December 2008, which defines the company statistically, specifies company size categories in line with European Commission definitions, and the criteria that define them. There are four thresholds: staff headcount, annual turnover, balance sheet total of legal entities and the financial links between them.

The first three thresholds are assessed at the level of each company where the company is defined as the smallest combination of legal entities that make up an organisational unit of production of goods and services, which has some autonomy in decision-making (defined based on the company's financial links). A financial link is considered when it represents a stake of at least 50% of the capital of a legal entity.

When a company consists of several legal entities (it is classed as a "multi-entity" company as opposed to a "single entity" company), the company accounts of the constituting legal entities are aggregated to define the "company". This approach does not allow for adjustments for double counting between entities within the same company.

Company sizes are defined as follows:

- **SMEs:** up to 250 employees, with annual turnover not exceeding EUR 50 million or the balance sheet total not exceeding EUR 43 million;
- Mid-tier enterprises (MTEs): companies that are not SMEs, with up to 5,000 employees, with annual turnover not exceeding EUR 1.5 billion or the balance sheet total not exceeding EUR 2 billion;
- Large enterprises: other companies.

I http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=AE22AD6AA9827C20CEBCA70F67427237.tpdjo01v\_3 cidTexte=JORFTEX T000019961059&categorieLien=id

SMEs and MTEs may be either a single legal entity or a multi-entity reporting to either a French or a foreign parent company.

The activity sector is based on the 2008 aggregate nomenclature, itself based on the NAF Rev. 2.

In the case of a multi-entity company, the sector is determined by allocating each entity to a corresponding sector. The multi-entity company's sector is defined by the entity that generates the highest annual turnover for the company, provided it exceeds 50% of total revenue. If not, the sector is determined based on the staff headcount criterion, again, provided that the entity's staff represents more than 50% of the multi-entity's total staff. In cases where no single entity accounts for over 50% of sales or staff, the sector of the entity with the highest annual turnover is assigned to the group as a whole.

### Average size of each company category in 2011

(number and EUR millions)

(number ana E	number ana EOR millions)												
	Number of companies	Number of legal entities	Average employees per company	Average sales revenue	Average value added	Average financial debt	Average bank debt	Average equity					
Total	189,878	272,511	50	15	4	7	2	7					
SMEs	185,251	236,150	18	4	I	I	I	ı					
METs	4,429	27,287	632	217	51	84	39	98					
Large enterprises	198	9,074	17,223	5,962	1,527	3,826	683	3,805					

Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME); all business activities excluding KZ (finance excluding holding companies) and OQ sectors (general government)

Source: Banque de France, FIBEN, November 2012.

### Economic weight of non-financial companies in 2011

(thousands of employees, sales revenue, value added, financial debt, bank debt and equity – EUR billions)

	Number of	Number of legal	Staff	Sales revenue	Value added	Financial debt <sup>a)</sup>	Bank debt	Equity <sup>a)</sup>
	companies	entities		revenue	auueu	debt	debt	
Total	189,878	272,511	9,560	2,908	754	1,314	445	1,388
By size								
SMEs	185,251	236,150	3,349	769	225	185	135	202
o/w subsidiaries	7.20/	0.533	240	00	22	27	,,	27
of foreign companies MTEs	7,206 4,429	9,522 27,287	249 2,800	88 959	23 226	36 371	15 175	26 432
o/w subsidiaries	4,427	27,207	2,000	737	226	3/1	1/3	432
of foreign companies	1,280	5,379	909	366	86	159	41	200
Large enterprises	198	9,074	3,410	1,180	302	757	135	753
By sector	'	'			,	'		
Agriculture	3,001	3,431	43	10	3	5	4	5
Manufacturing industry	29,117	47,157	2,489	942	221	394	97	590
Energy, water,	2.040	F 02/	244	150	42	204	22	107
waste management	2,860	5,026	366 937	152 189	43 69	206 73	22 41	107 70
Construction Retail and wholesale trade	31,016 68.533	41,597 95.568	2.386	1.115	176	233	99	342
Transport and warehousing	7,581	11,954	2,366 801	1,113	46	233 65	34	41
Accommodation	7,301	11,754	001	127	40	05	37	7'
and catering	9,625	14,706	392	42	21	30	15	21
Information and communication	4,876	7,712	415	144	72	121	28	87
Real estate activities	12,249	15,070	66	24	14	107	68	48
Services to businesses	18,384	26,687	1,557	149	81	68	31	66
Services to households	2,636	3,603	106	13	7	12	6	10
		Breakd	own as	a %				
By size								
SMEs	97.6	86.7	35.0	26.4	29.9	14.1	30.3	14.6
o/w subsidiaries								
of foreign companies	3.8	3.5	2.6	3.0	3.0	2.7	3.4	1.9
MTEs	2.3	10.0	29.3	33.0	30.0	28.2	39.3	31.2
o/w subsidiaries of foreign companies	0.7	2.0	9.5	12.6	11.5	12.1	9.2	14.4
Large enterprises	0.1	3.3	35.7	40.6	40.1	57.7	30.4	54.3
By sector								
Agriculture	1.6	1.3	0.5	0.3	0.4	0.4	0.9	0.4
Manufacturing industry	15.3	17.3	26.0	32.4	29.3	30.0	21.7	42.5
Energy, water,								
waste management	1.5	1.8	3.8	5.2	5.7	15.7	4.9	7.7
Construction	16.3	15.3	9.8	6.5	9.1	5.5	9.2	5.1
Retail and wholesale trade	36.1	35.1	25.0	38.3	23.4	17.7	22.2	24.7
Transport and warehousing	4.0	4.4	8.4	4.4	6.1	5.0	7.6	2.9
Accommodation and catering	5.1	5.4	4.1	1.5	2.8	2.3	3.4	1.5
Information	2.	2.0	4.3	F 0	0.5	0.2	(3	
and communication	2.6	2.8	4.3	5.0	9.5	9.2	6.3 15.4	6.3
Real estate activities	6.5 9.7	5.5	0.7	0.8	1.8	8.1	7.0	3.5
Services to businesses	9./	9.8	16.3	5.1	10.8	5.2	7.0	4.7

Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME); all business activities excluding KZ (finance excluding holding companies) and OQ sectors (general government)

Source: Banque de France, FIBEN, November 2012.

a) Amounts adjusted for estimated double counting.

#### 2 Definition of sizes for the analysis of consolidated accounts

The following size categories are used when analysing consolidated data (they are in line with those used for company accounts):

- **Medium-sized group:** up to 250 employees, annual turnover not exceeding EUR 50 million or the balance sheet total not exceeding EUR 43 million;
- **Mid-tier group:** group that does not belong to the first category, with up to 5,000 employees, annual turnover not exceeding EUR 1.5 billion or the annual balance sheet total not exceeding EUR 2 billion;
- Large group: other groups.

#### Economic weight of groups in 2011

(staff in thousands, sales revenue, financial debt, equity and total assets in EUR billions)

\ //	,	, ,	, 1 0			/
	Number	Staff	Sales revenue	Financial debt	Equity	Balance sheet total
Total	3,915	9,173	2,121	959	954	3,146
Medium-sized group	1,523	177	54	18	19	53
Mid-tier group	2,191	1,713	434	191	170	508
Large group	201	7,283	1,633	750	765	2,584

Scope: Non-financial groups

Source: Banque de France, FIBEN database of consolidated accounts, November 2012.

### Annex 3

# Recap of the main data and findings for all French companies

#### Rate of change

(as a %)

	SMEs		M	ΓEs	La enter			
	2010	2011	2010	2011	2010	2011	2010	2011
Turnover	3.5	7.9	4.8	8.0	6.9	6.1	5.3	7.2
Value added	3.3	5.8	4.5	4.5	6.8	1.5	5.1	3.6
Gross operating profit	8.3	6.2	8.3	2.3	25.3	-4.5	15.2	0.3
Net operating profit	16.0	5.7	17.6	-0.9	39.4	-10.3	25.6	-3.3
Cash flow <sup>a)</sup>	7.2	3.6	8.3	2.3	21.3	-1.2	15.4	0.7
Net cash flow <sup>a)</sup>	25.3	1.5	38.7	8.5	65.3	-5.6	52.5	-1.6
Self-financing	10.5	-3.1	14.9	-8.4	24.0	-17.0	18.8	-12.1
Investment	-14.0	2.8	-2.8	3.8	-12.9	7.8	-9.9	5.1
Equity <sup>a)</sup>	6.4	5.3	3.6	3.1	5.0	3.3	4.8	3.5
Financial debt <sup>a)</sup>	0.9	3.2	1.4	2.4	1.9	6.1	1.7	4.7
Cash	8.0	4.4	7.5	3.3	17.6	-3.6	12.8	-0.3

Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

#### Ratios

(as a %)

(43 4 70)								
	Average ratio		l qua	st rtile	Med	dian	Last quartile	
	2010	2011	2010	2011	2010	2011	2010	2011
Gross operating profit / turnover	6.4	6.2	1.9	2.1	5.7	5.7	11.6	11.7
Margin ratio: gross operating profit / value added	24.0	23.7	7.5	7.9	18.8	19.1	33.7	34.4
Return on operating capital: net operating profit / operating capital	6.6	6.3	1.8	2.0	8.5	8.5	22.0	21.4
Return on equity: net cash flow a) / equity <sup>a)</sup>	9.5	8.4	2.9	3.2	12.9	12.9	27.5	27.2
Savings rate: cash flow / total income <sup>a)</sup>	17.5	15.0	3.8	3.8	12.0	11.9	22.1	22.1
Investment rate: operating investment / value added	19.0	20.5	1.0	1.0	3.8	4.1	11.3	12.3
Gearing: Financial debt a) / equity <sup>a)</sup>	91.6	94.7	11.8	12.3	48.0	49.2	147.8	150.0
Share of equity: equity a) / total resources <sup>a)</sup>	35.0	34.6	20.0	19.1	40. I	39.4	61.4	60.5
Apparent payment period: financial debta) / cash flow a)	5.1	5.5	0.5	0.6	1.8	1.9	4.8	5.0
Apparent cost of debt:financial costs <sup>a)</sup> / financial debt <sup>a)</sup>	4.7	4.7	2.7	2.6	4.5	4.3	7.3	7.0

Scope: Non-financial companies as defined by the Economic Modernisation Act (loi de modernisation de l'économie – LME)

a) Amounts adjusted for estimated double counting Source: Banque de France, FIBEN, November 2012.

a) Amounts adjusted for estimated double counting Source: Banque de France, FIBEN, November 2012.

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# The financial situation of the major listed groups remained sound in the first half of 2012 despite a difficult environment

# Jean-Luc CAYSSIALS, Sabrina KHALFOUNE and Claire MANGIN-SOUBRET Companies Directorate

In the first half of 2012, business activity in the 70 major groups remained robust: turnover increased by 6% (compared to 7% at 30 June 2011). Sources of growth in emerging markets offset the weak activity in Europe.

However, profitability marked time compared to 2011. While business activity continued to grow, operating income stagnated and net profit dropped by 15%. Margin rates fell for the second consecutive year.

The cash position remained at a comfortable level of EUR 137 billion, up by 6% relative to June 2011. Operational cash flows rose by EUR 2 billion in the first half compared to June 2011, in line with turnover growth.

Investment spending also increased by close to EUR 2 billion compared to 30 June 2011, representing a total of EUR 51 billion, of which almost EUR 48 billion for internal investments (tangible and intangible fixed assets).

As regards resources, the groups' financial debt increased by 6% and accounted for 87% of equity (up by 3 percentage points in one year). Groups had greater recourse to market financing, with outstanding bond debt accounting for almost half of total debt.

Equity continued to rise, albeit at a weak pace, and was underpinned, unlike last year, by the other elements of comprehensive income. However, currency conversion differences recorded directly in equity still accounted for most of the change in comprehensive income. Moreover, the revised IAS 19 standard is expected to have an increasingly significant impact on pension liabilities: actuarial gains and losses already represented a negative impact of EUR 7 billion on equity at end-June 2012 for groups having anticipated the revision of the standard.

Key words: consolidated accounts, IFRS, results, large industrial and commercial companies, major French groups, other comprehensive income (OCI), companies listed on segment A of Euronext

[EL codes: F23, G30, G32, L25

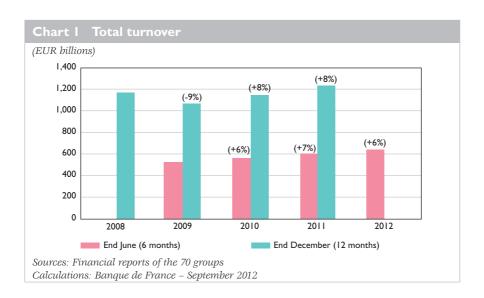
# I | Economic activity was slightly less dynamic in the first half of 2012

### I | I A moderate rise in turnover and increased disparities

Since the summer of 2011, French listed groups have been faced with an uncertain environment, marked by the sovereign debt crisis in Europe and slowing growth. Nevertheless, the total turnover of the 70 leading listed groups posted a year-on-year rise of 6% to stand at EUR 642 billion in the first half of 2012. Since June 2009, it has increased by more than EUR 110 billion.

This growth in turnover was slightly less strong than in 2011 at the same date (for the record, it was up by 7% between the first half of 2010 and the first half of 2011). The slowdown in 2012 is attributable to manufacturing groups, some of which having registered a decline in turnover compared to the first half of 2011. The manufacturing industry was particularly affected by the drop in sales in the automotive industry, while the heightened competition among mobile telephone operators had a negative impact on the turnover of several industry representatives.

The counter-performance of the groups in the automotive and telecoms sector contrasted with the continued strong growth in the energy and luxury sectors. The result was a greater heterogeneity than in the first half of 2011.



# I | 2 Sustained growth in emerging countries offset a weak level of activity in Europe

The internationalisation process of French groups continued. In the first half of 2012, the groups under review derived only 39% of their turnover from their activity in France (against 40% in the first half of 2011). The share of turnover derived from their activity in Europe also decreased: while it accounted for 65% of total turnover in December 2009, it only represented 57% in the first half of 2012.

Thanks to their international dimension, the major French groups were able to take advantage of the new sources of growth in the most dynamic regions, which offset the weak sales in Europe. In fact, the least internationalised groups and therefore the most exposed to economic difficulties in Europe posted the lowest turnover growth rates: the cumulated turnover generated in Europe inched up by only 1% in the first half of 2012, while it increased by 13% in America and 14% in the rest of the world.

Table I Geographical breakdown of turnover

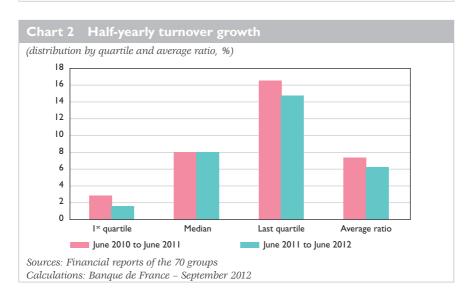
(%)

( )								
	Dec. 2009	June 2010	Dec. 2010	June 2011	Dec. 2011	June 2012		
Europe	65	62	61	60	59	57		
America	19	20	20	20	21	21		
Rest of the world	17	19	19	20	20	21		

The reference documents published are not perfectly homogeneous as regards the geographical breakdown of activity; at 30 June 2012, only 52 groups out of the 70 studied displayed information with a homogeneous sectoral breakdown.

Sources: Financial reports of the 70 groups

Calculations: Banque de France - September 2012



These changes were amplified by currency effects, in particular the depreciation of the euro against the dollar (the euro lost 9% on average in the first six months of 2012 compared to the same period in 2011). Indeed, the conversion into euros of the accounts of certain foreign subsidiaries had mechanically a positive impact on the groups' total turnover.

# 2 Profitability recorded a small decrease

# 2 | I Activity rose but operating income remained unchanged

The operating profit – operating income net of operating expenses – measures the intrinsic performance of the group's activities, without taking into account the financial income which impacts the overall performance of the group.

For the 50 groups that disclose this intermediate balance, the cumulative operating income remained unchanged in the first half of 2012 (EUR 27 billion), after having risen by 6% in 2011. This stagnation is due to the groups' heterogeneous developments in an uncertain environment. The total operating income of these 50 groups is affected by the poor performance of a number of them whose situation has deteriorated since the start of the year, in particular in the automotive sector, but not only: 13 out of these 50 groups recorded a lower operating income at 30 June 2012.

The operating margin rate (operating income over turnover) thus marked time, slipping from 9% to 8%. More than half of the groups posted a lower margin rate, in particular the information and communication groups.

# 2 | 2 Net profit inched down and the net margin rate declined

If one looks at net profit – operating income after accounting for financial charges and tax expenses – profitability declined. This holds true for the 70 groups under review, since all disclose this balance: the net cumulative profit slid from EUR 39 to 33 billion, a 15% decrease compared to June 2011. This level is nevertheless not very far from that of the previous two years, and remains significantly higher than that recorded in the first half of 2009 (EUR 24 billion), then hit by the recessionary effects of the financial crisis of 2008.

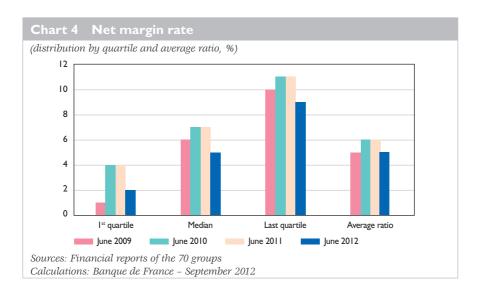
The decline in net profit is not only due to a stagnating operating income, but also to higher financial charges. On the one hand, the cost of debt



climbed with the rise in interest payments due to an increase in average outstanding debt in the first half of 2012. On the other hand, additional expenses were recorded as a result of asset writedowns.

In sectoral terms, net profit declined mainly in industry and telecom groups, while it increased in energy and environment groups.

As a result of a higher turnover and a lower net income, the net margin rate decreased mechanically for the second consecutive year, from an average of 6.5% in June 2010 to 5% in June 2012. The distribution of the



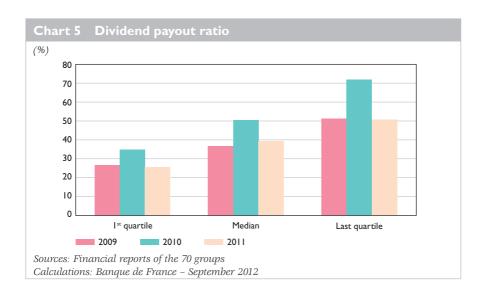
ratio highlights a decline of all quartiles: half of the groups thus showed a net margin rate of less than 5% (against 7% in 2011), and a quarter of them a rate of less than 2%.

The decline in margin rates over the past two years shows a relatively marked drop in the first half of 2012: 43 out of the 70 groups under review posted a decrease in their net margin rate, against only 35 in 2011 and 20 in 2010.

### 2 3 Paid-out dividends fell in 2011

Dividends paid out in 2011<sup>1</sup> and concerning 2010 decreased: dividends totalled EUR 33 billion (for a EUR 71 billion profit in 2010), against EUR 37 billion in 2010, amounting to a 12% fall.

The dividend payout ratio, which corresponds to the share of profits generated during the year that is paid out as dividends to shareholders, was also down on the previous year. Half of the groups posted a rate below 39% in 2011 (compared with 50% in 2010, when dividends paid out to shareholders had increased significantly). In addition, in 2011, only 3 out of the 70 groups under review paid out more than their profits, compared with 9 groups in 2010.



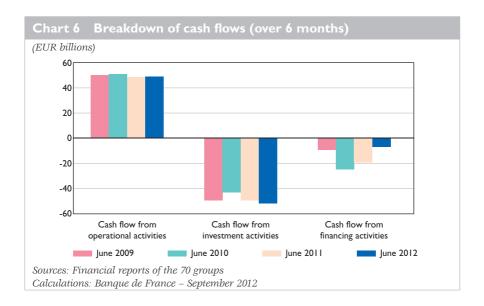
<sup>1</sup> Dividends paid in the course of fiscal year 2011 relating to 2010 earnings. At the moment, data is too scarce for assessing dividends paid in 2012 relating to 2011.

# 3 Cash levels were comfortable but lower than at end-2011

The aggregate cash position of the principal non-financial groups stood at EUR 137 billion at 30 June 2012, corresponding to a 6% rise compared to end-June 2011 (+ EUR 8 billion). These cash reserves accounted for 10% of the groups' balance sheet.

All sectors did not record an increase. For example, in manufacturing, cash reserves dropped by 7%. In addition, cash levels declined by EUR 11 billion compared to 31 December 2011.

In order to obtain a more accurate analysis of cash levels, it is necessary to examine the breakdown of half-yearly cash flows. This breakdown enables us to analyse the use of available funds over the last six months and to track the changes in cash flows generated by operational activities, investment activities and financing activities respectively (see Chart 6).

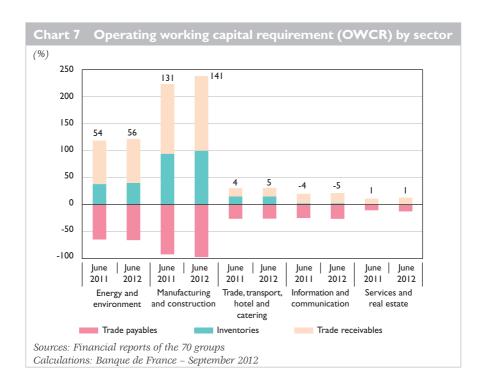


### 3 | I Slightly higher cash flows from operational activities at 30 June

Cash flows from operational activities correspond to the difference between the group's self-financing capacity and the change in the working capital requirement. The operating working capital requirement (OWCR) corresponds to the financing needed to ensure the company's current activity. It grows at the same annual rate as turnover. As a result, the rate of increase of operational cash flows is comparable to that of activity. The growth in operational activities generates a cash surplus of close to EUR 50 billion, i.e. 7.7% of turnover.

In the first half of 2012, the 70 groups showed an aggregate financing requirement for operational purposes of EUR 198 billion, i.e. a 6% increase compared to 30 June 2011. All sectors displayed a positive change in OWCR, except the information and communication sector.

The increase in the aggregate OWCR results both from a rise in the trade credit balance<sup>2</sup> – trade receivables and payables were up by 5% and 4% respectively compared to June 2011 – and a 5% increase in inventories – these were nevertheless cut back in several groups, in particular in the automotive industry, faced with shrinking demand and a negative outlook.



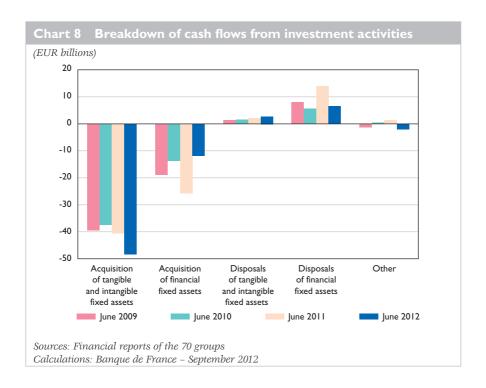
<sup>2</sup> The trade credit balance is defined as the difference between trade receivables and trade payables.

# 3 2 Investment spending continued

Cash flows from investment activities are divided into four main types of transactions: acquisition of tangible and intangible fixed assets, acquisition of financial fixed assets, disposals of tangible and intangible fixed assets and disposals of financial fixed assets.

Despite an uncertain environment, the groups under review continued to invest. Indeed, during the first half of 2012, net cash flows from investment activities climbed by EUR 2 billion compared to June 2011, to reach over EUR 53 billion.

This increase results primarily from the growth in acquisitions of tangible and intangible fixed assets (+ EUR 8 billion compared to June 2011), but also from the decline in disposals of financial fixed assets (- EUR 7 billion compared to June 2011). At the same time, acquisitions of financial fixed assets posted a sharp decrease (- EUR 14 billion year-on-year) compared to the first half of 2011, which had been marked by several major external growth operations, in particular in the energy sector and the pharmaceutical industry (see Chart 8).



#### Box I

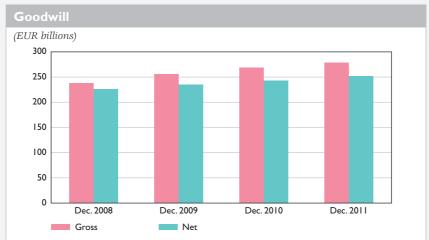
#### Greater caution in the valuation of goodwill

At 30 June 2012, gross goodwill accounted for close to 18% of the groups' total assets, unchanged over the four years under review, and 54% of total equity at end-2011.

Despite the decline in financial acquisitions in the first half of 2012, gross goodwill has increased significantly over the past three years, climbing by close to 17% since 2008 (+ EUR 41 billion).

Unlike French rules which provide for an amortisation of goodwill, the IFRS provide for an impairment test designed to verify that the present value is at least equal to the net amount recorded under assets. If not, an impairment loss for goodwill is recorded as a reduction of gross intangible assets.

Following these impairment tests, the aggregate net value of goodwill amounted to EUR 252 billion at end-June 2012, up by only 11% since December 2008. Net goodwill rose at a slower pace than gross goodwill. This is attributable to the increase in impairments which more than doubled between 2008 and 2010, reflecting the groups' cautious behaviour in an uncertain environment.



Sources: Group financial reports (sample restricted to the 52 groups publishing information) Calculations: Banque de France – September 2012

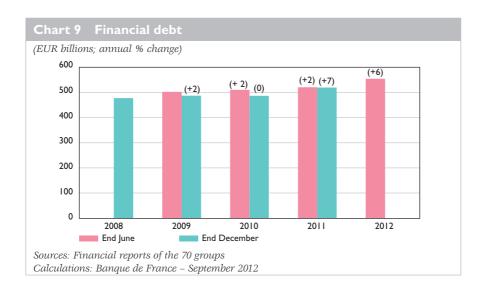
# 3 | 3 Cash flows from financing activities reflected a search for additional resources

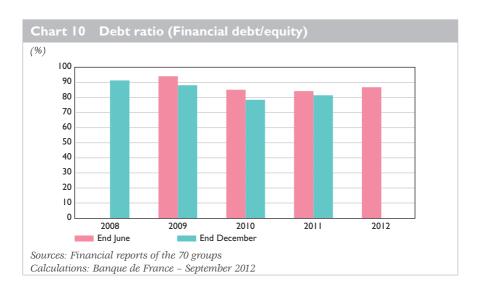
Cash flows from financing activities include equity capital operations (increases, reductions), extra-group dividend payouts, financial debt repayments and new debt issues or subscriptions. They are highly volatile. They generated funding needs in the first half of 2012, but much less than a year earlier: at 30 June 2012, they only amounted to EUR 7 billion (compared to EUR 19 billion at end-June 2011).

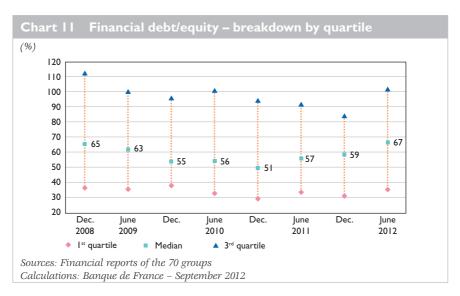
# 3 | 4 Debt increased in the first half of 2012

Financial debt grew at about the same pace as in 2011: it was up by 6% in June 2012 (against 7% in December 2011). This increase is mainly attributable to the energy and environment sectors, as well as to manufacturing and construction.

Coupled with the moderate increase in equity capital (+3%), the debt ratio rose by 3 percentage points, from 84% in June 2011 to 87% in June 2012. After two years of decline up until end-2010, the debt ratio has picked up again over the past 18 months. The three quartiles of the debt ratio distribution also increased in the first half of 2012, with widening disparities. Half of the groups posted a debt ratio above 67% (+10 percentage points compared to June 2011), 25% of the groups even displaying a debt ratio above 103% (see Chart 11).







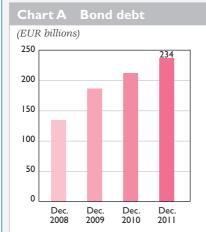
#### Box 2

#### Groups have greater recourse to direct market financing

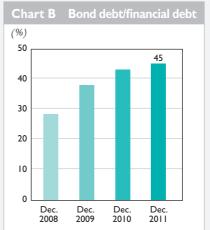
In fiscal 2011, the 70 groups included in the sample continued to restructure their debt by having greater recourse to market financing. They financed a certain number of investment operations through several bond issues, which also partially replaced debt financing.

Between end-2010 and end-2011, the bond debt of the groups under review rose by EUR 24 billion. It accounted for 45% of the sample's financial debt at end-2011 (+2 percentage points compared to the previous fiscal year).

The large groups thus opted for a diversification of their financing methods by substituting direct market financing for bank borrowing.



Sources: Financial reports of the 70 groups Calculations: Banque de France – September 2012



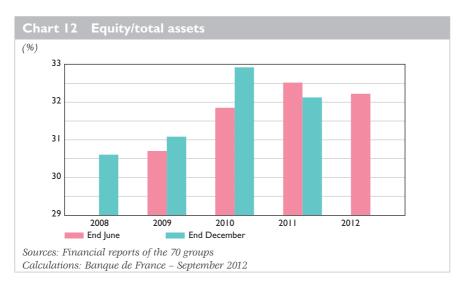
Sources: Group financial reports (sample restricted to the 52 groups publishing information)

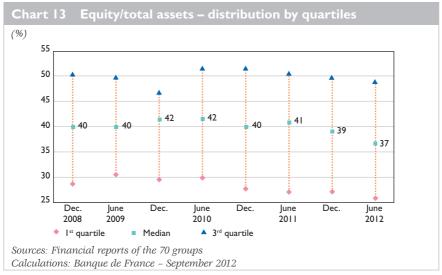
Calculations: Banque de France – September 2012

# 4 Moderate increase in equity

### 4 | I The share of equity in total assets stabilised

Equity increased by 3%, at the same pace as in June 2011. Their share in total assets remained stable (the average ratio stood at 32.5% at end-June 2012, against 32.2% at end-June 2011) (see Chart 12). The median value, on the other hand, decreased from 41% in June 2011 to 37% in June 2012: half of the groups posted a ratio below 37.3% at 30 June 2012 (see Chart 13).



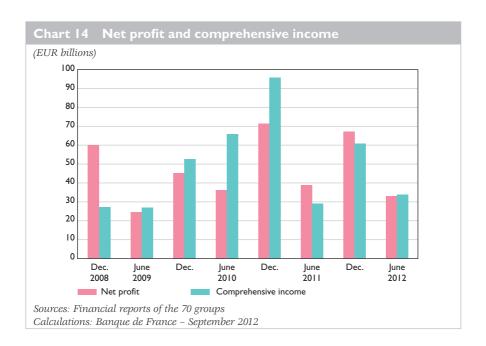


### 4 2 The weight of other comprehensive income

One of the particularities of financial statements consolidated under IFRS concerns other comprehensive income (OCI). This entry has no impact on a group's cash position but may cause large variations in total equity. Since end-2008, groups must copy this entry recorded directly under equity, with no impact on the calculation of net profit, in a table entitled "Comprehensive Income Statement".<sup>3</sup>

In 2011, other comprehensive income had a negative impact on equity variations for a total of EUR 6 billion: the comprehensive income of the 70 groups was thus lower than net profit by EUR 6 billion due to the weight of other comprehensive income. Conversely, this entry had a positive impact of EUR 2 billion in the first half of 2012.

"Other comprehensive income" causes a certain degree of volatility in equity.<sup>4</sup> Indeed, while in terms of outstanding the weight of OCI is relatively small compared to that of total equity, its variations have a greater effect on the variations in total equity which is directly impacted by the volatility in exchange rates and market values.



<sup>3</sup> Net profit + other comprehensive income (OCI) = comprehensive income.

<sup>4</sup> The total aggregate impact on equity is not analysed in the reference documents published at 30 June. At 31 December, the total aggregate OCI is not significant, while it accounted for 4% of the groups' total equity at end-December 2009 and 1% at end-December 2010.

Table 2 Change in other comprehensive income (OCI)								
(EUR billions)	(EUR billions)							
	2008	HI	2009	HI	2010	HI	2011	HI
		2009		2010		2011		2012
Conversion differences	-11	3	3	39	25	-15	2	7
Financial assets available for sale	-11	0	4	-1	I	3	- 1	2
Cash flow hedges	-11	- 1	3	-11	-3	5	-4	-4
Actuarial gains and losses	-6	-1	-2	-3	-2	0	-6	-7
Earnings and losses on associates								
accounted for using the equity method	0	0	0	2	2	-1	-1	0
Other	Other 6 0 0 4 2 -I 2 2						2	
TOTAL -32 3 7 30 24 -10 -6 I								
Sources: Financial reports of the 70 gro	ирѕ							
Calculations: Banque de France - Septe	ember 2	2012						

Among the five main components of "other comprehensive income" at end-June 2012, two categories offset each other and represent the largest amounts.

- Currency conversion adjustments on foreign subsidiaries (with non-euro accounts) represented a EUR 7 billion gain at 30 June 2012, against a loss of EUR 15 billion a year earlier. The energy sector recorded the largest variation in the first half of 2012 and gained EUR 8 billion compared to the first half of 2011.
- Actuarial gains and losses linked to pension liabilities (defined-benefit schemes), which had not so far been very significant, amounted to EUR 7 billion at end-June 2012, due to the anticipation by certain groups of the revised IAS 19 on the way of accounting for pension liabilities (see Box 3).

#### Box 3

# Pension liabilities: the impact of IAS 19 (revised) could be quite significant for certain groups

According to this standard, the leading French groups that close their accounts under IFRS rules are required to use a single method to account for provisions for pension liabilities (retirement bonuses, long-service medals).

However, for the time being, it is difficult to anticipate the overall impact of the revised IAS 19:

• So far, few groups have applied the revised IAS 19 in anticipation for fiscal 2011. Indeed, the European Union formally adopted the accounting reform only on

.../ ...

5 June 2012 and the application of the new standard will become mandatory only as from 1 January 2013. Thus, only three groups in the sample have adjusted their accounting methods in anticipation of the revised IAS 19;

• In addition, the information provided in the reference documents is not sufficient to accurately calculate the future impact of this reform on the groups' financial statements.

Different effects are nevertheless to be expected across groups:

- Firstly, the weight of defined benefits on accounts is considerable for certain groups (in particular those for which provisions for pension liabilities represent over a quarter of equity). Changes in the method of calculating provisions will therefore significantly affect liabilities on these balance sheets;
- Secondly, the differences already noted across groups cannot be attributed to their sector of activity, but to the country in which they are located, as well as to staff numbers;
- Above all, the impact of the reform, which substitutes a single method (Corridor, SoRIE, "100% résultat") for the three accounting methods initially authorised, will essentially depend on the method currently applied.

Thus, the groups that use the SoRIE method (about half of our sample) and the "100% résultat" method (one group in our sample) will be less impacted by these changes. For the most part, the groups mention in their consolidated accounts that they expect the reforms to have a negligible effect on their accounts. For the SoRIE method, as the actuarial gains and losses are already taken into account under other comprehensive income, the new standard will have no impact in this respect. For the "100% résultat" method, the actuarial gains and losses were directly recorded in the profit and loss account, but the new method should concern only a very small number of French groups.

Conversely, groups that use the Corridor method (29 groups in our sample) and are currently able to smooth the impact on accounts will be more affected. Indeed, the actuarial gains and losses were not accounted for and only mentioned in the appendix. We can therefore expect the volatility in these groups' equity to rise when the accounting method changes in 2013. At end-2011, the unaccounted for actuarial gains and losses of these 29 groups amounted to EUR 7 billion. This amount is mainly concentrated in two groups that represent 65% of the total.

I Statement of recognised income and expenses.

### 4|3 Declining stock market capitalisations over the past year

Stock market valuations have declined significantly in recent months following the sharp market correction.

At 31 December 2011, market capitalisations exceeded by only 20% the equity levels of the groups under review, compared to 50% in 2008. Market valuations are therefore getting increasingly close to equity levels (the groups' growth prospects being revised downwards by investors).

At end-June 2012, half of the studied sample had a price to book ratio below 1.3 (against 1.7 in June 2011). In addition, a quarter of the groups were undervalued with a ratio below 0.8, while none of the groups were at end-June 2011. De facto, at 30 June 2012, 27 groups had a ratio below 1, compared to 1.2 a year earlier.

Overall, the non-financial groups listed on segment A of Euronext posted a satisfactory financial situation, showing resilience in an uncertain environment. However, disparities have increased and certain groups, which are more exposed to the worsening business conditions in Europe, displayed weaker performances.



# **Appendix**

### I | Methodology

The study covers non-financial groups listed on the Paris financial market, with financial years running from 1 January of year N to 31 December of year N +1, and belonging to segment A of Euronext (capitalisation above EUR 1 billion). The sample consists of 70 groups. It is estimated that these groups account for 80% of turnover of all listed companies in France.

The study is based on annual consolidated accounts for 2008, 2009, 2010 and 2011 and half-yearly consolidated accounts for 2009, 2010, 2011 and 2012.

#### Sample

	<b>C</b>	
	Groups taken into account	
ACCOR	essilor international	PUBLICIS
ADP	EUROTUNNEL	RALLYE
AIR LIQUIDE	FRANCE TELECOM	RENAULT
ALCATEL-LUCENT	FROMAGERIE BEL	REXEL
AREVA	GDF SUEZ	RUBIS
ARKEMA	GEMALTO	SAFRAN
ATOS ORIGIN	HAVAS	saint-gobain
BIC	HERMÈS INTERNATIONAL	sanofi-aventis
BIOMÉRIEUX	ILIAD	SCHNEIDER ELECTRIC
BOLLORÉ	IMERYS	SEB
BOURBON	INGENICO	SUEZ ENVIRONNEMENT
BOUYGUES	IPSEN	TECHNIP
BUREAU VERITAS	IPSOS	TELEPERFORMANCE
CAP GEMINI	JC DECAUX SA.	THALES
CARREFOUR	L'ORÉAL	TOTAL
CFAO	LAFARGE	VALEO
CIMENTS FRANÇAIS	LAGARDÈRE S.C.A.	VALLOUREC
DANONE	LVMH	VEOLIA ENVIRONNEMENT
DASSAULT AVIATION	MAUREL ET PROM	VICAT
DASSAULT SYSTÈMES	MÉTROPOLETV	VINCI
EADS	MICHELIN	VIRBAC
EDF	NEXANS	VIVENDI
EIFFAGE	PEUGEOT	
ERAMET	PPR	

Groups not taken into account							
ARCELORMITTAL	AXA	AIR FRANCE-KLM	ALTERA	APRR			
CGGVERITAS	BNP PARIBAS	ALSTOM	FDL	CASINO GUICHARD			
SCHLUMBERGER	CIC	EUTELSAT COMMUNIC.	FONCIÈRE DES RÉGIONS	CAMBODGE NOM.			
STMICROELECTRONICS	CNP	NEOPOST	FONCIÈRE LYONNAISE	CHRISTIAN DIOR			
	CRÉDIT AGRICOLE	PERNOD RICARD	GECINA NOM.	COLAS			
	EULER HERMÈS	RÉMY COINTREAU	ICADE	EURAZEO			
	NATIXIS	SODEXO	KLÉPIERRE	FAURECIA			
	SCOR SE	UNIBAIL-RODAMCO	MERCIALYS	FINANCIÈRE DE L'ODET			
	SOCIÉTÉ GÉNÉRALE	VILMORIN & CIE	SILIC	TFI			
		ZODIAC		WENDEL			

Groups with financial statements in USD

Financial institutions

Groups with financial years not ending 31 December

Property companies

Groups consolidating other groups in the sample or being already consolidated by other groups in the sample

Other groups for which there is no available information

# 2 | Data analysed

The principal accounting items analysed for the 70 groups in the 2012 sample are listed in the following table.

✓: The items seen and used in our analyses

X: The items seen but not used in our analyses due to incomplete information

I. GENERAL INFORMATION				
Company name				
SIREN number				
NACE code of group's principal activity				
II. INCOME STATEMENT				
Turnover 🗸				
o/w turnover in France ✓				
o/w turnover by geographical area				
EBITDA X				
Operating income				
Net profit ✓				
Current operating income X				
Operating income				
Net profit ✓				

III. COMPREHENSIVE INCOME
Change in currency conversion differences 🗸
Financial assets available for sale 🗸
Cash flow hedges 🗸
Changes in revaluation surplus 🗸
Actuarial gains and losses 🗸
Affiliates' earnings and losses booked directly as equity 🗸
Other 🗸
Comprehensive income
IV. BALANCE SHEET
Goodwill – gross value
Goodwill – net value 🗸
Other intangible fixed assets 🗸
Tangible fixed assets 🗸
Inventories 🗸
Trade receivables 🗸
Total assets (current and non-current)
Total financial debt 🗸
o/w bond debt <b>√</b>
Minority interest
Shareholder equity 🗸
Trade payables 🗸
Total liabilities (current and non-current)
V. CHANGE IN EQUITY
Change in issued share capital
Dividends paid (group share + minority share)
Currency conversion differences
Gains/losses on financial instruments
Revaluation of other assets
Actuarial gains and losses
Equity-accounted companies
VI. CASH FLOW
Cash flow from operational activities 🗸
Cash flow from investment activities 🗸
<ul> <li>acquisition of tangible and intangible fixed assets ✓</li> </ul>
<ul> <li>acquisition of fnancial fixed assets ✓</li> </ul>
<ul> <li>disposals of tangible and intangible fixed assets ✓</li> </ul>
<ul> <li>disposals of financial fixed assets ✓</li> </ul>
• other changes ✓
Cash flow from financing activities 🗸
Change in net cash position
Net cash position at year-end ✓

# 3 Data processing

Breakdown of the 70 groups into 5 sectors of activity:

Energy and	Manufacturing		Information and	
environment	and	hotel and	communication	real estate
	construction	catering		
AREVA	Alcatel-Lucent	Accor	Atos Origin	Bourbon
EDF	Arkema	ADP	Cap Gemini	Bureau Veritas
GDF Suez	Bic	Bolloré	Dassault Systèmes	Havas
Maurel et Prom	Biomérieux	Carrefour	France Telecom	JC Decaux SA.
Suez Environnement	Bouygues	CFAO	Gemalto	Publicis
Total	Ciment français	Eiffage	lliad	Technip
Veolia Environnement	Danone	Eurotunnel	Ipsos	Teleperformance
	Dassault Aviation	PPR	Lagardère S.C.A.	
	EADS	Rallye	Métropole TV	
	Eramet	Rexel	Vivendi	
	Essilor International	Rubis		
	Fromageries Bel			
	Hermès International			
	Imerys			
	Ingenico			
	Ipsen			
	L'Oréal			
	Lafarge			
	LVMH			
	Michelin			
	Nexans			
	Peugeot			
	Renault			
	Safran			
	Saint-Gobain			
	Sanofi-Aventis			
	Schneider Electric			
	Seb			
	Thales			
	Valeo			
	Vallourec			
	Vicat			
	Vinci			
	Virbac			

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### **Securitisation in France**

#### Omar BIROUK and Laetitia CASSAN

**Directorate General Statistics** 

Monetary and Financial Statistics Directorate

The financial crisis that emerged in 2007 resulted in greater scrutiny of securitisation and convinced European authorities of the need to set up a special databank for this activity in order to monitor its development. At the end of 2009, in accordance with ECB Regulation 2008/30, the Banque de France started collecting data on the principal balance sheet items of French securitisation vehicles. This study offers an initial analysis of the results.

Securitisation - involving the sale of receivables to a special purpose vehicle - is a financial mechanism that contributes to financing the economy. The majority of the assets on the balance sheets of French securitisation vehicles are loans originated by euro area credit institutions representing receivables from French resident counterparties. At 30 June 2012, these assets represented EUR 176.3 billion out of total securitised outstandings of EUR 201.6 billion. In effect, securitisation has played a significant role in refinancing residential mortgages and claims on resident businesses, and it broadens the range of investment opportunities offered to investors.

Despite its relative dynamism within the euro area, France's securitisation market remains modest, ranking 5th in terms of euro area origination per country.

Key words: securitisation, synthetic securitisation, retained securitisation, debts, loans, assignment, factoring, discount, credit risk, insurance risk, liability structuring, rating, financing, investment, securitisation vehicle, securitisation scheme, conduits, bank refinancing, special purpose vehicle (*Fonds commun de créances*, FCC), securitisation fund (*Fonds commun de titrisation*, FCT)\*, securitisation company\*, ABS, RMBS, CMBS, ABBT, ABCP, CDO, CLO, Solvency II, Basel II

JEL Codes: E44, G21, G22, G23, G24, G32, F65

ecuritisation is a technique for re-organising the assets of an economic entity. It aims to transform certain less liquid assets (debts, loans, etc.) on the balance sheet of an economic entity into financial securities. To do this, the assets in question are sold to a special purpose vehicle (SPV) or securitisation vehicle that, in turn, issues securities – asset-backed securities (ABS), mortgage-backed securities (MBS), etc. – to finance their acquisition. The interest and principal of the securities issued is paid out of the cash flows generated by the underlying assets.

Introduced in France by Act 88-1201 of 23 December 1988 that created the FCC (fonds communs de créances¹ – French equivalent to the SPV), the legal framework for securitisation was modernised by the Order of 13 June 2008 which extended its purpose and legal forms. The new legal framework diversified the types of assets eligible for securitisation (originally only bank loans) to trade receivables, insurance risks, debt securities, etc. It also broadened the scope of the eligible securitisation

#### Box I

# Banque de France data collection from financial vehicle corporations engaged in securitisation

The process of data collection from securitisation vehicles throughout the euro area (the reference reporting population) was initiated by the ECB Regulation (ECB/2008/30) of 19 December 2008. The objective of this quarterly process, which came into force in December 2009, is to collect data concerning the civil status and balance sheet items of securitisation vehicles registered in France. The data collection therefore concerns all transactions organised by resident securitisation vehicles and involving resident and non-resident originators. The data reported at each end-of-quarter is addressed to the ECB, which aggregates the data on French resident vehicles to that provided by the other euro area countries in the reference reporting population, to produce statistics on the securitisation industry.

This process has thus extended the ambit of ECB Regulation (ECB/2008/32) concerning the collection of balance sheet information on securitisation transactions conducted by resident banks (Financial and Monetary Institutions - FMIs) via resident and non-resident securitisation vehicles.

A list of securitisation vehicles, updated every quarterly period, is available on the Banque de France website.<sup>1</sup>

 $I \quad http://www.banque-France.fr/fileadmin/user\_upload/banque\_de\_france/Economie\_et\_Statistiques/liste\_OT\_2012Q2.pdf$ 

<sup>1</sup> Until that date, under the provisions of the Banking Act of 24 January 1984, the professional purchase of un-matured receivables as part of an entity's usual business was considered a credit activity, thereby confining securitisation exclusively to credit institutions.

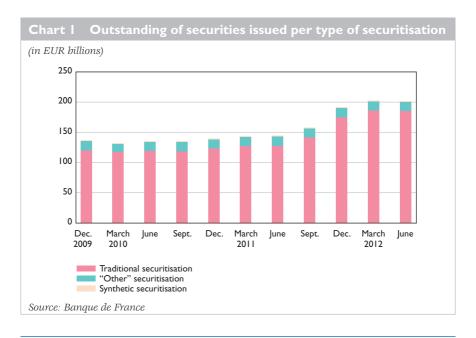
techniques (replenishment of vehicles, broader credit enhancement methods, active management of portfolios and the resale of acquired assets) and the types of securities that securitisation vehicles can issue (in addition to units in FCCs – which are due to be phased out, units in securitisation funds – FCTs, short-term debt securities such as commercial paper or other short-term securities, etc.).

All of these innovations allowed a significant growth of the contribution of securitisation to the financing of the economy.

# I| Forms of securitisation in France

# I | I Securitisation involving the complete sale of the assets is the dominant form...

At 30 June 2012, the total value of securities issued by French securitisation vehicles stood at EUR 201.6 billion, up 50% since 31 December 2009 (136.7 billion) when the Banque de France started its securitisation data collection programme. The rise in the aggregate outstandings of securitised assets was particularly strong in the second half of 2011 mainly as a result of the financial structures set up by resident banks to obtain refinancing from the European System of Central Banks (ESCB).

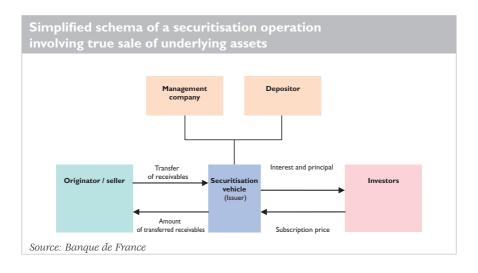


Traditional securitisation operations account for the bulk of the securitised assets (more than 90% of aggregate securitised outstandings at end-June 2012). In these so-called cash securitisation operations, the underlying assets are transferred via a "true sale" to the securitisation vehicle. The holder of the securities (the investor) has a pro-rata ownership interest in the underlying assets and is thus entitled to the right to a corresponding fraction of the income generated by these underlying assets.

Two other types of securitisation are recognised by the ECB's reporting procedure: synthetic securitisation and "other securitisations".

With synthetic securitisation, only the credit risk associated with the underlying assets is sold to the securitisation vehicle (via credit derivatives) and not the assets themselves (as in the case of cash securitisations). This type of transaction requires calculation of the default risk on the underlying assets, usually estimated using mathematical models that reproduce their dynamic. Synthetic securitisation, via the vehicles operating under French law, remains marginal in France, representing only 0.5% of aggregate securitised assets at end-June 2012.

The "other securitisations" represented 9.5% of total securitised assets at 30 June 2012. They correspond to transactions involving the transfer of risks other than credit risks (corporate insurance risk or business risk). On the whole, these "other securitisations" involve secondary securitisation, i.e. the creation of "conduits", separate legal entities or custodial arrangements to issue asset-backed commercial

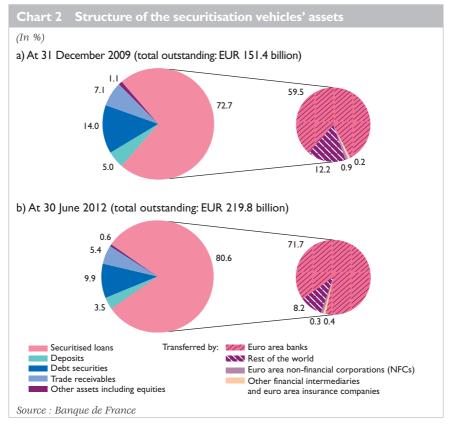


<sup>2</sup> A true sale is defined as a sale that is binding on third parties and in which the assets must be beyond the reach of the originator and its creditors, including in the event of the originator's insolvency.

paper (ABCP), the sale proceeds of which are used to purchase securities issued by other securitisation vehicles or schemes.

# I 2 ... and the assets sold essentially consist of loans

The assets of French securitisation vehicles consist mainly of securitised credits and loans, whose share in their balance sheet totals rose over the period under consideration from 72.7% at end-2009 to 80.6% at the end of June 2012. These credits are essentially transferred by euro area banks (71.7% at the end of June 2012), with other sources remaining marginal (0.7% in total from non-financial companies – NFCs, other financial intermediaries and insurance companies). This predominance of bank credits/loans in total securitised assets in France reflects the legal framework surrounding securitisation practices in France: in 1988, only bank credits/loans with maturities greater than two years were eligible for securitisation.



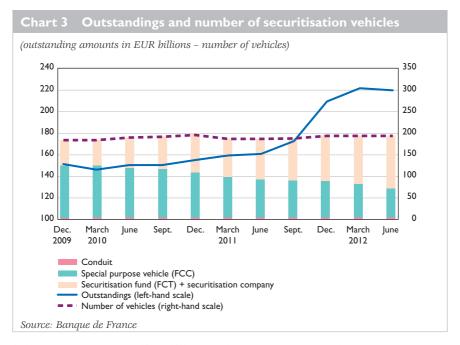
<sup>3</sup> The "rest-of-the-world" originators are not sufficiently identified in the current reporting.

The subsequent relaxation of the legislation in terms of the nature and the maturity of the assets eligible for securitisation led to the inclusion not only of shorter maturity bank loans (consumer loans, interbank receivables) but also of debts in the form of already securitised assets (i.e. re-securitisation) – which represented approximately 5% of the total securitised assets at end-June 2012 (out of a total of 10% of the debt instruments held) – trade bills (5.4%) or any type of receivable, even future, generating a cash flow.<sup>4</sup>

Deposits, which represent between 4 and 5% of total securitised assets, serve as a liquidity reserve for securitisation vehicles but also as collateral to synthetic securitisation transactions.

# I | 3 The development of securitisation in France and reform of the legal framework

In France, the development of securitisation over recent years has gone hand in hand with the modernisation of the legislative framework surrounding securitisation vehicles.



Since the French government Decree of 13 June 2008, the assets of securitisation schemes may consist of:
 Existing or future receivables under French or foreign law, either performing or distressed, of a fixed or an unfixed value (Articles R214-93 and 94 of the French Monetary and Financial Code, hereafter the "CMF");

<sup>·</sup> Cash under the conditions defined by Article R214-95 of the CMF;

Assets transferred in the framework of the creation or the constitution of collateral, or of a guarantee, in accordance with Article L214-43 of the CMF;

<sup>•</sup> Financial futures, with the maximum loss not exceeding the value of the asset (Article R214-99 of the CMF).

#### BOX 2

#### Transfer of receivables in securitisation transactions

Receivables may be transferred within the framework of a light procedure which avoids the formalities provided for in Article 1690 of the French Civil Code. Article L 214 43 of the French Monetary and Financial Code states that "the acquisition or assignment of receivables is effected simply upon delivery of a transfer deed, the terms and mode of which are established by decree, or by any other method of transfer under French or foreign law".

This sale becomes enforceable against third parties on the date affixed on the transfer deed when it is handed over regardless of the receivables' origination date. Future receivables may thus be transferred to a securitisation scheme.

The transfer of receivables in the framework of securitisation differs from trade discount or factoring operations by its recourse to an external ad hoc vehicle that acquires the transferred receivables via market financing. In addition, the acquisition of the receivables by a securitisation scheme generally dissolves any link with the originator who is not liable in the event of obligor default on the receivables transferred; this principle is not always written into factoring operations.\(^{1}\)

Inversely, in trade discount or factoring operations, the company sells a certain number of receivables directly to the bank or to the factoring agent (so that the obligors of these receivables thus become debtors to the bank or to the factoring agent). In exchange, the company receives funds that constitute an advance on the transferred receivables, from which a commission is deducted by the bank or the factoring agent. Unlike securitisation transactions, the likelihood of repayment is assessed not just with regard to the quality of the transferred receivables but also to the solvency of the transferring company, which, in the event of default by the obligor(s), will be called upon to reimburse the advance made by the bank or factoring agent.

1 Factoring is often a delegated management activity whereby the factoring agent is subrogated in the rights of the client and therefore carries the default risk instead of the client. In the case of factoring agents' collection activities, the default risk is still entirely carried by the client.

Thus although the number of securitisation vehicles has remained relatively stable (close to 200 at 30 June 2012), their population has very substantially changed in terms of legal structure with securitisation funds (FCTs) and ABCP conduits progressively replacing securitisation special purposes vehicles (FCCs).

#### Securitisation schemes

Securitisation schemes<sup>5</sup> were created by the Order of 13 June 2008 and the Implementing Decree of 17 July 2008 which reformed the previous legal framework.

Two types of legal status are provided for: the first is a "securitisation company" with a legal personality and the second is a securitisation fund *(FCT)* that is managed on a co-ownership basis. The latter type of scheme (the *FCT*), by far the majority in France, replaces the special purpose vehicles *(FCCs)*, which are not being renewed after their extinction.

Both types of scheme are managed by a specially approved portfolio management company or by the management company of a special purpose vehicle *(FCC)*. The securities issued by these schemes may be offered publicly and may be admitted for exchange on a regulated market or an organised multilateral trading system.

According to Article L214-42-1 of the French Monetary and Financial Code, the purpose of these securitisation schemes is "to be exposed to risks, including insurance risks, via the acquisitions of receivables or the conclusion of contracts to create financial futures or to transfer insurance risk" and "to completely finance or cover these risks by issuing shares units or debt securities, by concluding contracts to create financial futures or transfer insurance risks, or by recourse to borrowing or to other forms of resources".

#### Other securitisation vehicles

Securitisation vehicles also include ABCP<sup>6</sup> conduits. These are established as limited liability companies operating under ordinary law with the purpose of issuing commercial paper to finance a purchase of trade receivables or asset-backed securities. To accomplish their programmes, the conduits are usually sponsored by a major bank that will arrange a back-up borrowing facility to be used, as required, to ensure the timely repayment of maturing commercial paper. These liquidity lines are supposed to cover the liquidity risk and not the credit risk.

<sup>5</sup> They are regulated by Articles L214-42-1 to L214-49-14 and R214-92 to R214-114 of the CMF.

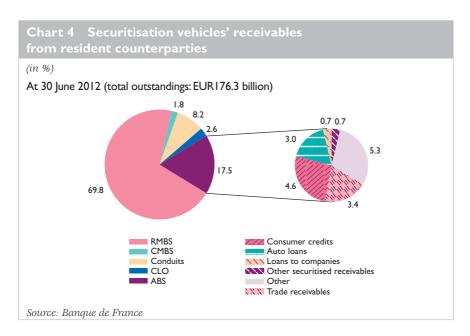
<sup>6</sup> Structured investment vehicles (SIV) are often confused with ABCP conduits. In common with SIVs, they are off-balance sheet funds that are legally independent from the institutions that sponsor them. They also invest in long-term assets which they finance with short-term resources (issue of commercial paper). They differ however by their limited liquidity line (to 10 % of the value of the assets they hold, compared with 100% in ABCP conduits), which exposes their investors to liquidity risk.

# 2 Role of securitisation in financing the French Economy

Securitisation contributes to financing the economy. In France, it has played a historical role in financing the residential housing market.<sup>7</sup>

At 30 June 2012, out of total assets of EUR 219.8 billion on the balance sheets of French securitisation vehicles, the outstandings of securitised receivables that benefited from market financing (via securities issuance) stood at EUR 201.6 billion, of which receivables from French resident counterparties accounted for EUR 176.3 billion. Of the latter amount, 72% represented the mortgage market and essentially home loans: 69.8% consisted of residential mortgage-backed securities (RMBS). The other 2.2% represented commercial mortgage-backed securities (CMBS).

A much smaller proportion (17.5%) consisted of asset-backed securities, representing different types of receivables: consumer credits, trade receivables, auto loans. The other securitised receivables from French residents generally concerned conduit assets (8.2%) and portfolios of trade receivables or of collateralised loan obligations (CLOs)<sup>8</sup> originating mainly from the banking sector.



<sup>7</sup> In addition to the dedicated structures set up to finance the property market such as mortgage credit institutions, the home financing funds (CRHs), and, since the Act of 22 October 2010, the home financing companies (SFHs), whose operations resemble the mechanism used in securitisation with the issue of covered bonds, but which are outside the scope of the Banque de France's data collection on securitisation.
8 See the glossary below for a more detailed explanation of these products.

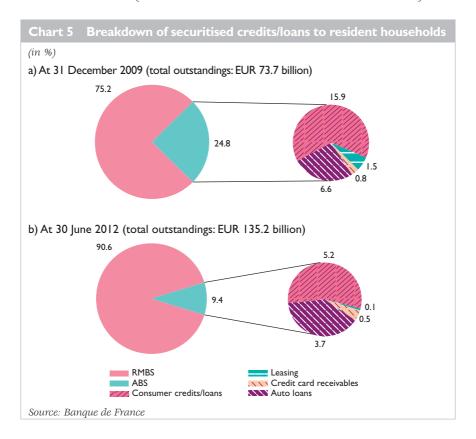
Receivables securitised in France therefore contribute primarily to the refinancing of loans to resident households and non-financial companies (NFCs).

# 2 | I The bulk of French securitised assets represented resident household receivables...

As at 30 June 2012, 77% of the receivables acquired by securitisation vehicles operating under French law represented loans to resident households.

Between end-2009 and mid-2012, the volume of securitised household loans nearly doubled from EUR 73.7 billion to EUR 135.2 billion. This increase essentially reflected the increased mobilisation of residential mortgages to refinance the banks in the context of tighter liquidity conditions on the interbank market towards the end of 2011.

On the other hand, over the same period, the securitisation of consumer credits contracted, although on a smaller scale, from EUR 11.7 billion to EUR 7.1 billion (i.e. 5.2% of total securitised household loans).



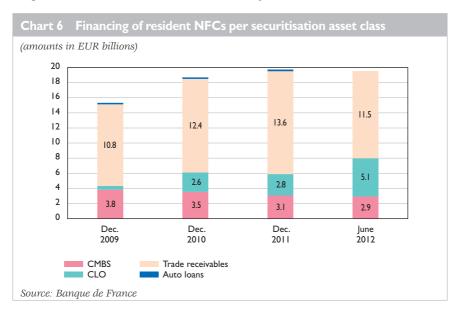
# 2 | 2 ... but also contributed to the refinancing of NFC receivables

Securitisation represents an additional source of refinancing for trade discount and factoring: non-financial companies (NFCs) transfer their trade receivables to a securitisation vehicle which obtains refinancing from investors.

The total value of securitised trade receivables transferred by NFCs grew from EUR 10.8 billion at end-2009 to EUR 13.6 billion at end-2011, and then fell back to EUR 11.5 billion at 30 June 2012.

The securitisation of NFCs' trade receivables nevertheless encounters two obstacles:

- the amount of receivables to be securitised has to be relatively large to amortise the costs associated with this type of financial structure. The majority of SMEs therefore prefer to obtain cash via trade discounting or factoring rather than via securitisation;
- securitisation does not always remove the originator's receivables from its balance sheet. For example, if an agreement exists for the management of the securitisation vehicles in the interests of the originator, the transferred assets may be re-consolidated<sup>9</sup> as the



<sup>9</sup> The conditions under which the securitisation vehicle (and its risks and proceeds) can be included within the originator's consolidation scope are detailed in Opinion No. 2004-D of 13 October 2004 by the Emergency Committee of the National Accounting Board (since 18 January 2010, this body has been superseded by the Accounting standards Authority).

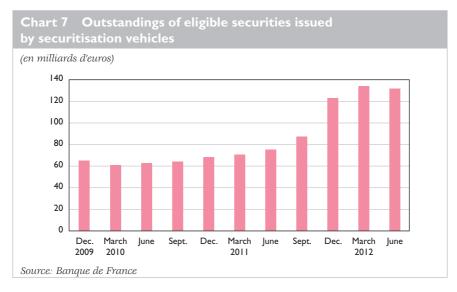
securitisation scheme cannot, in this case, be considered as totally separate from the originator.

These obstacles, particularly the high cost of securitisation for an SME, may however be circumvented by the implementation of CLO-type structures that pool together the receivables of several SMEs, allowing economies of scale. In effect, receivables securitised through CLO structures rose from EUR 0.5 billion at end-2009 to EUR 5.1 billion at 30 June 2012.

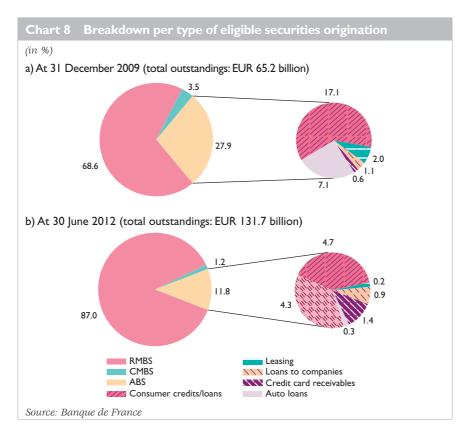
### 2 | 3 Securitisation of loans and bank refinancing

The purpose of securitisation transactions in the banking sector has evolved over time. In the pre-Basel 1 environment, banks generally used securitisation for regulatory arbitrage. The requirements of the Cooke ratio prompted a certain number of credit institutions to seek regulatory capital relief by taking parts of their loan portfolios off their balance sheets. Under the Basel II prudential regime, the implementation of the McDonough<sup>10</sup> ratio tightened the prudential rules surrounding the securitisation of bank loans.

This prompted credit institution originators to use securitisation more as a source of refinancing. In addition, in the context of the recent financial crises, new types of structures emerged for the recycling of very high quality receivables into securitised assets that could be eligible



<sup>10</sup> The McDonough ratio is defined in Directive 2006/48/EC on the taking up and pursuit of the business of credit institutions and 2006/49/CE on the capital adequacy of investment firms and credit institutions (together forming the Capital Adequacy Directive transposing the Basel II recommendations into European law). This Directive was transposed into French national law by government Decree of 19 April 2007.



as collateral in refinancing operations with the ESCB. The eligible securities issued by securitisation vehicles are often subscribed by the originator banks themselves ("retained securitisation") for refinancing purposes. Indeed, over the period under consideration (end-2009 to mid-2012), the volume of eligible securities issued by French securitisation vehicles doubled from EUR 65 billion to EUR 132 billion at end June 2012.

The substantial increase in volume of eligible securities between September and December 2011 resulted from refinancing operations that were all rated AAA<sup>11</sup> and backed by RMBSs. The share of this type of security in total eligible securities rose from 68.6% at end-2009 (EUR 44.7 billion) to 87% in June 2012 (EUR 114.6 billion). Inversely, the share of eligible ABSs in the pool of eligible securities decreased from 27.9% (EUR 18.1 billion) to 11.8% (EUR 15.4 billion).

<sup>11</sup> Since 1 March 2009, the minimum initial issue rating required for a security to be eligible for ECB refinancing has been raised from "A" to "AAA". Moreover, to remain eligible, the rating must be maintained above "A". Eligible securities issued by a securitisation vehicle are also given an automatic discount of 16%.

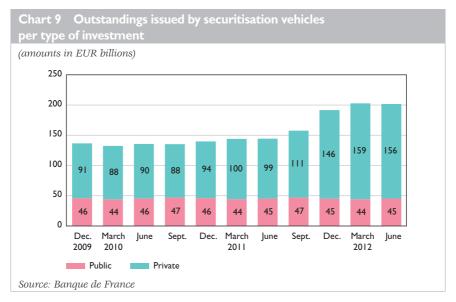
# 3 | Securitisation: an instrument that meets investors' needs

# 3 | I Structuring of securities issued by securitisation vehicles based on investor quality

Securitisation vehicles' liabilities mainly consist of debt securities (92% at 30 June 2012) with the remainder (8%) consisting of deposits and various other financial products (a breakdown that has remained stable since end-2009). The securities issued are mainly long-term (81%) versus 11% short-term (less than one year).

The securities issued may interest different categories of investors with a variety of investment objectives, including professional investors (private placements) and non-professional investors (public offerings). The private placement mainly concerns companies providing third-party investment portfolio management services or qualified investors (sometimes grouped together in limited investment syndicates) on condition that the latter are investing for their own account.

The volume of private placements remained approximately stable at an average of EUR 45 billion over the period under review of reported data, whereas the volume of publicly offered securitised assets rose by 71% to reach EUR 156 billion at the end of June 2012.



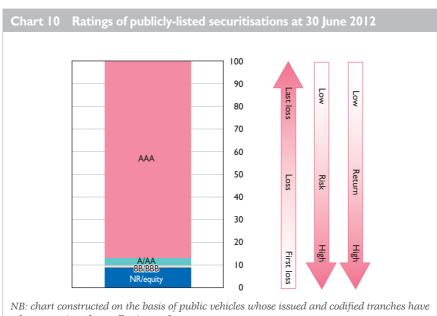
<sup>12</sup> A public offering is defined in the CMF (Article L.411-1) as "an advertisement, regardless of its form or method of dissemination, which contains sufficient information on the conditions of the offer and the securities being offered to enable an investor to decide whether to buy or subscribe to such securities".

### 3 2 Quality of the securities issued and the spread

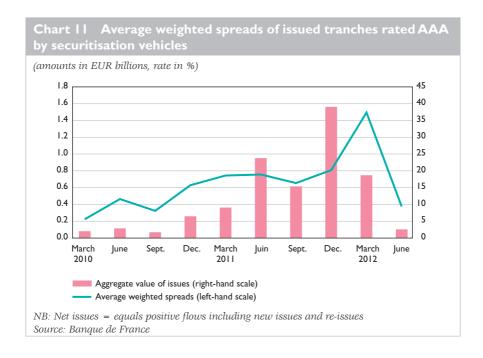
One of the reasons advanced to explain the development of securitisation, apart from the role it plays in financing the economy, is its capacity to satisfy the financial markets' appetite for triple-A rated securities that are considered very high quality (even if this rating originates from a structured finance arrangement mechanism). At 30 June 2012, more than 85% of the public securities issued by French securitisation schemes were triple-A rated. For France, the growth of the issue of triple-A rated securities has been primarily motivated by the need to create a collateral that is eligible for ECB refinancing.

In effect, this result has been obtained by a structuring of securitisation vehicles' liabilities: the securities issued are structured in tranches that are ranked in order of seniority for interest payments and repayment of the principal and inversely for the loss risk and expected yields. The senior tranche has priority over the other tranches for the income generated by the underlying assets. This is followed by one or more mezzanine tranches and lastly by an equity tranche, that is only paid when all the others have been paid. The rating of each tranche depends on the level of risk. It can reach AAA for the senior tranche when the probability of default is very low.

The yield on debt securities issued by securitisation schemes is calculated on the basis of market rate plus a spread. The most frequently used



NB: chart constructed on the basis of public vehicles whose issued and codified tranches have a known rating (data collection and prospectus) Source: Banque de France



market rate is the 3-month Euribor that serves as a benchmark. The spread, expressing the risk cost associated with each tranche of issued securities, is therefore the lowest for the senior tranches.

During the period under review, the securitisation issues almost exclusively consisted of AAA rated tranches. The spread associated with new issues increased relatively sharply reaching 1.5% by March 2012<sup>13</sup> before falling back to 0.4% in June, mainly due to the volume of securities issued rather than to changes in the risk environment: the securities carry a higher spread when the volume of issues is high in order to ensure a maximum level of uptake.

# 3 | 3 Securitisation allows investors to diversify their exposure by accessing other classes of risk

The technique of securitisation, which is highly flexible nowadays, offers investors exposure to a wide variety of asset classes ranging far beyond the traditional securitisation of bank loans. These other types of securitisation transaction are still very much in a minority in France such as synthetic securitisation which allows exposure to the credit risk without the actual

<sup>13</sup> The sharp increase in the spread for this maturity may be explained by the announcement of the downgrade of France's sovereign debt on 13 January 2012.

#### BOX 3

### Securitisation of insurance risk

The twin function of securitisation, i.e. a) pushing the credit risk associated with the securitised assets off their books, and b) access to new sources of financing via the sale of the securities on the capital markets, is also used in the insurance field. Insurance and reinsurance companies can effectively transfer the inherent risk associated with their activities to capital markets and thereby obtain additional refinancing. The coverage by insurance and reinsurance undertakings of major natural catastrophes has, for example, prompted the creation by these companies of a market for catastrophe bonds (catbonds) in order to face potential losses that grew beyond the sector's financial capacity: this means that the financial markets effectively play the role of last resort insurers.

Insurance risk securitisation uses an identical technique to synthetic credit risk securitisation: an insurer transfers the insurance risk to a securitisation vehicle which undertakes to cover its potential loss in exchange for a share of the premium income. to finance coverage of the potential claims, the securitisation scheme issues securities and invests the proceeds in high quality collateral. The yield on these securities is therefore derived from the return on the risk-free investment and from the premiums received from the insured parties.

In France, the Securitisation Order of 13 June 2008, transposing EU Directive 2005/68/CE of 16 November 2005 on reinsurance, provides a specific framework for the securitisation of insurance risk. Under Solvency II, the prudential framework will also allow the development of insurance securitisation by establishing similar criteria for the recognition of reinsurance and securitised assets as technical provisions. Lastly, the new international financial reporting standards (IFRS4) allow the recognition of securitisation instruments as substitutes for reinsurance, as long as they represent a real transfer of the risks.

In France insurers frequently use this type of transaction involving the creation of a special purpose vehicle abroad, but less frequently in the framework of French law. There are also a number of specialised insurance risk securitisation vehicles in other European countries such as Ireland, the UK and Luxemburg.

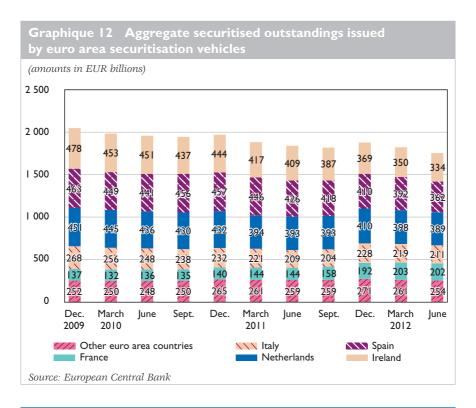
By adopting securitisation, the insurance model is getting closer to the banking model, evolving from a risk accumulation function to a simple "risk intermediation" function. However, insurance is a business that carries very specific risks that if transferred to structures without the requisite skills (i.e. that are not insurance companies per se) could lead to their undervaluation. Moreover, considering the risk of under-valuation, the issue of financial products transferring insurance risks requires greater vigilance in respect of securitised insurance assets held by other insurance companies, as the risk of a mismatch between assets and liabilities increases the total risk.

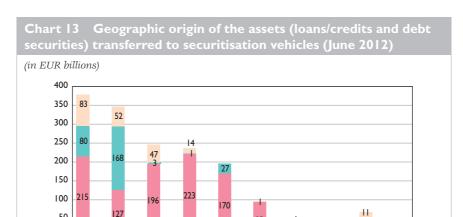
transfer of the receivables. The broadening of the securitisation palette to include sectors other than the banking sector and NFCs will allows investors to obtain exposure to different risks such as insurance risk which has the advantage of being uncorrelated to the risks associated with traditional investment instruments.

In France, the securities issued by securitisation schemes allow exposure to insurance risk since the implementation of the government Order of 13 June 2008 (see Box 3). At 30 June 2012, securitised insurance risks represented total outstandings of EUR 1.1 billion.

# 4 France has a modest position on the European securitisation market

Among the countries of the euro area, France ranks 5th in terms of total issuance of securitised assets by securitisation vehicles. The Netherlands accounts for the largest share of euro area securitisation transactions (with 22.2% of the total face value of securities issued at end-2012), followed by Spain (with 20.6%) and Ireland (with 19%). France's total of EUR 202 billion at end-June 2012 represented 11.5% of total securitised





95

BE

DF

51

LU

43

3

ΑT

Residents Non-residents Geographical location not determined

IT

ES

ΙE

50

0 NL

NB: A finer analysis per counterparty location for the assets transferred to securitisation vehicles (for which a breakdown is possible) i.e. credits/loans and debt securities only, reveals that Ireland, Luxemburg and the Netherlands are not typical cases. In fact, the vast majority (78%, representing aggregate receivables of EUR 51 billion) of the assets securitised by Luxemburg-based securitisation vehicles are backed by non-resident receivables; in Ireland, this phenomenon represents almost half (48% - EUR 168 billion) of the underlying assets; and for the Netherlands, foreign receivables represent nearly 21% of the underlying credits/loans and debt securities (i.e. EUR 80 billion). In France, the share of non-resident counterparties was only 13% (i.e. EUR 27 billion).

FR

Source: European Central Bank, Banque de France calculations.

assets in the euro zone (EUR 1,752 billion) compared with just 6% at the end of 2009. Nevertheless, the volume of securitised assets originated in France by securitisation vehicles has being growing at a relatively dynamic pace whereas overall volumes in the main countries of the euro area have actually contracted.

In addition, it is interesting to note that the proportion of non-residents - whose risk profiles are more difficult to assess - in the loans and debt securities sold to securitisation vehicles is much smaller in France (13%) than in Luxemburg (78%), Ireland (48%) and the Netherlands (21%).

### **Glossary**

### **Asset-backed securities (ABS)**

The term asset-backed security refers to all securitisation instruments other than those backed by property loans. The underlying assets for ABSs include auto loans and credit leasing, credit card receivables, student loans, loans to small companies, franchise loans, etc.

### Commercial mortgage-backed security (CMBS)

Commercial mortgage-backed securities (CMBS) are securities backed by commercial property loans (offices, shopping centres, etc.).

### Collateralised debt obligation (CDO)

A collateralised debt obligation (CDO) is a sub-category of asset-backed security (ABS) in which the underlying assets are receivables from a limited number of institutional (or similar) borrowers (20 to 500) as opposed to traditional portfolios of ABSs where the number is between 500 and 100,000 borrowers (mortgage loans and trade receivables). The majority of CDOs assets are generated by the banking system and take the form of a portfolio of bonds (collateralised bond obligations or CBOs) or commercial loans (collateralised loan obligations or CLOs).

#### Originator / seller

The originator<sup>1</sup> of a securitisation transaction may be a bank or a company. The originator can also play the role of the agent for the transferred receivables. In that case, it oversees the transfer of the receivables, manages the cash in the securitisation vehicle and checks that there are sufficient securities issued (in the case of replenishable structures). It ensures that the procedures are followed for obtaining a rating and provides the information required by the supervisory authorities.

#### **Depositor**

The depositor is a credit institution operating in an EEA (European Economic Area) member State or in a State listed by a Decree issued by the Minister for the Economy, or any other institution authorised by that Minister (Article L214-49-2 of the *French Monetary and Financial Code* – CMF) that is responsible for the custody of the cash and receivables acquired as well as for the control of the conformity of the decisions taken by the management company (Art. L214-49-7 of the CMF).

I Initially reserved for credit institution, securitisation operations were opened to all commercial companies by the Act of 2 July 1998.

### **Special purpose vehicle (FCC)**

The special purpose vehicle (FCC) was created by Act. 88-1201 of 23 December 1988 which laid the initial foundations for securitisation transactions in France. The FCC is set up under the initiative of the company responsible for its management and the depositor (Art. L21449-6 of the CMF). The funds liabilities consist, at all times, of at least two parts (Art. R214-108 of the CMF), each of which has a minimum amount of 150 euro (Art. D214-108-1 of the CMF). Since 13 June 2008, this vehicle has been replaced by the securitisation fund (FCT).

### **Securitisation fund (FCT)**

Since the Order of 13 June 2008, this vehicle has replaced the special purpose securitisation vehicle (FCC). It has the same characteristics and complies with the same implementation formalities as the FCC, but with an extension of its purpose to cover the securitisation of insurance risk.

### **Securitisation company**

The "securitisation company" is established as a limited liability company or as a closed corporation. Its minimum share capital is EUR 37,000 (Art. L224-2 of the *French Commercial Code*). Securitisation companies were created in order to promote the international use of this type of vehicle by lifting the risk of tax penalisation related to the transfer of foreign receivables to a French vehicle. In fact, non-double taxation agreements are only applicable if the transfer is to a tax resident with a legal personality.

#### **Covered bonds**

Like ABSs, covered bonds are financial products that allow the securitisation of certain categories of receivables (essentially residential mortgage loans, receivables from public entities, and sometimes loans for shipbuilding and aircraft construction). However, in the Banque de France's statistical data collection, these covered bonds have two differences from securities issued by securitisation vehicles:

- covered bonds are issued by a credit institution and not by a securitisation vehicle:
- the investor who acquires covered bonds has dual recourse, firstly against the issuer, but also, in case of default, against the cover pool (portfolio of underlying assets), whereas the holder of ABSs only has rights over the cover pool.

### Residential mortgage-backed security (RMBS)

These are securities backed by residential property loans. In France, property loans to individuals are increasingly covered by guarantees and not by mortgages. The annual survey on the residential property financing conducted by the ACP (*Autorité de contrôle prudentiel* – The Prudential Supervisory Authority) found that 62% of residential property loans granted in 2011 were guaranteed by a bank or by an insurance company, versus 27% that were guaranteed by a mortgage or a creditor's lien.

### **Management company**

The management company in a securitisation transaction must be a portfolio management company, as defined in Article L532-9 of the CMF, or a special purpose vehicle (FCC) management company as defined in Article L214-48-1 of the same code. In addition, the securitisation management company, unless exonerated under the terms of Article R214-101-1 of the CMF, must be authorised for that activity by the AMF (*Autorité des marchés financiers* – The Financial Markets Authority) (Art. L214-49-1 of the CMF).

# **Equilibrium exchange rate and competitiveness** within the euro area

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The external imbalances between major countries and within the euro area have brought back to the fore discussions about the rebalancing between surplus and deficit countries and about the focus placed on competitiveness and one of its instruments or indicators: the exchange rate. The European Commission decided to use the exchange rate as one of the indicators to be monitored in order to identify excessive external imbalances within the euro area.

In order to better understand the difficulties involved in assessing the competitiveness of an economy via the exchange rate, this paper reviews the different methods generally used to calculate the equilibrium exchange rate. It then analyses developments in these competitiveness measures (price and cost) within the euro area between 1999 and 2012 and highlights the deterioration observed in certain Member States as of 2000.

Key words: equilibrium exchange rate, competitiveness, inflation, euro area

JEL codes: F31, F41, E31

acroeconomic imbalances have been central to international economic debate since the financial crisis. At the global level, the Group of Twenty (G20) has established a framework for member countries to identify and adopt the necessary reforms for global rebalancing in order to ensure strong, sustainable and balanced growth. At the European level, by introducing a set of six legislative measures (the Six-Pack), the European Commission has developed a new procedure for identifying excessive imbalances within the euro area that enables it to act to correct them.<sup>1</sup>

At both levels, the exchange rate is considered one of the key variables to be monitored because it is both a variable in global rebalancing and an indicator of price or cost competitiveness. As a variable in rebalancing, the direction and magnitude of the necessary adjustments depend on the value of the equilibrium exchange rate, but there are several definitions of this rate. As a price-competitiveness indicator, monitoring the exchange rate allows us to determine its degree of flexibility. However, it remains difficult to assess whether the adjustments observed are consistent with the country's fundamentals.

Surveillance of exchange rates, and therefore the estimation of equilibrium exchange rates, has always been a core task for the International Monetary Fund (IMF). In the absence of a sole definition of the equilibrium exchange rate, the IMF has developed a methodology that takes into account the different interpretations of this notion.<sup>3</sup> However, the fundamental concepts inherent in the notion of the equilibrium exchange rate, and the resulting analysis by the IMF, remain a source of discussion within the international community.<sup>4</sup>

The IMF also proposes a *de facto* classification of exchange rates to measure their degree of flexibility and assess the extent to which the value of a country's currency is determined by the market. The value of a currency is directly linked to the notion of a country's price-competitiveness: by intervening to devalue its currency, a country can make its products relatively cheaper than those of its partners. This notion of price-competitiveness therefore remains just as relevant in a monetary union because, although the nominal exchange rate cannot adjust, price

- I The Six-Pack comprises the following:
  - as regards budget policy: (i) enhanced budget surveillance and economic policy coordination, (ii) clarification of implementation of the excessive deficit procedure, (iii) budget surveillance in the euro area and (iv) requirements for the financial framework of the Member States;
  - as regards macroeconomic imbalances; (v) prevention and correction of macroeconomic imbalances and (vi) enforcement measures to correct excessive macroeconomic imbalances in the euro area.
- 2 This article focuses on the most widely-used aggregate measures of competitiveness and does not address the problems inherent to these measures (like the choice of deflators or their lack of accuracy).
- 3 This assessment framework evolves in line with the macroeconomic and financial changes observed, as well as with the introduction of more reliable and sophisticated estimation techniques. For example, the IMF is currently working on a new assessment method that will replace the one used by the Consultative Group on Exchange Rate Issues (CGER), as mentioned in Lee et al. (2008). The question of equilibrium exchange rates is of course older; for a discussion of the concepts, see for example Driver and Westaway (2005), or Bussière, Chortareas and Driver (2003).
- 4 Abiad et al. (2009) show that CGER interest rate misalignments often forecast the direction of currency movements correctly, but they are systematically overestimated for undervalued currencies and underestimated for overvalued currencies.

levels in each country continue to change, which in turn changes the relative price of goods. This is why one of the indicators used by the European Commission, in its attempt to identify excessive imbalances, measures changes in relative prices within the euro area.<sup>5</sup>

For a better understanding of the discussions surrounding exchange rate assessment, the first part of this article examines the most widely-used methods and their limitations. These methods to measure competitiveness are applied to the eleven initial members of the euro area. The dispersion of the results suggests that it is necessary to consider all methods when valuing a currency. The second part focuses on the exchange rates observed and analyses their development within the same group of countries over the past twelve years. These competitiveness measures (price and cost) show a net deterioration of certain countries as of 2000, illustrating the importance of exchange rate surveillance within the euro area.

## I | Rebalancing variable: assessment methods

### I | I The real effective exchange rate

The real effective exchange rate (REER) is the most widely used measure when assessing a global value for a currency, as it reflects the position of the currency of one country in relation to that of its main trading partners.

The REER of country i is calculated using the following formula: 
$$REER_i = \prod_{j \neq i} \left( e_{ij} \frac{IPC_i}{IPC_j} \right)^{w_{ij}}$$

where  $e_{ij}$  is the bilateral nominal exchange rate between countries i and j,  $CPI_{ij}$  and  $CPI_{ij}$  are the respective consumer price indices of the two countries, and  $w_{ij}$  is the weight allocated to the currency of country j in trade between the two countries and represents the magnitude of their trade linkages, with  $\sum_i w_{ij} = 1.6$ 

This indicator is then compared to its equilibrium level, which is a benchmark level (to be estimated) in line with the economic fundamentals of the relevant country, in order to measure any potential misalignment.

<sup>5</sup> For these different measures of competitiveness, only the deflator changes: consumer price index for price competitiveness and unit labour cost for cost competitiveness.

<sup>6</sup> The weighting system is double weighted by trade in manufactured goods that takes account of imports, exports and competition of third countries on France's export markets.

Among the different methods for assessing the exchange rate, four are generally used. They can be divided into two types of approach:

- methods that indirectly deduce the misalignment of the exchange rate from a relationship with the current account (the "Macroeconomic Balance" and "External Sustainability (ES)" approaches);
- and those that estimate it directly using information on relative prices (the "Behavioural Equilibrium" and "Purchasing Power Parity" approaches).

### 1 2 Current account approaches

These methods proposed by Williamson (1983 and 1994) are both descriptive and normative.

### The macroeconomic equilibrium exchange rate

In the macroeconomic approach, the fundamental equilibrium exchange rate (or FEER) is explicitly compatible with the internal and external balance of the economy. Over the medium term, the economy is assumed to be at full employment (internal balance) and the foreign trade balance to be characterised by a sustainable current account position vis-à-vis other countries (external balance). In practice, this approach requires a full employment output level to be defined for the country and its trading partners, a sustainable current account position to be identified and a balance of trade equation to be estimated.

Misalignment of the REER is obtained indirectly by: 
$$^{7}$$

$$misalignment = \frac{REER - REER^{norm}}{REER^{norm}} = \frac{ca - ca^{norm}}{\varepsilon}$$

where ca is the current account to GDP ratio and  $\epsilon$  the long-term elasticity of the current account to the exchange rate which depends on import and export price elasticities.

This approach raises numerous theoretical and empirical difficulties. It is a coordination model in which countries must agree on consistent trade balance objectives that sum to zero at the global level. In practice, the choice of the sustainable level for the current account balance is open to debate. This approach is based on a static analysis and is subject to assumptions about the internal balance: the labour market must be in

<sup>7</sup> See Lee et al. (2008) for a detailed explanation of this equality.

equilibrium and price and wage adjustment dynamics are not taken into account. Finally, the resulting exchange rate misalignment, derived from the current account deviation from its norm, depends on the trade elasticities used (and the corresponding  $\varepsilon$ ).<sup>8</sup> All these difficulties result in a high degree of uncertainty as to the exchange rate equilibrium level and the corresponding misalignment.9

### The external sustainability method

The External Sustainability (ES) method is also based on the concept of the current account norm, however it derives its benchmark level from accounting principles in order to maintain the external debt at its sustainable level. The benchmark level at which external debt must be stabilised is generally the last observed value.

The current account to GDP ratio (canom) stabilising the net foreign asset position at a given level (bnorm) is defined by:10

$$ca^{norm} = \frac{g + \pi(1 + g)}{(1 + g)(1 + \pi)} b^{norm}$$

where g is the potential growth rate in GDP and  $\pi$  long-term inflation.

Misalignment of the REER is calculated as in the previous case.

In addition to the arbitrary choice of the benchmark external debt level, this approach is also highly sensitive to the choice of trade elasticities and the potential growth level used.

### 1 | 3 Relative price approaches

### The behavioural equilibrium exchange rate

The behavioural equilibrium exchange rate (BEER) developed by MacDonald (1997) and Clark and MacDonald (1998) is a composite econometric model. Unlike the previous approaches that aim to explain how the REER is determined using a theoretical model, the BEER shows changes in the REER in a mainly empirical manner. It seeks to identify the long-run relationships (cointegration) between the REER and the fundamental variables of the economy (net external assets, relative productivity, government spending, etc,) in order to determine its equilibrium level.

<sup>8</sup> Imbs and Méjean (2010) show large variations in elasticities, depending on the assumptions used to estimate them.

<sup>9</sup> This uncertainty as to both the "sustainable" level of the current account and the elasticities is discussed in Bussière et al. (2010). 10 See Lee et al. (2008) for a detailed explanation of this equality.

This dynamic approach explicitly shows the long-run determinants of the REER. However, their theoretical analysis and that of their misalignment is largely performed outside the model (contrary to that of the Fundamental Equilibrium Exchange Rate — FEER).

The equilibrium REER is determined by:  $log(REER^{eq}) = \sum_{k=1}^{N} \hat{\beta}_k x_k$ 

where  $\hat{\beta}_k$  are estimated cointegration coefficients, and  $\sum_{k=1}^{\infty} \hat{\beta}_k x_k$  the long-run relationship between the REER (its logarithm) and its determinants (the fundamentals of the economy).

Misalignment of the REER is obtained directly by:  $misalignment = log(REER) - log(REER^{eq})$ 

Given that the BEER is primarily an econometric model, this approach is subject to the usual robustness issues, meaning that the estimated long-run relationship is sensitive to the choice of variables, the group of countries and the period.

### **Purchasing Power Parity**

The other approach based on relative prices is Purchasing Power Parity (PPP). Proposed by Cassel (1918), this measure of exchange rate misalignment is one of the oldest. It states that, over long periods of time, exchange rates adjust to offset the differences in inflation rates. Balassa (1964) and Samuelson (1964) built on this theory to show that a large part of the long-run movements in the real exchange rate can be explained by differences in productivity. Indeed, the Balassa-Samuelson effect gives a trend appreciation in real exchange rates of the least developed countries during their economic catch-up process, driven by relative productivity gains in the tradable goods sector.

In order to model deviations from purchasing power parity a preliminary regression of the relative price measure on the fundamental determinants (per capita income) is necessary to calculate the misalignment, i.e. the difference between the current relative price and projected relative prices. Contrasting with the BEER approach, the measure of relative prices used here is not based on a representative sample of the competition (REER) but on a measure of the relative cost of living in relation to a base country. Consequently, it is not necessarily a highly representative indicator of price competitiveness, but does allow comparison of cost of living.

The PPP approach generally considers the relationship between the measure of relative prices (PPP exchange rate) and the per capita income. This estimated relationship is sensitive to the time period used and the choice of countries. <sup>11</sup> Moreover, the use of a single explanatory variable also increases the risk of ignoring the impact of important explanatory variables, thereby causing bias in the identification of exchange rate misalignment. <sup>12</sup>

## 2 Differences in estimated misalignments

### 2 | I Illustration for the euro area

There is considerable uncertainty surrounding equilibrium REER estimates. Indeed, the calculations based on these four approaches require the empirical relationships to provide satisfactory characteristics of the underlying economy. Estimates of the BEER, the FEER and external sustainability also depend on assumptions regarding the equilibrium values of several macroeconomic variables.

Salto and Turrini (2010) highlighted the differences in the misalignment obtained depending on the method used. They considered the four methods (FEER, ES, BEER and PPP) within the euro area for different periods:

- 1986-1991: European Exchange Rate Mechanism;
- 1992-1998: post-Maastricht Treaty;
- 1999-2003: moderate imbalances:
- 2004-2007: large imbalances;
- 2008-2009: the financial crisis. 13

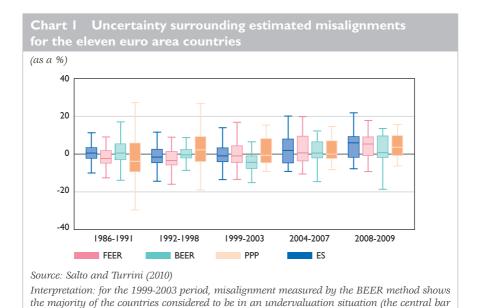
Chart 1 summarises the distribution of the deviations (25th, 50th and 75th percentiles) for each method within the euro area. Overall, the results are qualitatively and quantitatively different in level and dispersion. It is interesting to note, however, that since the creation of the euro, the misalignments measured by the current account methods (FEER and ES) provide consistent results for over half of the REERs considered (an overvaluation). For the 2008-2009 period, the four methods converge and indicate that the majority of the REERs considered are overvalued.

<sup>11</sup> Lopez et al. (2005) discuss this point, and more specifically the importance of modelling the autocorrelation.

<sup>12</sup> This divergence between the estimated results and the theory is known as the PPP puzzle, according to Rogoff (1996).

<sup>13</sup> For the euro area (E11), the authors study the following countries: Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Netherlands, Portugal and Spain.

half of the countries considered (central bar close to 0).



However, the misalignments are quantitatively different: the FEER and ES approaches suggest an overvaluation of between 5% and 18%, and 6% and 23% respectively, while it is between 1% and 15% for the BEER approach and 4% and 16% for the PPP approach. This makes it difficult to choose a path and a timetable for the adjustments required to restore balance.

is clearly below 0), while the FEER method suggests a situation close to equilibrium for almost

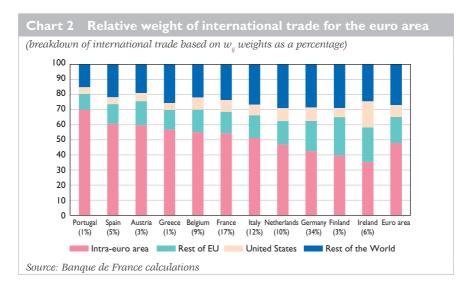
This illustration allows us to highlight two essential points in the analysis of equilibrium exchange rates: the different approaches used for determining the equilibrium exchange rate produce greatly varying results. Consequently, all exchange rate assessments must consider all these approaches in order to take account of the conceptual differences in the notion of equilibrium exchange rate and misalignment.

In the euro area, all four methods identify an overvaluation in the case of over 50% of the REERs observed at the beginning of the financial crisis.

# 3 Developments in the price and cost competitiveness indicator: what do we observe?

### 3 | I Importance of intra-euro area trade

The positioning in terms of price and cost of each of the countries within the euro area is extremely important as the rest of the euro area is their



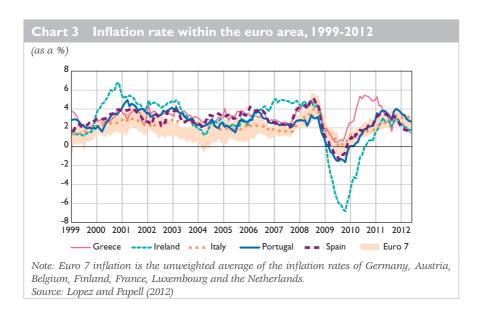
biggest trading partner. Chart 2 shows that more than 50% of the trade of Portugal or Greece is intra-euro area. For Germany, which alone accounts for over 30% of intra-euro area trade, this trade amounts to 43% of its foreign trade, while trade with the European Union totals 63%. Any rebalancing of the REER for euro area countries therefore primarily implies a realignment of relative prices and costs, i.e. the differences in inflation and unit labour costs between Member States.

## 3 2 Developments in price competitiveness between 1999 and 2012?

Lopez and Papell (2012) show that, statistically, inflation rates within the euro area have displayed common behaviour since 1999, with the exception of the 2009-2010 period. Their analysis also highlights two important points:

- the stable relationship between Member States' inflation rates does not imply that these rates are identical;
- in order to identify potential imbalances, not only must the euro area inflation rate be observed, but also that of individual Member States.

Over the 1999-2008 period, average euro area inflation was very close to 2%. However, during that period, Ireland, Greece and Spain recorded significantly higher levels of inflation than the other Member States, causing a loss of competitiveness in terms of relative prices in relation to the rest of the euro area. Chart 3 also shows that from 2009 to 2010,

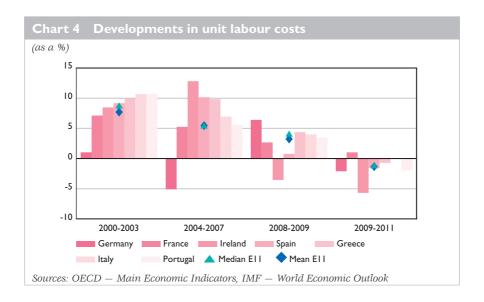


Ireland's inflation rate fell sharply before converging once again towards the group trend. Spain's inflation rate followed a fairly similar path, although to a lesser magnitude, while inflation in Greece continued to be the highest in the euro area up to the end of 2011.

## 3 | 3 Developments in cost competitiveness between 1999 and 2012?

The competitiveness gap in terms of prices for these countries can also be observed in costs. Developments in unit labour costs in the euro area economy as a whole are shown in Chart 4 and confirm the marked drop in inflation rates as of 2000 in certain Member States. It also shows that inflation rates rose over the 2004-2007 period: those of Greece, Spain and Ireland increased by over 10% between 2004 and 2007, while euro area inflation rose by 5% on average and those of Germany fell by 5% over the same period. However, only Ireland showed a significantly sharper decline in unit labour costs than the other euro area countries for the 2009-2011 period. Moreover, French unit labour costs remained in line with the euro area average between 2000 and 2009, but differed over the 2009-2011 period, in that they rose by 1% while those of the other Member States fell by 1.3% on average. 14

<sup>14</sup> Gaulier and Vicard (2012) analysed developments in unit labour costs by sector within the euro area



# 4 Are the adjustments likely to result in rebalancing?

If intra-euro area relative prices adjusted in line with estimates of the equilibrium exchange rate, the estimated overvaluation for over half of the euro area for the 2008-2009 period should coincide with a decline in relative prices. In other words, overvalued countries should see a fall in their inflation rate while undervalued countries should see a rise. This gain in price competitiveness should also be reflected in cost competitiveness.

The sharp fall in the Irish inflation rate coincides with an almost 10% fall in unit labour costs in Ireland between 2008 and 2011, confirming the efforts made to rebalance (price and cost) competitiveness. However, for the same period, the rest of the euro area (E11) experienced relatively stable inflation and an average increase in unit labour costs of almost 2% (and a median of over 4.5%). The statistical evidence given by Lopez and Papell (2012) corroborate these observations: the changes observed within the euro area since 2010 are not sufficient to achieve the adjustment in relative prices (costs) required to realign (price and cost) competitiveness within the euro area.<sup>15</sup>

<sup>15</sup> There may be a number of reasons for the divergence observed in the REER of euro area countries. Bussière, Chudik and Mehl (2011) show that the responses of the REERs of these countries to global shocks have converged since the introduction of the euro, suggesting that the shocks causing divergences between their REERs are likely to be country-specific.

The financial and economic crisis has highlighted the dangers inherent to macroeconomic imbalances within the euro area. More specifically, this article focuses on the notion of (price and cost) competitiveness, and shows that Member States rarely act spontaneously to make the changes necessary for rebalancing.

In order to prevent this situation, the euro area has introduced a set of six measures, the Six-Pack, to enhance the economic governance of the European Union. The package came into force on 13 December 2011 and one part of it proposes a new surveillance mechanism aiming to prevent and correct macroeconomic imbalances within the euro area. Among the ten indicators used in the scoreboard of this early-warning system, real effective exchange rates and unit labour costs are used to identify competitiveness gaps. <sup>16</sup> This legislative package also provides for the possibility of imposing financial sanctions on Member States that do not follow the EU recommendations.

<sup>16</sup> The other indicators are the current account balance, the net international investment position, export market share, private sector debt, credit to the private sector, general government debt, housing prices and the unemployment rate.

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# Macroeconomic and financial vulnerability indicators in advanced economies

Summary of the conference of 13-14 September 2012 organised by the Banque de France and the University of Strasbourg

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On 13 and 14 September, the Banque de France and the University of Strasbourg co-organised a conference on macroeconomic and financial vulnerability indicators in advanced economies. The conference, the aim of which was to examine surveillance systems and vulnerability indicators designed to help anticipate crises and their propagation, was organised around four main topics: Banking risk and macroprudential policies, causes of instability on financial and sovereign bond markets, fiscal vulnerability detection mechanisms, new economic vulnerability alert systems. The conference provided an opportunity for researchers and professionals to exchange views on a combination of theoretical and empirical studies. This article summarises the main points developed during the presentations and discussions; notably, the elaboration of a regulatory framework allowing the identification and prevention of situations of vulnerability in the real economy as well as in the financial sector; the introduction of new alert systems based on leading indicators; the understanding of systemic crises, the causes of global imbalances and their interdependencies, the role of interventions by public authorities as a stabilising or destabilising factor.

Key words: Banking risk, macroprudential policy, financial instability, detection tools

JEL codes: C23, E44, E62, G01, G21, G28, H63, O40

I The detailed programme of the conference and a selection of the papers presented may be obtained from the Banque de France website: http://www.banque-france.fr/economie-et-statistiques/la-recherche/seminaires-et-colloques/indicateurs-de-vulnerabilite-macroeconomiqueset-financiers-dans-le-s-economies-avancees html

n 13 and 14 September 2012, the Banque de France and the University of Strasbourg co-organised² a conference on macroeconomic and financial vulnerability indicators in advanced economies. The aim of the conference was to examine surveillance systems and vulnerability indicators designed to help anticipate crises and their propagation. This conference brought together researchers from universities, central banks, European and international institutions as well as financial market professionals. The participants debated governance reforms underway in Europe, fiscal policy indicators, the modelling of vulnerability indicators, global imbalances and the detection of international crises. The conference was organised around four topics: banking risk and macroprudential policies, causes of instability on financial and sovereign bond markets, fiscal vulnerability detection mechanisms, new economic vulnerability alert systems.

The opening address was given by Claude Diebolt, Director of the *Bureau d'Économie Théorique Appliquée* (BETA), and Christian Pfister, Deputy Director General of Economics and International Relations at the Banque de France. Both expressed their satisfaction regarding this second collaboration between the two institutions,<sup>3</sup> underlining the importance of the topics discussed in a context where public debt crises seem increasingly linked to imbalances of a more global nature, both financial and macroeconomic. Their potentially systemic nature amply justifies research into a governance framework that would help prevent their propagation and into the construction of vulnerability indicators aimed at preventing these crises.

These two aspects provided the skeleton for the presentations by the two guests speakers, Paul De Grauwe of the London School of Economics and Francesco Zollino of the Bank of Italy's Macroeconomic Forecasts and Monetary Policy Department.

Paul De Grauwe began by highlighting the difficulties encountered by countries like Ireland, Italy, Spain and Portugal which are currently seriously affected by a liquidity crisis that threatens to render them insolvent due to self-fulfilling dynamics. In fact, these countries issued public debt in a currency over which States have no control, which, from the point of view of the financial markets, seems to signal the absence of a "lender of last resort" in the event of repayment difficulties. This situation can generate self-fulfilling prophecies because euro area countries are prey to investor behaviour likely to erode confidence in these countries' repayment capacity. In such circumstances, unexpected capital outflows can cause spikes in interest rates. Indeed, the banks are confronted

<sup>2</sup> The organisers were the Directorate General for Economics and International Relations of the Banque de France, via its Public Finance Policy Analysis department and the University of Strasbourg's Bureau d'Économie Théorique Appliquée (BETA).

<sup>3</sup> In September 2010, a first conference co-organised by the two institutions ("New challenges for public debt in advanced economies") took place in Strasbourg.

with the same phenomenon, which according to Paul De Grauwe explains the correlation of liquidity crises with fiscal solvency crises. As soon as one member country encounters repayment difficulties, its sovereign bond yields rise, prompting other countries to adopt austere fiscal consolidation policies that can lead to recession and solvency problems. This scenario is reminiscent of the situation in which a certain number of emerging countries found themselves during the 1990s. One similarity is related to the fact that these countries accumulated foreign currency debts.

In the theoretical models, self-fulfilling prophecies generally lead to a co-existence between "good" and "bad" balances. The latter generally characterise a loss of financial market confidence vis-à-vis governments that can then be forced to adopt austerity measures to repair investor confidence. But in the meantime, production falls and unemployment rises. On the other hand, the good balances reflect a context where investors buy public debt at low interest rates in the belief that it has a low default risk. In this case, States are not pushed into tight fiscal policies and can even stimulate economic growth. So how do we eliminate the "bad" balances? Paul De Grauwe sees three types of policy. In the short term, the role of the central bank as lender of last resort represents a key element. Of course, central bank interventions could themselves generate concern if perceived as inflationary or as jeopardising the solvency of the central bank itself. In the medium term, governments must implement structural policies (particularly the reduction of global imbalances). In the long term only, governments should implement fiscal consolidation measures to reduce public debt levels so as to prevent default crises from emerging.

Thus, according to Paul De Grauwe, there is a sequencing of policy implementation that would allow States to avoid public debt, financial market and economic crises.

Franscesco Zollino focused his talk on the necessary progress to reduce global macro-economic imbalances. The European sovereign debt crisis has in effect revealed weaknesses in the euro area's institutional framework and particularly in the form of non-compliance with the fiscal rules and a disconnection between its fiscal balance targets and its external balance targets. It has also revealed the absence of mechanisms for coping with major financial crises like those the euro area has been facing. The elimination of these weaknesses is one of the euro area's major governance challenges over the coming years. The difficulty of this challenge lies in the fact that these imbalances have become systemic due to the role that the bank lending channel and the bank balance sheet channel play in the emergence of current account crises. One major difficulty is that *a priori* we do not have objective methods for quantifying imbalance alert thresholds that could be integrated into dashboard monitoring indicators. Moreover, there are major differences in the ways these imbalances manifest themselves

from one European country to another. For example, it is not clear that a reduction of Spain's budget deficit would resolve its current balance of payments problems. In fact, it should be noted that before the crisis, compliance with the Stability and Growth Pact criteria actually reflected private sector over-spending. This is not the case for Germany which manages to prevent any excessive deterioration of its fiscal balance while posting a current account surplus.

In view of these difficulties, Franscesco Zollino proposes that the interdependencies between the major macro-economic balances should be given greater importance in the new process of European governance.

While we all recognise the global nature of the crisis and the potentially destabilising role of financial markets, the problems encountered by advanced economies have also stemmed from difficulties in anticipating recent shocks. The construction of new indicators is therefore a prerequisite for the proposal of new and effective regulatory frameworks, which, in turn, means that the causes of financial and economic vulnerability need to be identified in all their dimensions. The approach in terms of global imbalances would appear to be the right one, particularly given the interdependence of financial markets. Hence, for example, as far as public debt is concerned, its accumulation cannot be uniquely attributed to fiscal policy, its dynamic being so closely related to the evolution of money and financial markets.

The conference discussions and presentations then focused on four aspects.

The first theme discussed was that of the role played by banking risk in triggering global imbalances. It would appear that the banking sector is a transmission channel for liquidity and solvency shocks. However we may also ask whether the central bank interventions to calm financial markets did not in themselves have a destabilising effect via interpretations of the signals that such interventions transmitted. The second theme concerned the causes of financial and public debt market instability, with the discussions highlighting the need to differentiate between micro-economic and macro-economic factors. The last two themes concerned fiscal vulnerability indicators, both from the viewpoint of the tools and of the logic that permits their analysis through the prism of global imbalances.

### I | Banking risk and macroprudential governance

At the height of the recent financial crisis, regulators' attention was focused on assessing the solidity of the area's banking sectors. Two concepts emerged as being key to this endeavour: a "bottom-up" micro-economic approach and a "top-down" macroprudential approach. In the first case, the objective is to

assess the financial health of the individual banks and financial institutions, notably those whose difficulties would lead to systemic risk for the financial system as a whole. In the second case, macro-economic indicators are used first (for example, the ratio of credit to the economy in the different phases of the business cycle) and then the question of how to share the burden of adjustment between the banks is examined. The conference also provided an opportunity to discuss studies in this field recently conducted by the International Monetary Fund (IMF). Ferhan Salman<sup>4</sup> (IMF) presented a new tool allowing the detection of financial stress situations from bank balance sheet data by focusing on three systemic risk spillover factors, i.e. sovereign risk, overall risk aversion and the country-specific macro-economic indicators. Camelia Minoiou<sup>5</sup> (IMF) presented a study on the transmission of liquidity shocks during the 2008-2009 crisis via the international banking channel. Her study is based on individual bank loan data (loan analytics) for the period January 2006 to March 2010. The transmission of liquidity shocks could be explained by the very high level of bank dependence on wholesale markets. Outside crisis periods, banks' balance sheets showed an increase in loans raised on these markets; but over the 2008-2009 period, lending conditions tightened and credit institutions with inadequate reserves found themselves in situations of financial distress. The authors suggest that banks' dependence on these markets could be used as a leading indicator of financial vulnerability.

A central banker's point of view on these questions was provided by Julia Giese<sup>6</sup> from the Bank of England. According to the study presented, macro-economic indicators such as credit/GDP ratios or the change in relative real estate prices are good leading indicators of a financial crisis. The study proposed by the BoE is based primarily on the detection of banking crises in the United Kingdom over the last four decades. The authors conclude that targets on these indicators should be integrated into monetary policy rules used by central bankers. In applying these tools to the case of the United Kingdom, the authors show that the Bank of England could have tried to avoid certain crises in the past. They recommend including composite targets into the functions of monetary responses.

According to Frédéric Boissay<sup>7</sup> of the European Central Bank (ECB), systemic financial crises often have an endogenous character related to market imperfection. The author has presented results in support of this idea based on dynamic stochastic general equilibrium modelling (DSGE). The role played by banks in the provision of liquidity to the interbank market is modelled in a detailed way. According to the model proposed, a small negative productivity shock can spread and lead to a financial crisis. The model is calibrated on American data and allows, in particular, the

<sup>4</sup> Heiko Hesse, Ferhan Salman and Christian Schmieder, "Defining integrated risk scenarios to identify financial vulnerabilities".

<sup>5</sup> Camelia Minoiu and Tümer Kaplan, "Liquidity shocks, bank balance sheets, and international lending during the 2007-08 crisis".

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reproduction of certain stylised facts relating to recessions. In particular, the model allows the simulation of longer and deeper recessions when they are caused by financial crises, in coherence with empirical observation.

# 2 Sources of instability on financial and sovereign bond markets

What are the sources of instability on financial and sovereign bond markets? One of the first viewpoints discussed at the conference was that micro-economic risks are key, notably, the financing costs borne by businesses. Alessandro Conciarelli,8 from the Bank of Italy, proposed the addition of a new indicator to the customary financial risk indicators, based on the implied cost of capital (ICC) for companies. This indicator is constructed on the market values of private and public securities, on credit default swap (CDS) rates, on equity volatility and on investor expectations. This battery of indicators allows an assessment of the value of companies. Another possible response is that the behaviour of the players themselves may trigger macro-economic instabilities that were non-existent at the outset. One such example could be the signals that market regulators send out to markets. The conference's papers and discussions were notably focused on the case of central banks. The usual vision is that their intervention calms markets. This viewpoint is questioned by Mark Carlson<sup>9</sup> from the Federal Reserve System who based his analysis on a more sophisticated composite stress indicator than the ones generally used in the literature, and, which simultaneously takes into account pricing risk, uncertainty and market liquidity. He shows that periods of intervention by the US monetary authorities have always coincided with an increased level of financial market stress: recapitalisation of savings banks, interventions to calm markets after 11 September 2001 and during the recent crisis between 2009 and 2010.

However, according to Nadya Jahn<sup>10</sup> from Münster University, this argument can be countered. Based on the example of Germany, she shows that the periods of greater financial sector instability have often coincided with years of reform of the banking system imposed by national and international regulators.

The distinction between micro-economic and macro-economic causes of financial instability is nevertheless problematical if we do not take into account the heterogeneity of the factors triggering crises from one market to another. Antonio Afonso<sup>11</sup> of the Technical University of Lisbon has shown

<sup>8</sup> Alessandro Conciarelli, "Implied cost of capital (ICC) as a new macro-prudential tool".

<sup>9</sup> Mark Carlson, Kurt Lewis and William Nelson, "Using policy intervention to identify financial stress".

<sup>10</sup> Nadya Jahn and Thomas Kick, "Early warning indicators for the German banking system: A macroprudential analysis".

<sup>11</sup> Antonio Afonso, Michael Arghyrou and Alexandros Kontonikas, "The determinants of sovereign bond yield spreads in the EMU".

that this is the case for public debt markets and equity markets. According to his study, macro-economic and fiscal imbalances may well have triggered the European public debt crises, implying that their resolution must involve an improvement of external balances and/or fiscal sustainability, rather than prudential regulations aimed at stabilising the behaviour of participants in CDS or other derivative markets related to public debt.

## 3 Indicators of fiscal vulnerability

Fiscal vulnerability can be assessed using indicators that allow the linkage of global imbalances to one another. For example, yield spreads can be used as leading indicators of the risk of public debt default, just as portfolio effects and balance sheet effects constitute another cause of fiscal crises. Economic literature also mentions the role played by events linked to contingent liabilities, currency market pressure, current account imbalances, corporate solvency problems or financial market liquidity problems. Consequently, the vulnerability of public finances can be just as much related to the factors of fiscal imbalances as to sources of non-fiscal instability. The European institutional framework in place before the crisis under-estimated the importance of the links between external imbalances and public finances. This was a weakness of the Stability and Growth Pact and of the multilateral surveillance mechanism. In fact, the recent crisis has revealed that even countries complying with public deficit and public debt criteria could be subject to credit or asset price bubbles or could have high levels of private debt, all of which translate into the accumulation of external imbalances. That is why reforms were recently introduced, such as the so called six-pack, for example, which provides States with a scoreboard of several warning indicators: the evolution of current accounts, export performances, labour costs, real estate prices, private sector debt, unemployment, etc.. Carlos Cuerpo Caballero, 12 of the European Commission, presented the economic reasons underpinning the choice of these indicators. Sarah Ciaglia<sup>13</sup> from the German Finance Ministry explained that we should avoid focusing exclusively on macro-economic indicators and include risk factors related to financial markets and monetary imbalances. The difficulty is monitoring all these indicators: can a single regulator control the correct functioning of such complex system?

The necessity to integrate elements other than macro-economic indicators into the new fiscal surveillance mechanism was also underscored by Gilles Dufrénot<sup>14</sup> of the University of Aix-Marseille and the Banque de France. He cited the example of France which, during certain periods, managed to artificially

<sup>12</sup> Declan Costello, Carlos Cuerpo Caballero and Jonas Fischer, "Scoreboard for the surveillance of macroeconomic imbalances".

<sup>13</sup> Christian Kastrop, Werner Ebert, Stefanie Wolff-Hamacher and Sarah Ciaglia, "Financial, fiscal and real economic vulnerabilities: Implications for the Euro area surveillance framework".

<sup>14</sup> Marcel Aloy, Anne Péguin-Feissolle and Gilles Dufrénot, "Fiscal vulnerability and financial repression in France since 1950".

resolve its public debt problems through financial repression.<sup>15</sup> Inflationary policies coupled with strategies of maintaining nominal interest rates at very low levels allowed governments to reduce substantially the real cost of public debt. Considering the economic policy measures currently adopted in certain counties, one cannot totally exclude a return to favour of this type of policy.

# 4 What tools to measure the vulnerability of public finances?

In his talk, Matthieu Lequien<sup>16</sup> (Insee) provided an overview of the econometric tools used to measure the vulnerability of a country's public finances. He insisted on the fact that the transversality condition (the notion that the discounted value of anticipated debt in future periods should not explode) does not necessarily indicate the sustainability of public finances *per se* but rather the risk that an investor takes by accepting to finance a State based on observations of how that State has, in the past, adjusted its primary balances to its debt levels. According to the authors, that is why the transversality condition is normally tested on the basis of a fiscal impulse response function where the ratio of the primary balance to GDP depends on the ratio of public debt to GDP, and on other macroeconomic variables such as, for example, the output gap.

But the approach usually used for assessing the vulnerability of public finances has at least three weaknesses. First of all, there is undoubtedly an excessive focus on the long term, whereas States incur debt regularly to refinance debt. Secondly, the question of the optimal level of debt is rarely studied, although this type of indicator could be used as a rule that would prevent debt management from leading ultimately to solvency problems. Lastly, vulnerability needs to be studied ex ante, i.e. warning tools are needed that indicate the imminence of repayment difficulties, and not just ex post.

Andrea Schaechter<sup>17</sup> (IMF) replied to the question of the prioritisation of public finance vulnerability indicators by presenting a new toolkit that takes into account six types of indicators:

- the financing requirement of a country in a given year in order to assess the very short-term risks;
- indicators of spillover between advanced countries;

<sup>15 &</sup>quot;Financial repression" is defined as a set of measures or policies designed to minimise the debt ratio by keeping real interest rates at low levels (inflationary policies, administered nominal rates, legislation forcing banks to hold a proportion of total of public debt). Such measures are generally effective in a context where barriers to the free movement of capital have been implemented.

<sup>16</sup> Gildas Lamé, Matthieu Lequien and Pierre-Alain Pionnier, "Interpretation and limits of sustainability tests in public finance".

<sup>17</sup> Andrea Schaechter with C. Emre Alper, Elif Arbatli, Carlos Caceres, Giovanni Callegari, Marc Gerard, Jiri Jonas, Tidiane Kinda, Anna Shabunina and Anke Weber, "A toolkit for assessing fiscal vulnerabilities and risks in advanced economies".

- sovereign default risk indicators based on high frequency market data;
- medium and long-term indicators on primary balance adjustments necessary to stabilise the debt ratio;
- the effects of interest rate and growth shocks on the debt ratio;
- and the assessment of possible default risk on the basis of different scenarios for the evolution of public finances.

This battery of indicators applied to large number of advanced countries has the advantage of showing a certain heterogeneity in the risks and the types of public finance problems encountered by the countries.

Regarding the rules allowing assessment of the optimal level of public debt, Cristina Checherita-Westphal<sup>18</sup> of the ECB uses a theoretical model that generates a sort of Laffer debt curve. Using this tool, the authors assessed the optimal threshold of public debt for European countries at 50% compared with a threshold rate of approximately 60% for the OECD as a whole.

Lastly, regarding the ex ante assessment of public finance risks, Jan Babecky¹¹ of the Czech National Bank suggested using an indicator based on the impacts of past crises. The proposed study uses a database that lists all banking and currency crises for 36 countries of the European Union and the OECD from 1970 to 2010. A crisis early warning model based on the use of Bayesian model averaging estimators allows the selection of the leading indicators of a crisis from among approximately thirty variables. One of the interesting aspects of this study is the combination of a continuous measure of the impact of crises with a discrete indicator providing information about the emergence of these crises. The results seem to indicate that, among the factors that have triggered crises in the past, those that seem to recur fairly frequently are strong increases in equity and housing prices, domestic credit bubbles and credit supply bottlenecks on international capital markets.

In conclusion, this conference revealed a convergence of views on the fact that the prevention of global imbalances in developed countries requires a new set of warning indicators, indicators which until recently have essentially been used for predicting crises in emerging and developing economies. It also highlighted the necessary evolution of supervisory and regulatory frameworks to include an increasing number of complex indicators considering the spillover effects between countries and between the factors underlying different imbalances on different timescales.

<sup>18</sup> Cristina Checherita-Westphal, Philipp Rother and Andrew Hughes Hallet, "Fiscal sustainability using growth-maximising debt targets".

<sup>19</sup> Jan Babecký, Tomáš Havránek, Jakub Matějů, Marek Rusnák, Kateřina Šmídková and Bořek Vašíček, "Leading indicators of crisis incidence: Evidence from developed countries".

# The labour market: institutions and reforms

Summary of the conference of 15-16 November 2012 organised by Aix-Marseille School of Economics and the Banque de France

## Delphine DELLA GASPERA, Rémy LECAT and Gregory VERDUGO

**Economics and International Relations General Directorate** 

Microeconomic and Structural Analysis Directorate

With the crisis, labour market reforms gained momentum and are a key priority for governments and international institutions. This first Aix-Marseille School of Economics-Banque de France annual conference devoted to the labour market provided an opportunity to discuss past reforms and explore new avenues for reform. While, according to the OECD, past reforms led to an improvement in labour market conditions before the crisis, a mixed picture was painted by several participants of the German system, whose labour market proved resilient during the crisis but saw an increase in poor workers and greater barriers to labour market entry for newcomers. As regards the avenues for reform, the benefits and drawbacks of the single employment contract were debated, but no consensus was reached, other than the objective to reduce the duality of the labour market between vulnerable workers and protected workers. Lastly, participants stressed the importance of social dialogue as an effective method of reform and a source of growth.

Key words: labour market, unemployment, single employment contract, wages, social contributions, social dialogue.

IEL codes: J2, J3, J5, J6

he Aix-Marseille School of Economics (AMSE) and the Banque de France organised their first annual conference devoted to the labour market on 15 and 16 November 2012, in Marseille, in the premises of the Banque de France and at the Vieille Charité. This conference provided a forum for dialogue between researchers from universities (AMSE, Università Bocconi, Sciences Po, and université de Bretagne occidentale) and economic institutions (Banco de España, Banque de France, Insee, and the OECD) on the topic of "the labour market: institutions and reforms".

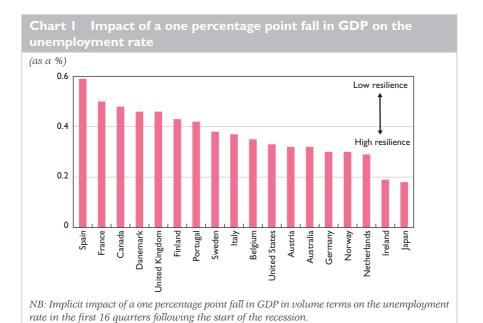
With the crisis, the unemployment rate increased, but this rise was very heterogeneous across OECD countries. For a single macroeconomic shock, the deterioration of the labour market was very different: between 2008 and 2009, the unemployment rate rose by 7 percentage points in Spain and by 0.2 percentage point in Germany, with a comparable contraction in GDP. The resilience of the labour market, i.e. its capacity to resist macroeconomic shocks, has thus become a key issue for employment policies.

The crisis has also led to a sharp rise in the share of long-term unemployment; for those unemployed for over one year, it increased from 24% in 2009 to 34% of total unemployed in 2011 at the OECD level. The persistence of long-term unemployment not only creates a difficult social situation but also results in a loss of long-term growth due to the skills depreciation associated with prolonged inactivity.

Against this background, structural labour market reforms gathered pace, with a view to boosting potential growth and enhancing job creation. However, significant divergences remain as to the direction of reforms: what employment contracts? What role for labour tax? What employment protection? What role for industrial relations?

# I | The labour market reform in Europe before and after the crisis

In the first talk, Stephano Scarpetta (OECD) gave an overview of labour market reform in Europe before, during and after the crisis. The objective itself of the reforms has changed: before the crisis, the decline in structural unemployment was the main concern of governments; with the crisis, the objective is now to enhance the resilience of the labour market, i.e. to limit the contraction in employment in response to an economic shock.



Before the crisis, structural reforms focused on three areas:

Source: OECD Employment Outlook 2012, Box 2.3

- making employment policy spending active: increasing the proportion of spending directed towards return-to-work programmes (training, job placements, etc.) in relation to unemployment benefits;
- enhancing labour market flexibility: facilitating the use of fixed-term contracts, working time flexibility;
- enhancing wage flexibility, through the reform of collective bargaining.

According to a study by the OECD, <sup>1</sup> these reforms resulted in a fall in the unemployment rate in most OECD countries. The crisis interrupted this fall but also led to notable divergences across countries, which do not reflect economic activity developments. Chart 1 illustrates the impact of a one percentage point decline in GDP on the medium-term unemployment rate: while in Spain, this decline resulted in a rise of almost 0.6 percentage point in the unemployment rate, the rise was half as great in Germany.

According to the OECD, two main factors explain this divergence:

• Coordinated wage bargaining contributes to the resilience of the labour market and the decline in structural employment in that it allows

I Published in OECD Employment Outlook 2012.

companies to adjust employment, wages and working time to economic conditions and to better withstand shocks.

• Conversely, over-reliance on temporary jobs, which can be rapidly destroyed in the event of an economic downturn, reduces the resilience of the labour market and increases the share of structural unemployment.

In response to the crisis, temporary measures were taken, in particular initiatives to support hiring and develop short-time work schemes. However, resources for active labour market policies did not keep pace with the rise in unemployment, whereas these policies would play a crucial role, according to the OECD, in ensuring that the rise in structural unemployment does not keep part of the labour force out of the labour market.

More structural reforms have been implemented since the crisis, in particular in the worst affected countries, such as those of South Europe. In order to enhance potential growth, which is a prerequisite for ensuring the sustainability of their debt, these countries undertook a reform of employment protection: a reduction in firing costs, extension of the scope of redundancy, extension of the trial period, possibility of departing from national agreements in order to negotiate working conditions locally, etc. However, the difficulties generated by the growing labour market segmentation between vulnerable workers and protected workers have led some economists to consider the need of also proposing an employment contract reform.

## 2 Employment contract reform

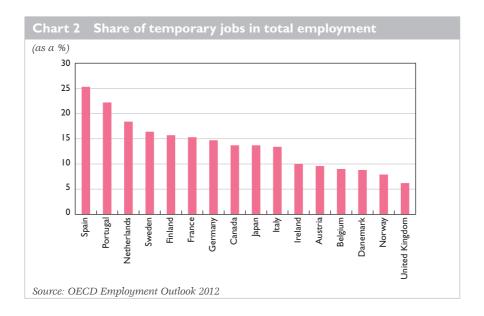
During the conference, a number of sessions were devoted to employment contract reform, in particular moving to a single employment contract by merging the fixed-term and the permanent contract: Juan Jimeno (Banco de España) presented the issues raised by labour market duality in Spain<sup>2</sup> and Etienne Wasmer (Sciences Po) assessed the arguments surrounding the single employment contract;<sup>3</sup> Erwan Gautier (Banque de France and université de Bretagne occidentale) commented on these two presentations and Tito Boeri (Università Bocconi) presented an article on single contract.<sup>4</sup>

Since the 1980s, the share of temporary work has risen steadily: according to Juan Jimeno, in 1980 it stood at around 7.5% in Europe; today, it has almost doubled (14%), with the highest rates seen in Portugal (23%)

<sup>2</sup> Based on "Reforming an insider-outsider labor market: the spanish experience" (Samuel Bentolila, Juan J. Dolado and Juan Jimeno).

<sup>3</sup> Based on "Moving towards a single labour contract: pros, cons and mixed feelings" (Nicolas Lepage-Saucier, Juliette Schleich, Etienne Wasmer).

<sup>4</sup> Based on "The economics of the single contract" (Tito Boeri, Pietro Garibaldi and Espen Moen).



and Spain (25%) (see Chart 2). Erwan Gautier also points out that most employees in France are hired on temporary contracts and that only 13% of these are converted into permanent ones.

The coexistence of permanent contracts and temporary contracts creates duality in the labour market, characterised by employees benefiting from permanent contracts and protected by high firing costs on the one hand, and temporary workers with little protection, on the other. Juan Jimeno, Erwan Gautier and Etienne Wasmer agree on the fact that duality has an adverse impact on productivity and increases inequality by reducing access to stable jobs, training, credit and housing for temporary workers. In order to reduce labour market duality in several European countries, some economists, such as Juan Jimeno or Tito Boeri, are in favour of creating a single employment contract. This new contract would replace all temporary contracts or just fixed-term contracts and could be introduced either at once or over time, with a transitional period during which the old contracts and the new one would coexist.

The single contract would be a permanent contract with a long trial period and severance pay increasing in line with seniority. This would apply as of the first working day and not only from the end of the trial period. Tito Boeri examined the relative merits of providing for severance pay. He showed that without severance pay, companies tended to dismiss employees too frequently. He believes that having no severance pay in the case of dismissal for misconduct and severance pay in all other cases would be an incentive for discipline. It would tend to decrease the number of unfair dismissals on the employer side and reduce moral hazard on the

employee side. He also considers that it would be justified to gradually increase severance pay in line with seniority given the employee's investment in the company. Lastly, according to Tito Boeri, severance pay must also be lower for SMEs.

Juan Jimeno and Erwan Gautier agree that the single contract would remove the discontinuity observed in terms of dismissal costs between permanent and temporary contracts. Juan Jimeno believes that its main advantage would be to reduce the marginal cost borne by the employer when the expiring fixed-term contract is converted into a permanent contract. This significant reduction in costs should limit overstaffing and slow down the turnover of temporary workers. A trial period together with low severance pay would also encourage job creation, while the gradual increase in severance pay would enhance the commitment of workers over the longer term. Erwan Gautier pointed out that this measure would reduce unemployment volatility since, in a dual market, the stock of temporary jobs increases rapidly during a boom and falls immediately during a recession.

Etienne Wasmer and Erwan Gautier noted that the single contract would not prevent labour market fragmentation: it would not better protect the most vulnerable workers, who could still be dismissed during their trial period. Moreover, according to Etienne Wasmer, the increase in severance pay entitlements provided for in the single contract would greatly reduce labour mobility. Yet, the use of temporary contracts is a way to address the rigidity of employment protection legislation for permanent workers and the lack of labour mobility. Erwan Gautier added that the single contract would not allow temporary needs to be met, such as replacing staff on maternity leave, or other specific needs. Furthermore, employers would still need to justify dismissals and it would not reduce the risk of legal proceedings in the event of disagreements.

Etienne Wasmer believes that, rather than introducing a single employment contract, it would be preferable to reform the permanent contract by easing its protection while maintaining its positive features, such as the possibility of improving human capital through training and investing in specific skill-sets. The costs of duality could also be reduced by adopting active policies in the area of training, via the introduction of a bonus-malus system depending on the proportion of the trained staff, and in the area of access to credit and housing. Erwan Gautier suggested reducing uncertainty related to terminations of employment contracts, by promoting negotiations at the individual level, as is the case in France with conventional terminations, and at the company or industry level. Companies or industries should be able to negotiate dismissal, the adjustment of wages to the level of productivity and the situation of the company, as well as mobility and training arrangements.

# 3 How to reform the labour market in Europe?

The round table closing the first day of lectures was devoted to the labour market reforms that are currently in place and debated in Europe: what are the consequences? What methods should be used? Olivier Bargain (AMSE) started by highlighting the success of the Hartz reforms in Germany in the early 2000s. While these reforms appear to have been effective in reducing unemployment before the crisis, they also resulted in a sharp rise in low-paid, unskilled and part-time jobs. During this period, Germany also made substantial gains in competitiveness through moderate wage-setting, which also partly explains its current economic dynamism.

Gilbert Cette (Banque de France) underscored the important role of collective bargaining at the company level in Germany's performance during the crisis. The possibility of negotiating wage cuts in exchange for job protection in Germany made it possible to keep a high level of employment whereas unemployment rose very rapidly in other European countries. However, this measure is only really effective in the case of temporary shocks and tends to protect incumbent workers to the detriment of new workers. When permanent adjustments are needed, the temporary protection of jobs only delays such adjustments. In France, the strength of the German labour market has spurred debates about secured professional paths. Social partners are currently negotiating a proposed reform that aims to achieve a compromise between employment flexibility and protection while improving the labour market efficiency. These negotiations are being conducted under pressure from the government that will legislate in early 2013, even if no agreement is reached. Focus is returning to the question of the role of social partners and the role of the State. It seems difficult to delegate more responsibility to the social partners if they anticipate that final decisions will be taken by the State.

Stephano Scarpetta noted that labour market reforms themselves do not create jobs but they foster a favourable environment for job creation. An additional difficulty is to implement these reforms once they have been passed, particularly if they appear to be imposed from outside. These reforms could also be called into question by future governments. A risk of this nature, which does not appear negligible in the case of Italy at the moment, introduces further uncertainty for employers. In theory, social dialogue may yield better results and facilitate the implementation of reforms, although it is often difficult to achieve consensus. The uncertainty created by the high rate of litigation in cases of conflicts between employers and employees is also an obstacle to the smooth functioning of the labour market. Lengthy legal proceedings and the risk of having to pay high penalties in the event of a wrongful termination of an employment contract reduce the incentives to create permanent jobs and favour the

supply of temporary jobs. In Germany, however, there is a widespread use of mediation procedures between employers and employees and the recent reforms implemented in Italy also aim to encourage mediation to resolve employer/employee conflicts.

During the discussion, Bruno Decreuse (AMSE) pointed out that labour market reforms are themselves dependent on the economic climate and discussed the factors that lead to consensus on the implementation of new institutions. Olivier Bargain stressed that undertaking deep-seated reforms was a lengthy process. He noted that Denmark took twenty years to implement its current "flexicurity" model. In conclusion, Juan Jimeno highlighted the difficulties involved in implementing reforms in countries in recession. He also believed that it would be useful to put in place an employment contract at the European level in order to improve labour mobility.

## 4 Replacement income, taxation, and wages

This session focused on the influence of public authorities' actions through taxation, replacement income and minimum wage setting: what are the consequences of the minimum income benefit (French *Revenu minimum d'insertion*-RMI) on labour market participation among young people? Is the decline in wage inequality in France due to the minimum wage or the increase in skilled labour supply? What impact does taxation have on wages?

The study by Olivier Bargain and Karina Doorle (Institute for the Study of Labor)<sup>5</sup> analysed the impact of the RMI on labour market participation. All other things being equal, the possibility of claiming the RMI decreases the relative advantage of working, which could reduce incentives to take a job for relatively unskilled workers. One of the original features of this study lies in the fact that it focuses on single men of under 30 whose unemployment rate is particularly high in France. In order to identify the impact of the RMI on employment probability, the study uses the fact that the minimum age for obtaining the RMI is 25. Taking this age-related eligibility discontinuity, the authors estimated the impact of the RMI on employment probability by comparing the employment rate of 25 year olds with that of 24 year olds. The results show a fairly low impact, with the RMI resulting in a maximum decline in the employment rate of between 7% and 10% for unskilled workers. On the contrary, no impact was found for workers with school-leaving or university qualifications.

<sup>5 &</sup>quot;Putting structure on the RD design: social transfers and youth inactivity in France" (Olivier Bargain and Karina Doorley).

The study by Gregory Verdugo (Banque de France)<sup>6</sup> sets out to describe changes in the wage structure in France since 1969. The study shows that, contrary to the Anglo-Saxon countries or Germany, wage inequalities have fallen overall in France over this period. The decline in graduates' wages compared to those of non-graduates accounts for the largest share of the decrease in wage inequalities. One explanation for this is the strong relative rise in the minimum wage, which has reduced wage differentials at the bottom of the distribution. Another explanation is the increase in the skilled labour supply: the rise in the education level in France was extremely substantial in the 1970s and the 1990s. By estimating the wage elasticity of skilled workers relative to the education supply, the author shows that the rise in the education level accounts for half the reduction in wage differentials over the period.

The article by Etienne Lehmann, François Marical and Laurence Rioux (CREST-Insee)<sup>7</sup> studies the impact of the tax system on the labour supply behaviour. Their aim was to determine whether workers react in the same way to changes in the level of taxation related to income tax and to changes related to social contributions. The authors consider a series of income tax and social contribution reforms implemented between 2003 and 2006 for workers whose wages are below the median wage. Their estimates, based on a short period, show a negative elasticity of gross income in real terms relative to the marginal rate of income tax. This negative elasticity can be explained by a decline in labour supply in response to a rise in the marginal rate of income tax, in particular for women. Conversely, the elasticity of gross income with respect to social contributions is close to 1. This positive elasticity reflects the fact that employers offset the rise in social contributions in order to avoid a fall in net wages, with these rises therefore being mainly borne by companies in the short term.

# 5 Regulation, social dialogue and the labour market

The last session in this conference provided an opportunity to broaden the debate to include the interactions between regulation and social dialogue, between the labour market and the housing market. Regulations can either stifle social dialogue or stimulate it, as was the case when the 35-hour working week was put in place, providing strong incentives for reaching agreements.

<sup>6 &</sup>quot;The Great compression of the French wage structure" (Gregory Verdugo).

<sup>7 &</sup>quot;Labor income responds differently to income-tax and payroll-tax reforms" (Etienne Lehmann, François Marical and Laurence Rioux).

Gilbert Cette, Nicolas Dromel (Paris School of Economics), Rémy Lecat (Banque de France) and Anne-Charlotte Paret (ENSAE)<sup>8</sup> studied the linkages between regulation, social dialogue and firms' productivity. Using a survey conducted by the Banque de France since 1991 among companies, the authors show that the quality of social dialogue is a determining factor for productivity. For instance, regulation only affects the performance of companies if it gives rise to opposition from employees or their representatives, who then use it to block the decisions of management; on the contrary, industry-level or firm-level agreements, which testify to a good social climate, fully offset the negative impact of regulatory constraints on productivity.

Bruno Decreuse and Tanguy van Ypersele (AMSE) considered the linkage between the labour market and the housing market and concluded that the housing market is an important factor in the mobility of employees and has a major impact on their wage claims. The study presented by Bruno Decreuse<sup>9</sup> focuses more specifically on the impact of regulation on the rental market size. Given the lower transaction costs, the existence of a sufficiently large rental market promotes geographical mobility and limits the social demand for job protection on the labour market. This study shows that procedural formalism in evicting tenants tends to reduce rental market size, but only in non-industrialised countries. In the case of industrialised countries, procedural formalism increases the mobility of fragile tenants.

<sup>8 &</sup>quot;Labour relations quality and productivity: an empirical analysis on French firms" (Gilbert Cette, Nicolas Dromel, Rémy Lecat and Anne-Charlotte Paret).

<sup>9 &</sup>quot;Does housing market regulation decrease the rental market size? Theory and empirical evidence for industrialized countries" Bruno Decreuse and Tanguy van Ypersele.

## **PUBLISHED ARTICLES**

## **Quarterly Selection of Articles**

### Autumn 2005

- The single monetary policy and the interest rate channel in France and the euro area
- Fourth Economic Policy Forum: Productivity and monetary policy
- Measuring corporate profitability

### Winter 2005/2006

- Some hypotheses regarding an inflation regime change in France
- Inflation dynamics in France
- Price-setting in the French and euro area manufacturing sectors: specific survey results

## Spring 2006

- "Productivity, competitiveness and globalisation" Banque de France international symposium Concluding remarks
- Interaction between regional economic integration and institutional integration: the European experience
- The weaknesses of Chinese financial markets: reforms essential to diversifying the financing of the economy
- An analysis of business and credit cycles: the cases of Poland, Hungary, the Czech Republic and the euro area

#### Summer 2006

- Re-examining the money demand function for the euro area
- Target2: from concept to reality
- French households' financial investment: comparison with Europe (1995-2004)

#### Autumn 2006

- Are we heading towards a heightening of global inflationary pressures?
- A national central bank within a federal system
- Progress towards the Single Euro Payments Area
- Are house prices in the United States and Europe sustainable?
- Banque de France scores: development, applications, and maintenance

### Winter 2006/2007

- Monetary policy making in the euro area and in the United States
- Adjustment scenarios for the US current account balance: an assessment based on different NiGEM calibrations
- Risk contagion through defaults on trade bills

## Spring 2007

- The credibility of monetary policy from a New Keynesian perspective
- Perspectives on productivity and potential output growth: a summary of the joint Banque de France/Bank of Canada workshop, April 2006
- New borrowing post-debt relief: risks and challenges for developing countries

## Summer 2007

- Debt retrenchment strategies and control of public spending
- Estimating the sacrifice ratio for the euro area
- The position of industrial firms in 2005

## Autumn 2007

- National Financial Accounts in 2006: further increase in private sector debt, central government debt on the decline
- The geographical breakdown of direct investment: a group-based approach
- DSGE models and their importance to central banks

### Winter 2007

- Issues regarding euroisation in regions neighbouring the euro area
- France's balance of payments and international investment position in 2006
- The position of manufacturing firms in 2006
- Labour market flexibility: what does Banque de France research tell us?

## Spring 2008

- The macroeconomic impact of structural reforms
- Recent trends in productivity: structural acceleration in the euro area and deceleration in the United States?
- Productivity decomposition and sectoral dynamics

## Summer 2008

- TARGET2 and European financial integration
- Supplementing settlement functions with a decision-support system in TARGET2
- Globalisation, inflation and monetary policy Banque de France's international symposium
- The Euro-Mediterranean economic and financial partnership
- Foreign investors' participation in emerging market economies' domestic bond markets
- The composition of household wealth between 1997 and 2003

### Autumn 2008

- France's balance of payments and international investment position in 2007
- Why calculate a business sentiment indicator for services?
- OPTIM: a quarterly forecasting tool for French GDP
- The contribution of cyclical turning point indicators to business cycle analysis
- Is credit growth in central and eastern European countries excessive?
- Migrant workers' remittances: what is the impact on the economic and financial development of Sub-Saharan African countries?

## Summer 2009

- Developments in money and credit in France in 2008
- France's national economic assets, 1978-2007: 30 years shaped by real estate and stock market capital gains
- The position of firms in France at end-2008 Recent developments
- The impact of the financial crisis on transfer systems
- Situations of overindebtedness: a typology

## Autumn 2009

- Government debt markets in African developing countries: recent developments and main challenges
- Payment periods and corporate trade credit between 1990 and 2008
- National Financial Accounts in 2008: a further rise in non-financial sector debt
- Non-residents' equity holdings in French CAC 40 companies at end-2008

#### Winter 2009-2010

- Measuring banking activity in France
- Analysis of the scope of the results of the bank lending survey in relation to credit data
- The position of firms in 2008
- Credit Mediation
- Recent developments in the structure of insurers' investments
- A new standard for compiling and disseminating foreign direct investment statistics

## Spring 2010

- Firms' wage policies during the crisis: survey findings
- The economic impact of business failures in 2008 and 2009
- Housing markets after the crisis: lessons for the macroeconomy
- Borrowing requirements and external debt sustainability of Sub-Saharan African countries
- Valuation of unquoted foreign direct investment stocks at market value: methods and results for France

## Summer 2010

- National financial accounts in 2009: a shift in financing flows towards general government
- Non-residents' equity holdings in French CAC 40 companies at end-2009
- SMEs in the manufacturing sector in France an intermediate position compared with eight other European countries
- Developments in France's foreign trade in services: analysis by sector and by country
- The Banque de France rating system: an asset for the Central Bank and a tool for commercial banks
- Economic linkages, spillovers and the financial crisis. Summary of the BdF/PSE/IMF conference of 28 and 29 January 2010

## Autumn 2010

- France's national economic wealth declined in 2009 for the second year in a row
- Developments in regulated savings since the reform of the "A" passbook savings account distribution network
- The financial position of SMEs in 2009: a financial structure that has proven resilient to the crisis
- Post-crisis monetary policy strategies
- Cohesion policy and the new Member States of the European Union

#### Winter 2010-2011

- The position of firms in 2009: a decline in business and a reluctance to invest during the crisis
- Payment periods in 2009 One year on from the Economic Modernisation Act
- French outward and inward foreign direct investment in 2009
- The future of monetary policy Summary of the conference held in Rome on 30 September and 1 October 2010
- New challenges for public debt in advanced economies.
   Summary of the conference held in Strasbourg on 16-17 September 2010

## Spring 2011

- The impact of the earthquake of March  $11^{\rm th}$  on the Japanese economy and the rest of the world
- Monetary and credit developments in France: 2010, the year of the recovery
- Inventories in the crisis
- Structural reforms, crisis exit strategies and growth OCDE-Banque de France Workshop, 9 and 10 December 2010
- Structural analysis in times of crisis Banque de France symposium, 29 and 30 November 2010
- The Banque de France in European and international organisations

## Summer 2011

- Summary of the international symposium organised by the Banque de France "What is the appropriate regulatory response to global imbalances?"
- The relationship between capital flows and financial development: a review of the literature
- Households' savings and portfolio choices: micro and macroeconomic approaches
- National financial accounts in 2010: recovery in lending and ongoing rise in debt ratio
- Household savings behaviour in 2010

#### Autumn 2011

- SMEs see a pick-up in business in 2010, but delay investment
- Companies after the crisis Banque de France seminar, 28 June 2011
- Fiscal and monetary policy challenges in the short and long run Summary of the Banque de France-Bundesbank conference held on 19 and 20 May 2011 in Hamburg
- After the collapse, the reshaping of international trade.
  Summary of the Banque de France/PSE/CEPII conference of 25 and 26 May 2011
  Insurance companies' investments at the end of 2010

## Winter 2011-2012

- The cost of business credit by firm category
- Companies in France in 2010: a mixed picture
- Payment periods in 2010: the efforts made since the implementation of the LME have lost momentum
- France's national economic wealth showed a marked rebound in 2010 due to higher land prices
- French overseas territories and the euro
- Summary of the international workshop on microfinance organised by the Banque de France on 8 July 2011
- Forecasting the business cycle

Summary of the 8<sup>th</sup> International Institute of Forecasters workshop hosted by the Banque de France on 1-2 December 2011 in Paris

Fiscal and monetary policy in the aftermath of the financial crisis.
 Summary of the BDF/EABCN/EJ/PSE conference on 8-9 December 2011

## Spring 2012

- High-growth SMEs
- The financial situation of the major French groups remained sound in the first half of 2011
- Leveraged buy-outs in France: substantial differences between small and medium-sized targets
- Monetary and credit developments in 2011
- Has the 2008-2009 recession increased the structural share of unemployment in the euro area?
- The measurement of systemic risk (Summary of a lecture given by Robert F. Engle, winner of the Nobel Prize in Economics, Banque de France, 25 January 2012)
- United States then, Europe now (Summary of a lecture given by Thomas J. Sargent, winner of the Nobel Prize in Economics, Banque de France, 1 March 2012)

#### **Summer 2012**

- Holdings of French investment funds
- SMEs in Europe: disparities between countries and sectors were greater in 2010 than before the crisis
- Analysis of banking activity by business line
- Firms' financing and default risk during and after the crisis (Summary of a conference hosted by the Banque de France and OSEO on 9 and 10 February 2012)
- 18th international panel data conference: a brief synthesis

#### Autumn 2012

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- Non-residents' equity holdings in French CAC 40 companies at end-2011
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### Nota bene

Please note that certain items in Table 12 (Banque de France Monthly Statement) have been renamed. The table "Balance sheet of monetary financial institutions (MFIs) excluding Banque de France" has been withdrawn. As a result, the statistical section of this Bulletin has been renumbered. Table 15 (Loans extended by credit institutions in France to French residents) now covers the table and the associated charts (former figures 16 and 17).

Table I Industrial activity indicators – Monthly Business Survey – France

(NAF revision 2; seasonally-adjusted data)

			2013				
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Changes in production from the previous month	a)						
Total manufacturing	-2	5	-1	-3	0	2	-5
Food products and beverages	-1	5	7	0	0	20	- 1
Electrical, electronic and computer equipement	-2	-1	-15	-5	0	-6	2
and other machinery	-2	-1	-15	-5	U	-6	2
Automotive industry	-14	-2	- 1	-55	-7	-11	-40
Other transport equipment	2	0	8	2	7	-6	2
Other manufacturing	-1	3	2	0	0	I	-4
Production forecasts <sup>a)</sup>							
Total manufacturing	-3	-3	-2	-1	-1	ı	2
Food products and beverages	9	6	8	4	9	4	9
Electrical, electronic and computer equipement	-3	-1	-3	-2	-1	9	2
and other machinery	-5	-1	-3	-2	-1	7	2
Automotive industry	-23	-34	-15	4	-5	1	5
Other transport equipment	1	4	7	2	4	6	6
Other manufacturing	-4	3	-1	0	-1	4	- 1
Changes in orders from the previous month a)							
Total manufacturing	-2	8	-4	-7	-1	П	-4
Foreign	0	3	-5	-5	2	9	0
Order books a)							
Total manufacturing	-5	-7	-10	-8	-9	-7	-11
Food products and beverages	-4	- 1	0	I	4	6	7
Electrical, electronic and computer equipement	0	-5	-7	-4	-8	-7	-6
and other machinery	0	-5	-/		-0	-/	-0
Automotive industry	-43	-64	-70	-70	-68	-67	-70
Other transport equipment	42	38	35	34	23	35	43
Other manufacturing	-6	-8	-10	-10	-10	-8	-15
Inventories of finished goods <sup>a)</sup>							
Total manufacturing	5	I	4	3	0	2	3
Food products and beverages	3	I	0	I	1	6	2
Electrical, electronic and computer equipement	10	4	7	7	5	6	4
and other machinery	10	7	′	′	3	6	7
Automotive industry	-4	-2	- 1	-1	-26	0	- 1
Other transport equipment	4	4	2	3	3	5	5
Other manufacturing	5	0	4	3	I	1	- 1
Capacity utilisation rate b)							
Total manufacturing	76.9	76.6	76.1	76.2	76.3	76.1	75.2
Staff levels (total manufacturing) a)							
Changes from the previous month	-2	-1	-4	-2	-3	-1	0
Forecast for the coming month	-3	-5	-3	-3	-3	-1	-2
Business sentiment indicator c)							
	90	93	93	92	91	94	95

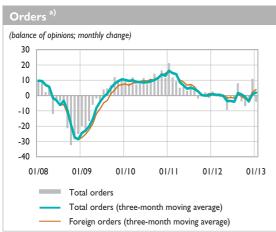
a) Data given as a balance of opinions. Forecast series are adjusted for bias when it is statistically significant.

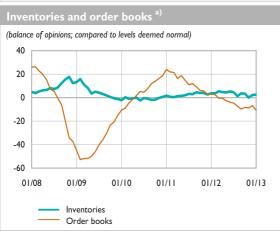
b) Data given as a percentage.

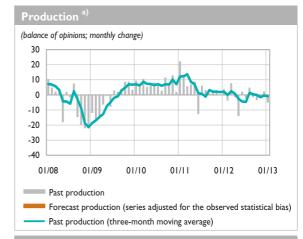
c) The indicator summarises industrial managers' sentiment regarding business conditions. The higher the indicator is, the more positive the assessment. The indicator is calculated using a principal component analysis of survey data smoothed over three months. By construction, the average is 100.

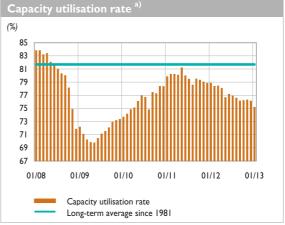
Table 2 Industrial activity indicators – Monthly Business Survey – France (NAF revision 2; seasonally-adjusted data)











Produced 20 February 2013

a) Manufacturing. Source: Banque de France.

Table 3

Consumer price index a)

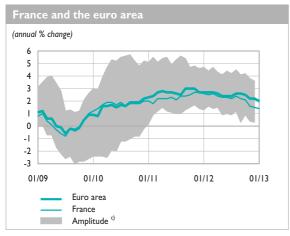
(annual % change)

		2012									
	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.		
France	2.3	2.3	2.2	2.4	2.2	2.1	1.6	1.5	1.4		
Germany	2.2	2.0	1.9	2.2	2.1	2.1	1.9	2.0	1.9		
Italy	3.5	3.6	3.6	3.3	3.4	2.8	2.6	2.6	2.4		
Euro area	2.4	2.4	2.4	2.6	2.6	2.5	2.2	2.2	2.0		
United Kingdom	2.8	2.4	2.6	2.5	2.2	2.7	2.7	2.7	2.7		
European Union	2.6	2.5	2.5	2.7	2.7	2.6	2.4	2.3	na		
United States	1.7	1.7	1.4	1.7	2.0	2.2	1.8	1.7	na		
Japan	0.2	-0.1	-0.4	-0.5	-0.3	-0.4	-0.2	-0.1	na		

(annual average)

(seasonally-adjusted monthly % change)

	2010	2011	2012			2012			2013
	2010	2011	2012	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
France	1.7	2.3	2.2	0.4	0.0	0.2	-0.2	0.2	-0.1
Germany	1.2	2.5	2.1	0.4	0.3	0.1	0.1	0.2	0.0
Italy	1.6	2.9	3.3	0.3	0.3	0.0	0.1	0.3	na
Euro area	1.6	2.7	2.5	0.4	0.2	0.1	-0.1	0.2	na
United Kingdom	3.3	4.5	2.8	0.3	0.3	0.6	0.2	0.2	0.1
European Union b)	2.1	3.1	2.6	-	-	_	_	_	-
United States	1.6	3.2	2.1	0.6	0.6	0.1	-0.3	0.0	na
Japan	-0.7	-0.3	0.0	-0.1	0.1	-0.1	0.0	0.2	na





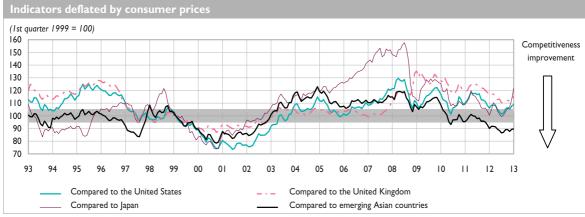
- a) Harmonised indices except for the United States and Japan (national indices).
- b) The series of seasonally adjusted monthly changes in the HIPC is not available for the European Union.
- c) Gap between the extreme values of harmonised price indices observed in the euro area (changing composition).

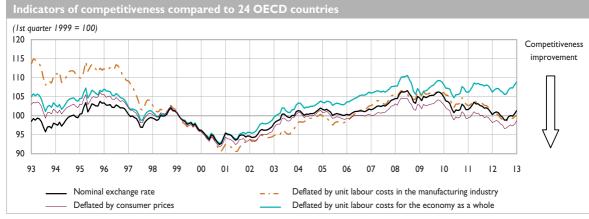
Sources: National data, Eurostat.

Produced 20 February 2013

Table 4
The competitiveness of France's economy





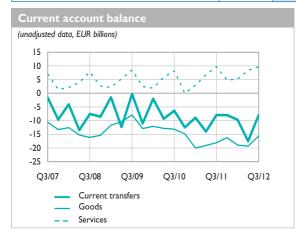


Grey area: change in competitiveness compared to long-term average less than 5%. Sources: National data, Banque de France, ECB, IMF, OECD, Thomson Financial Datastream.

Calculations: Banque de France.

Table 5
Balance of payments – Main components (quarterly data) – France

	2010	2011	20	П		2012	
			Q3	Q4	QI	Q2	Q3
Current account	-30.2	-38.9	-8.0	-8.0	-9.7	-17.6	-8.0
Goods	-52.9	-73.5	-18.1	-16.2	-18.9	-19.3	-15.6
Services	15.9	24.2	9.7	4.8	5.2	8.3	9.7
Income	40.7	46.9	11.2	14.0	11.6	3.4	7.8
Current transfers	-33.8	-36.6	-10.8	-10.6	-7.7	-10.0	-9.8
Capital account	0.0	-0.1	-0.6	0.5	0.0	-0.1	-0.5
Financial account	27.5	58.1	-1.9	47.1	1.6	16.0	31.7
Direct investment	-34.9	-35.4	-8.5	-0.2	-2.2	4.9	-3.4
French direct investment abroad	-58.0	-64.8	-16.8	-14.6	-13.1	-13.9	-9.5
Foreign direct investment in France	23.1	29.5	8.3	14.4	10.9	18.8	6.1
Portfolio investment	123.2	251.6	56.4	104.0	24.6	28.2	-10.0
Assets	26.2	177.5	87.8	113.0	-3.6	9.9	10.3
Liabilities	96.9	74.1	-31.4	-9.1	28.2	18.3	-20.3
Financial derivatives	34.3	13.8	0.4	2.3	-1.9	4.9	0.2
Other investment	-89.3	-177.3	-55.7	-61.1	-19.1	-21.1	45.3
Reserve assets	-5.8	5.5	5.5	2.1	0.2	-0.9	-0.5
Net errors and omissions	2.7	-19.1	10.4	-39.6	8.1	1.6	-23.3



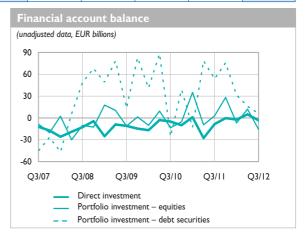
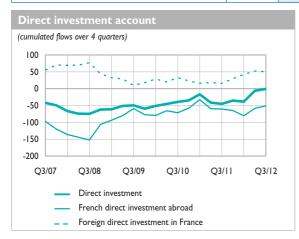


Table 6
Balance of payments – Current and capital accounts (quarterly data) – France

	2010	2011	20	П		2012	
			Q3	Q4	QI	Q2	Q3
Current account	-30.2	-38.9	-8.0	-8.0	-9.7	-17.6	-8.
Goods	-52.9	-73.5	-18.1	-16.2	-18.9	-19.3	-15.
Exports	392.0	424.0	101.4	109.1	111.8	109.3	105.2
Imports	444.9	497.5	119.5	125.4	130.7	128.6	120.
General merchandise	-54.1	-73.6	-18.3	-16.4	-18.8	-19.2	-15
Goods procured in ports by carriers	-2.0	-2.8	-0.7	-0.7	-0.9	-0.7	-0
Goods for processing and repairs on goods	3.2	2.9	0.9	0.9	0.8	0.5	0
Services	15.9	24.2	9.7	4.8	5.2	8.3	9
Exports	145.1	161.5	45.5	39.1	35.8	42.3	45.
Imports	129.2	137.2	35.8	34.3	30.6	33.9	36
Transportation	-3.2	-5.3	-0.9	-0.9	-0.9	-0.6	-(
Travel	5.9	7.5	5.5	-0.3	1.7	3.9	5
Communications services	0.8	1.3	0.3	0.4	0.2	0.3	(
Construction services	2.1	2.2	0.5	0.7	0.4	0.4	(
Insurance services	0.5	1.6	0.6	0.3	0.3	0.5	(
Financial services	0.7	2.1	0.5	0.6	0.4	0.4	(
Computer and information services	-0.4	-0.7	-0.2	-0.2	-0.3	-0.2	-(
Royalties and license fees	2.9	4.1	0.8	1.2	1.0	0.8	(
Other business services	6.3	10.9	2.6	3.0	2.3	2.7	
Personal, cultural and recreational services	0.1	0.3	0.0	0.1	0.1	0.0	(
Government services	0.2	0.2	0.1	0.0	0.1	0.1	(
Income	40.7	46.9	11.2	14.0	11.6	3.4	7
Compensation of employees	10.9	12.4	3.1	3.1	3.3	3.5	3
Investment income	29.8	34.6	8.1	10.9	8.4	-0.1	4
Direct investment	37.1	39.7	7.6	11.1	9.7	9.9	7
Portfolio investment	-5.1	-5.8	-0.1	-0.6	-1.5	-10.3	-3
Other investment	-2.3	0.7	0.5	0.5	0.2	0.3	0
Current transfers	-33.8	-36.6	-10.8	-10.6	-7.7	-10.0	-9
General government	-18.4	-19.3	-6.0	-6.1	-2.8	-5.4	-5
Other sectors	-15.4	-17.3	-4.8	-4.4	-4.8	-4.6	_4
of which workers' remittances	-9.1	-9.0	-2.2	-2.2	-2.3	-2.3	-2
Capital account	0.0	-0.1	-0.6	0.5	0.0	-0.1	-(

Table 7
Balance of payments – Financial flows (quarterly data) – France

	2010	2011	20	)11		2012	
			Q3	Q4	QI	Q2	Q3
Financial account	27.5	58.1	-1.9	47.1	1.6	16.0	31.7
Direct investment	-34.9	-35.4	-8.5	-0.2	-2.2	4.9	-3.4
French direct investment abroad	-58.0	-64.8	-16.8	-14.6	-13.1	-13.9	-9.5
of which equity capital and reinvested earnings	-45.4	-48.3	-10.3	-14.8	-10.5	-10.4	-10.2
Foreign direct investment in France	23.1	29.5	8.3	14.4	10.9	18.8	6.1
of which equity capital and reinvested earnings	16.7	19.1	-1.1	12.4	2.6	5.9	4.9
Portfolio investment	123.2	251.6	56.4	104.0	24.6	28.2	-10.0
Assets	26.2	177.5	87.8	113.0	-3.6	9.9	10.3
Equity securities	-15.9	54.0	9.6	33.9	-10.7	4.2	-15.8
Bonds and notes	16.2	80.8	59.3	62.3	35.8	7.1	26.0
Short-term debt securities	25.9	42.7	18.9	16.8	-28.8	-1.4	0.1
Liabilities	96.9	74.1	-31.4	-9.1	28.2	18.3	-20.3
Equity securities	-3.8	2.5	-6.8	-5.7	3.8	8.0	-0.1
Bonds and notes	99.1	96.0	-2.5	24.3	26.0	10.1	-9.2
Short-term debt securities	1.7	-24.4	-22.1	-27.7	-1.7	0.2	-10.9
Financial derivatives	34.3	13.8	0.4	2.3	-1.9	4.9	0.2
Other investment	-89.3	-177.3	-55.7	-61.1	-19.1	-21.1	45.3
Reserve assets	-5.8	5.5	5.5	2.1	0.2	-0.9	-0.5
Net errors and omissions	2.7	-19.1	10.4	-39.6	8.1	1.6	-23.3



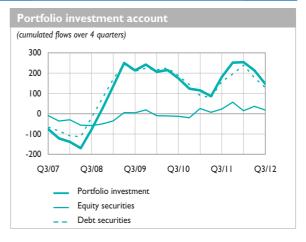


Table 8
Balance of payments – Geographical breakdown (quarterly data) – France

			3rd qua	rter 2012		
	EMU <sup>a)</sup>	EU-27 excl. EMU <sup>b)</sup>	USA	Japan	Switzerland	China
Current account	-2.6	0.0	-1.3	-0.6	1.5	na
Receipts	85.6	25.0	13.1	2.4	8.2	6.0
Expenditure	88.2	25.0	14.4	3.0	6.7	na
Goods	-8.7	0.9	-1.2	-0.1	0.2	-6.2
Receipts	48.0	13.2	6.2	1.8	3.1	3.8
Expenditure	56.7	12.3	7.4	1.9	2.9	10.1
Services	3.4	0.7	0.1	-0.1	0.7	0.8
Receipts	18.8	5.8	3.1	0.4	2.3	1.7
Expenditure	15.4	5.1	3.0	0.5	1.6	0.9
Income	4.2	2.2	-0.2	-0.3	1.6	na
Receipts	17.4	4.9	3.5	0.2	2.5	0.3
Expenditure <sup>c)</sup>	13.2	2.7	3.7	0.5	1.0	na
Current Transfers	-1.5	-3.8	0.0	0.0	-0.9	-0.1
Financial account						
Direct investment	0.8	-4.0	-0.5	0.8	2.5	-0.3
French direct investment abroad	-6.2	-1.8	-0.2	0.1	1.5	-0.3
Foreign direct investment in France	7.0	-2.2	-0.4	0.7	1.0	0.0
Portfolio investment – Assets d)	15.1	2.2	1.6	-3.1	0.2	0.3
Equity securities	-9.8	-2.1	0.2	-1.0	-0.5	0.3
Bonds and notes	26.9	-0.2	0.5	0.7	0.0	0.0
Short-term debt securities	-2.0	4.5	0.9	-2.7	0.7	0.0
Other investment	29.6	-12.6	-15.1	3.3	5.2	1.7

a) 17 Member States (including Estonia as of 1 January 2011).

b) Denmark, United Kingdom, Sweden, European Institutions and New Member States (Czech Republic, Hungary, Latvia, Lithuania, Poland, Bulgaria, Romania).

c) Geographical breakdown of portfolio investment income based on data compiled by the IMF (Coordinated Portfolio Investment Survey); data not available for China.

d) The geographical breakdown is not available for liabilities.

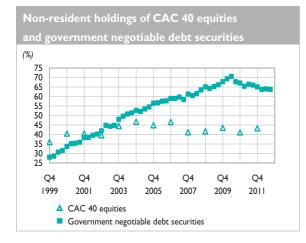
Table 9 Balance of payments (monthly data) – France

					I2-mor	12-month total	
	2011		2012		2011	2012	
	Dec.	Oct.	Nov.	Dec.	Dec.	Dec.	
Current account	0.5	-6.7	-4.3	-2.6	-38.9	-48.9	
Goods	-4.8	-5.6	-4.9	-5.7	-73.5	-70.1	
Services	2.5	1.2	1.7	3.3	24.2	29.5	
Income	6.6	1.2	1.9	2.9	46.9	28.8	
Current transfers	-3.8	-3.6	-3.0	-3.1	-36.6	-37.1	
Capital account	0.2	0.2	0.0	-0.1	-0.1	-0.3	
Financial account	10.0	21.8	8.2	-0.1	58.1	79.3	
Direct investment	1.6	-5.1	1.1	4.8	-35.4	0.0	
French direct investment abroad	-3.6	-7.4	-2.9	-1.8	-64.8	-48.6	
Equity capital	-4.8	-0.6	-0.5	0.9	-21.1	-12.7	
Reinvested earnings	-2.3	-1.9	-1.9	-1.9	-27.2	-24.3	
Other capital	3.5	-4.9	-0.5	-0.8	-16.6	-11.5	
Foreign direct investment in France	5.2	2.3	4.0	6.5	29.5	48.5	
Equity capital	8.5	0.5	2.8	3.5	12.1	13.1	
Reinvested earnings	0.6	0.8	0.8	0.8	7.0	9.4	
Other capital	-3.9	1.0	0.4	2.2	10.3	26.0	
Portfolio investment	29.8	-11.4	-26.7	18.2	251.6	22.9	
Assets	49.2	-7.9	-28.9	20.4	177.5	0.2	
Equity securities	12.9	0.3	0.1	-26.1	54.0	-48.1	
Bonds and notes	41.0	-2.3	-5.7	25.3	80.8	86.2	
Short-term debt securities	-4.7	-5.8	-23.2	21.1	42.7	-37.9	
Liabilities	-19.4	-3.6	2.2	-2.1	74.1	22.7	
Equity securities	-0.9	0.2	1.3	7.3	2.5	20.5	
Bonds and notes	-7.1	-2.3	11.0	-2.1	96.0	33.5	
Short-term debt securities	-11.4	-1.5	-10.2	-7.3	-24.4	-31.3	
Financial derivatives	0.3	1.3	1.9	-0.8	13.8	5.7	
Other investment	-21.4	38.3	33.8	-22.6	-177.3	54.7	
Reserve assets	-0.3	-1.3	-1.8	0.3	5.5	-4.0	
Net errors and omissions	-10.7	-15.3	-4.0	2.8	-19.1	-30.1	

Table 10
France's international investment position (direct investment measured at book value)

(EUR billions)

	2007	2008	2009	2010	2011	2012
	Dec.	Dec.	Dec.	Dec.	Dec.	Q3
Assets	4,533.5	4,414.1	4,661.2	5,597.8	5,877.4	6,065.1
French direct investment abroad	874.2	975.3	1,036.0	1,149.6	1,222.3	1,268.6
Equity capital and reinvested earnings	598.2	658.6	726.1	820.2	872.7	912.0
Other capital	276.0	316.7	309.9	329.4	349.6	356.6
Portfolio investment (foreign securities held by residents)	2,014.1	1,857.4	2,049.9	2,090.4	1,828.9	1,923.3
Financial derivatives	241.0	234.0	273.5	867.5	1,214.5	1,320.2
Other investment	1,325.7	1,273.5	1,209.5	1,365.9	1,478.7	1,405.9
Reserve assets	78.6	74.0	92.4	124.5	133.1	147.2
Liabilities	-4,708.2	-4,633.3	-4,864.1	-5,709.8	-6,025.2	-6,180.3
Foreign direct investment in France	-649.1	-684.5	-683.9	-709.8	-736.7	-773.8
Equity capital and reinvested earnings	-386.2	-395.3	-408.4	-422.9	-437.9	-451.3
Other capital	-262.9	-289.2	-275.5	-286.9	-298.8	-322.5
Portfolio investment (French securities held by non-residents)	-1,987.9	-1,872.5	-2,299.7	-2,431.8	-2,451.8	-2,575.5
Financial derivatives	-312.6	-289.3	-311.8	-905.5	-1,253.7	-1,354.4
Other investment	-1,758.7	-1,787.0	-1,568.6	-1,662.7	-1,583.0	-1,476.6
Net position	-174.7	-219.2	-202.8	-111.9	-147.8	-115.2



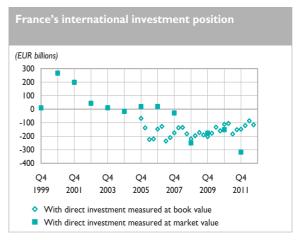


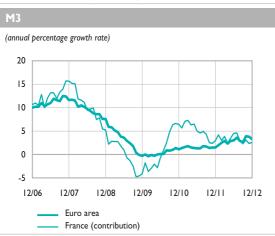
Table 11

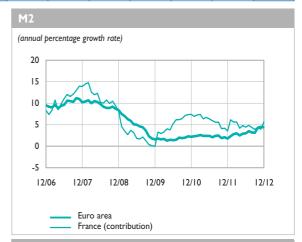
Main monetary and financial aggregates – France and the euro area

(annual percentage growth rate)

	2010	2011	2012	2011	2012						
	Dec.	Dec.	Dec.	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
MI											
Euro area <sup>a)</sup> France (contribution)	4.4 7.2	1.8 4.5	6.2 4.8	1.8 4.5	3.7 5.3	4.7 6.1	5.2 6.6	5.0 6.0	6.5 3.8	6.7 4.1	6.2 4.8
M2											
Euro area <sup>a)</sup> France (contribution)	2.2 7.4	1.8 3.5	4.4 5.6	1.8 3.5	3.0 4.4	3.5 4.9	3.2 4.4	3.1 3.9	4.3 4.4	4.5 4.0	4.4 5.6
M3											
Euro area <sup>a)</sup> France (contribution)	1.1 6.4	1.5 3.0	3.3 2.6	1.5 3.0	3.0 4.5	3.6 4.6	2.9 3.0	2.6 2.3	3.9 3.1	3.8 2.4	3.3 2.6
Loans to the private sector											
Euro area <sup>a)</sup> France <sup>b)</sup>	1.7 5.2	1.0 2.4	-0.7 2.0	1.0 2.4	-0.4 0.6	-0.4 0.0	-0.7 -0.2	-0.9 0.1	-0.8 0.4	-0.8 0.9	-0.7 2.0









Sources: Banque de France, European Central Bank.

Produced 20 February 2013

a) Seasonal and calendar effect adjusted data.

b) Loans extended by MFIs resident in France to euro area residents excluding MFIs and central government.

Table 12 Banque de France Monthly Statement <sup>a)</sup>

(outstanding amounts at the end of the period, EUR billions)

	2010	2011	2012	2012		2012		2013
	Dec.	Dec.	Dec.	Jan.	Oct.	Nov.	Dec.	Jan.
Assets								
National territory	103.4	295.8	326.4	291.9	330.3	330.0	326.4	264.1
Loans	56.3	218.4	234.2	211.6	240.1	238.5	234.2	172.5
MFIs b)	56.1	218.2	234.0	211.4	240.0	238.3	234.0	172.3
General government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other sectors	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Securities other than shares	46.6	76.9	92.1	79.8	90.1	91.5	92.1	91.6
MFIs	24.3	34.1	32.2	33.7	32.0	32.0	32.2	31.6
General government	22.3	42.9	59.9	46.1	58.1	59.5	59.9	59.9
Other sectors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shares and other equity	0.5	0.5	0.1	0.5	0.1	0.1	0.1	0.
Other euro area countries b)	102.5	106.8	87.6	106.4	89.0	88.5	87.6	89.8
Rest of the world b)	99.1	110.5	114.9	109.4	109.1	117.0	114.9	113.7
Gold	82.6	95.3	98.8	103.3	103.6	103.9	98.8	96.
Not broken down by geographical area c)	97.7	105.3	109.6	105.1	98.9	99.2	109.6	106.7
Total	485.3	713.6	737.3	716.1	730.9	738.7	737.3	670.4
Liabilities						'		
National territory – Deposits	51.6	185.6	200.3	144.6	228.4	206.7	200.3	142.8
MFIs	49.6	176.2	194.8	123.1	218.7	183.2	194.8	140.
General government	1.5	8.9	4.9	21.0	9.2	22.7	4.9	1.
Other sectors	0.4	0.5	0.6	0.4	0.5	0.8	0.6	0.3
Other euro area countries – Deposits	28.3	79.6	73.9	113.7	45.9	74.8	73.9	85.4
Rest of the world – Deposits	122.9	143.4	146.0	141.6	141.9	143.8	146.0	133.4
Not broken down by geographical area	282.5	305.0	317.1	316.2	314.7	313.4	317.1	308.9
Banknotes and coins in circulation d)	160.1	169.0	173.5	165.2	169.5	169.2	173.5	167.9
of which coins e)	2.7	2.8	2.9	2.8	2.9	2.9	2.9	2.9
Debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital reserves and revaluation account	97.6	112.4	117.0	120.5	123.6	123.8	117.0	114.3
Other liabilities	24.8	23.6	26.5	30.5	21.6	20.4	26.5	26.7
Total	485.3	713.6	737.3	716.1	730.9	738.7	737.3	670.4

a) These statistics are transmitted to the European Central Bank, on the 15th working day following the end of the month to which they relate, within the production of the consolidated balance sheet of the monetary financial institutions (Regulation ECB/2008/32).

b) This item includes the outstanding amounts of market operations.

c) Including the adjustment linked to the method of accounting used for measuring the euro notes on the liability side of the balance sheet of the Banque de France since January 2002.

d) Since January 2002, banknotes in circulation are treated according to specific euro area accounting conventions to bring them in line with the capital key share. 8% of the total value of euro banknotes in circulation is allocated to the European Central Bank. The remaining 92% is broken down between the NCBs in proportion to their share in the paid-up capital of the ECB.

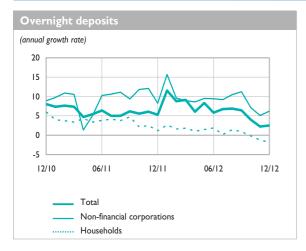
e) Coins in circulation are not a liability of MFIs in the participating Member States, but a liability of the central government. However, coins are part of the monetary aggregates and, by convention, this liability is to be entered under the category 'currency in circulation'. The counterpart to this liability is to be included within 'remaining assets'. (Regulation ECB/2008/32.)

f) The total of the balance sheet at end 2011 published in April 2012 in the Annual Report (709.2 bn) can be calculated by substracting from the total of the Monthly Statement at end December 2011 (713.6 bn): coins (2.8 bn) and miscellaneous amounts linked to the accounting gap between the statement established in the early January 2012 and the Annual Accounts, which include all the year-end entries (1.6 bn).

Table 13
Deposits – France

(outstanding amounts at the end of the period in EUR billions - % growth)

	2010	2011	2012	2011		2012		
	Dec.	Dec.	Dec.	Dec.	Sept.	Oct.	Nov.	Dec.
Overnight deposits								
Total non-financial sectors	516.3	546.3	554.8	546.3	543.9	534.4	523.5	554.8
(excluding central government)								
Households and similar	278.4	284.4	279.1	284.4	288.2	282.9	273.1	279.1
Non-financial corporations	182.5	203.3	213.6	203.3	200.4	195.9	196.4	213.6
General government (excl. central government)	55.4	58.6	62.0	58.6	55.3	55.6	54.1	62.0
Other sectors	39.1	39.3	42.0	39.3	43.3	43.0	39.0	42.0
Total – Outstanding amounts	555.I	585.I	596.4	585.I	586.6	576.9	562.I	596.4
Total - Growth rate	8.0	5.3	2.5	5.3	6.4	4.0	2.2	2.5
Passbook savings accounts								
"A" and "Blue" passbooks	193.5	214.7	247.0	214.7	230.4	237.5	239.8	247.0
Housing savings accounts	36.1	36.1	35.2	36.1	36.5	35.5	34.9	35.2
Sustainable development passbook accounts	68.0	69.4	91.9	69.4	71.5	85.4	88. I	91.9
People's savings passbooks	54.4	52.4	51.7	52.4	51.9	51.7	51.5	51.7
Youth passbooks	7.0	7.0	7.0	7.0	6.9	7.0	6.9	7.0
Taxable passbooks	159.8	179.7	179.1	179.7	194.7	182.2	178.7	179.1
Total - Outstanding amounts	518.8	559.3	611.8	559.3	591.8	599.2	599.9	611.8
Total - Growth rate	3.5	7.3	9.4	7.3	8.1	8.9	9.2	9.4



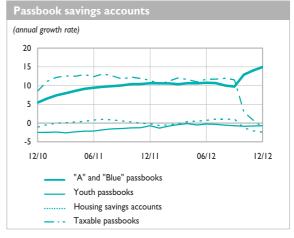
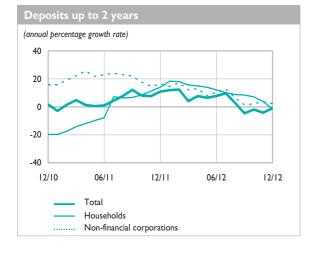


Table 14
Time deposits - France

(outstanding amounts at the end of the period in EUR billions – % growth)

	2010	2011	2012	2011		20	12	
	Dec.	Dec.	Dec.	Dec.	Sept.	Oct.	Nov.	Dec.
Deposits with agreed maturity up to two years								
Total non-financial sectors (excl. central government)	89.1	108.1	111.9	108.1	109.7	110.6	109.6	111.9
Households and similar	24.5	31.7	31.1	31.7	33.3	33.1	32.4	31.1
Non-financial corporations	63.9	75.5	79.9	75.5	75.4	76.5	76.3	79.9
General government (excl. central government)	0.7	1.0	0.9	1.0	1.0	1.0	1.0	0.9
Other sectors	44.2	42.7	40.7	42.7	36.6	42.1	38.5	40.7
Total - Outstanding amounts	133.4	150.9	152.7	150.9	146.3	152.8	148.1	152.7
Total - Growth rate	1.6	10.9	-1.0	10.9	-4.6	-1.9	-4.2	-1.0
Deposits with agreed maturity of over two years								
Total non-financial sectors (excl. central government)	282.6	306.7	329.2	306.7	324.4	325.5	324.9	329.2
Households and similar	248.0	259.0	269.4	259.0	267.4	266.5	265.7	269.4
PEL	182.3	186.6	188.2	186.6	185.7	185.2	184.6	188.2
PEP	26.6	24.4	24.0	24.4	23.7	23.6	23.5	24.0
Other	39.1	48.0	57.2	48.0	58.0	57.7	57.6	57.2
Non-financial corporations	34.0	46.6	58.4	46.6	55.6	57.6	57.7	58.4
General government (excl. central government)	0.6	1.1	1.4	1.1	1.4	1.4	1.4	1.4
Other sectors	94.4	177.0	154.7	177.0	157.1	155.2	156.3	154.7
Total - Outstanding amounts	377.0	483.7	483.9	483.7	481.5	480.7	481.2	483.9
Total - Growth rate	3.5	18.8	0.4	18.8	6.7	0.5	2.0	0.4



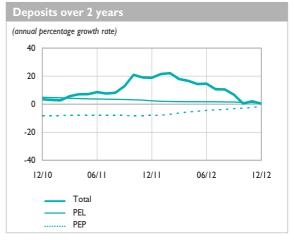
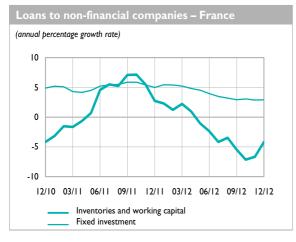


Table 15
Loans extended by credit institutions established in France to French residents – France

(outstanding amounts at the end of the period in EUR billions – % growth)

	2010	2011	2012	2011			2012		
	Dec.	Dec.	Dec.	Dec.	Aug.	Sept.	Oct.	Nov.	Dec.
Loans to resident clients									
Private sector	1,976.4	2,053.7	2,098.4	2,053.7	2,072.6	2,087.0	2,092.5	2,090.4	2,098.4
General government	214.8	195.1	206.6	195.1	199.1	198.1	205.3	206.3	206.6
Total - Outstanding amounts	2,191.2	2,248.7	2,306.7	2,248.7	2,271.8	2,285.0	2,297.8	2,296.7	2,306.7
Private sector	4.7	3.1	2.4	3.1	0.5	0.5	1.0	1.4	2.4
General government	9.5	-6.7	6.0	-6.7	6.0	5.1	8.2	8.4	6.0
Total – Growth rate	5.2	2.2	2.8	2.2	1.0	0.9	1.6	2.0	2.8
Loans to non-financial companies									
Fixed investment	525.0	547.1	562.3	547.I	556.9	556.8	559.2	559.5	562.3
Inventories and working capital	179.7	187.5	174.0	187.5	177.4	176.8	177.4	175.5	174.
Other lending	76.1	81.2	81.6	81.2	79.6	80.9	79.2	79.4	81.6
Total - Outstanding amounts	780.8	815.9	817.9	815.9	813.9	814.5	815.8	814.4	817.
Total - Growth rate	1.2	4.4	0.8	4.4	1.6	0.6	0.3	0.7	0.8
Loans to households									
Loans for house purchase	798.1	847.0	874.6	847.0	865.8	868.0	870.2	872.2	874.
Consumer loans	164.4	161.1	159.8	161.1	157.4	156.6	157.1	156.7	159.
Other lending	88.0	92.8	92.2	92.8	92.4	92.8	92.7	92.4	92.3
Total – Outstanding amounts	1,050.5	1,100.9	1,126.6	1,100.9	1,115.6	1,117.3	1,120.0	1,121.3	1,126.
Total – Growth rate	6.2	5.6	2.3	5.6	3.0	2.7	2.7	2.6	2.3



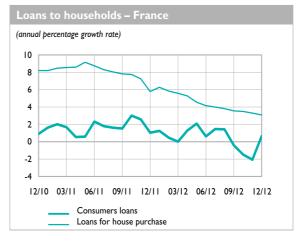
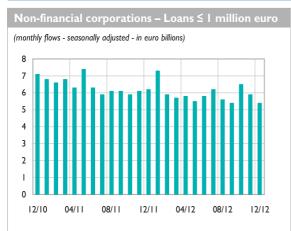
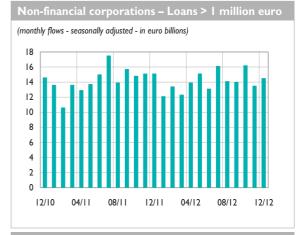


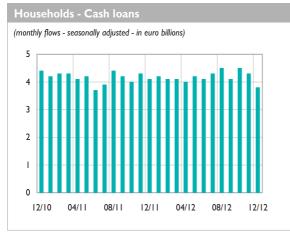
Table 16
New loans to residents, (excl. overdrafts) – France

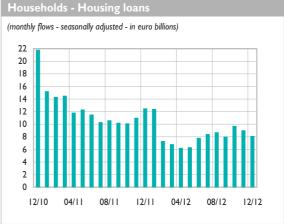
(monthly flows - seasonally adjusted - in euro billions)

		2011		2012			
	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.	
Loans to non-financial corporations							
Loans $\leq 1$ million euro $a$	5.9	6.1	6.2	6.5	5.9	5.4	
Loans > I million euro a)	14.8	15.1	15.1	16.2	13.5	14.5	
Loans to households							
Cash loans to sole traders and individuals	4.0	4.3	4.1	4.5	4.3	3.8	
(excl. revolving consumer credit)	7.0	7.5	7.1	٦.5	٦.5	5.0	
Housing loans	10.1	11.0	12.5	9.7	9.0	8.1	









Sources: Banque de France, European Central Bank.

a) All initial rate fixation periods.

Table 17 Investment and financing – Insurance corporations and pension funds – Euro area and France

Euro area						
	Cumula	Cumulated transaction flows over 4 quarter				
	20	2011 2012			2012	
	Q3	Q4	QI	Q2	Q3	Sept.
Financial assets						
Currency and deposits	14.0	21.4	27.1	10.5	-9.8	800.9
of which deposits included in M3 <sup>a)</sup>	5.0	14.3	29.0	15.2	2.6	198.0
Short-term debt securities	10.0	22.8	11.8	12.2	11.3	72.4
Long-term debt securities	106.2	38.0	12.4	31.9	56.0	2,908.4
Loans	16.1	7.3	4.9	-0.6	10.2	483.6
Shares and other equity	103.6	89.8	110.4	102.3	78.5	2,632.7
of which quoted shares	8.0	-0.1	-2.7	-4.6	-4.6	522.4
Remaining net assets	-39.6	-39.7	-46.7	-15.0	-12.0	250.6
Financing						
Debt securities	3.1	2.8	4.8	1.5	2.8	50.6
Loans	13.3	5.5	7.8	10.9	14.2	313.0
Shares and other equity	2.9	2.1	2.0	4.1	5.1	436.1
Insurance technical reserves	156.9	122.6	101.5	101.2	107.2	6,351.9
Life insurance	146.4	120.6	102.7	93.5	100.9	5,530.6
Non-life insurance	10.4	2.0	-1.3	7.6	6.2	821.3
Net lending/net borrowing (B9B)	34.0	6.6	3.8	23.7	4.9	

(EUR billions)

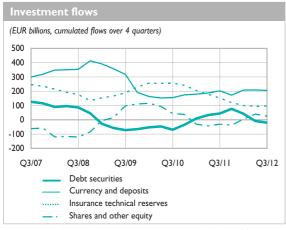
France							
	Cumulat	Cumulated transaction flows over 4 quart					
	20	2011 2012			2012		
	Q3	Q4	QI	Q2	Q3	Sept.	
Financial assets							
Currency and deposits	7.0	9.1	10.1	6.1	3.1	27.1	
Short-term debt securities	6.3	18.4	9.2	9.9	9.5	35.6	
Long-term debt securities	55.6	-14.1	-26.9	-23.1	-15.4	1,205.0	
Loans	1.1	1.0	0.9	0.7	0.8	35.1	
Shares and other equity	9.2	13.9	23.6	32.0	22.3	644.6	
of which quoted shares	-1.5	-2.3	-9.8	-7.7	-10.1	65.9	
Remaining net assets	5.8	4.4	2.1	2.4	-0.2	6.4	
Financing							
Debt securities	1.5	1.6	1.3	0.0	0.0	8.0	
Loans	11.2	1.3	-3.1	-5.0	-3.3	86.4	
Shares and other equity	0.4	0.0	0.8	1.0	1.7	100.9	
Insurance technical reserves	63.8	43.3	21.1	12.3	9.8	1,706.6	
Life insurance and pension funds	53.3	34.3	18.4	8.2	6.2	1,451.5	
Non-life insurance	10.5	9.0	2.7	4.1	3.6	255.1	
Net lending/net borrowing (B9B)	15.2	-7.5	8.0	27.5	18.6		

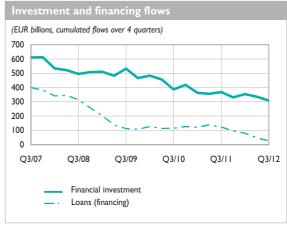
a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of insurance corporations held with MFIs and central government.

Sources: Banque de France, European Central Bank.

Table 18
Investment and financing – Households – Euro area

	Cum	ulated trans	saction flow	s over 4 qua	ırters	Outstanding amounts
	20	П		2012		2012
	Q3	Q4	QI	Q2	Q3	Sept.
Financial assets						
Currency and deposits	203.0	172.7	207.8	209.2	205.6	6,930.3
of which deposits included in M3 <sup>a)</sup>	113.7	83.0	123.6	135.6	154.4	5,225.7
Short-term debt securities	3.4	27.7	13.0	12.5	19.4	56.2
Long-term debt securities	40.4	49.0	29.2	-21.1	-39.2	1,301.0
Shares and other equity	-31.3	-37.9	3.6	39.8	25.9	4,172.2
Quoted shares	9.3	16.6	11.4	27.3	3.1	716.2
Unquoted shares and other equity	22.4	18.7	52.7	59.5	60.5	2,069.2
Mutual fund shares	-63.0	-73.2	-60.5	-47.0	-37.7	1,386.8
of which money market fund shares	-23.4	-21.2	-22.4	-20.1	-27.5	135.1
Insurance technical reserves	152.2	119.5	100.3	95.0	97.3	6,131.7
Remaining net assets	10.5	17.3	6.2	1.7	-16.1	188.8
Financing						
Loans	122.6	96.0	79.4	47.0	26.3	6,214.1
of which from euro area MFIs	148.1	81.1	33.8	12.6	1.0	5,283.4
Revaluation of financial assets						
Shares and other equity	-388.5	-411.1	-340.2	-399.1	178.6	
Insurance technical reserves	-19.6	19.9	102.7	105.5	184.4	
Other flows	-32.5	7.7	53.1	-13.2	49.6	
Change in net financial worth	-185.1	-131.1	96.3	-16.8	679.2	



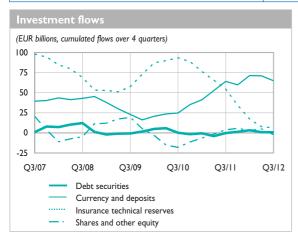


a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of households held with MFIs and central government.

Source: European Central Bank.

Table 19
Investment and financing – Households – France

	Cum	ırters	Outstanding amounts			
	20	11		2012		2012
	Q3	Q4	Q١	Q2	Q3	Sept.
Financial assets						
Currency and deposits	64.1	59.8	71.4	71.0	64.9	1,265.8
Short-term debt securities	-1.6	0.2	-0.5	-0.3	-0.3	1.3
Long-term debt securities	1.4	1.1	3.7	1.1	1.1	64.7
Shares and other equity	3.8	5.6	2.9	4.9	-2.3	988.1
Quoted shares	5.9	5.7	-1.4	0.4	-5.4	145.5
Unquoted shares and other equity	14.3	10.9	16.5	13.8	16.1	538.4
Mutual fund shares	-16.3	-11.0	-12.1	-9.3	-13.0	304.2
of which money market fund shares	-9.9	-7.3	-6.1	-3.9	-6.1	28.0
Insurance technical reserves	54.4	34.4	17.0	7.6	6.3	1,544.3
Remaining net assets	5.5	17.9	-2.3	-3.7	2.6	124.7
Financing						
Loans	72.9	58.9	55.8	40.0	29.5	1,148.2
Revaluation of financial assets						
Shares and other equity	-64.3	-71.9	-46.8	-85.3	83.8	
Insurance technical reserves	-13.6	-12.4	-2.0	-3.2	28.8	
Other flows	-5.6	3.1	22.3	13.1	20.3	
Change in net financial worth	-28.8	-21.0	10.1	-34.8	175.7	



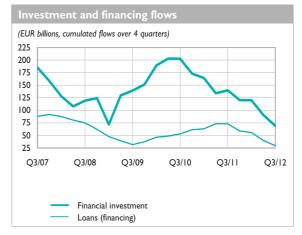
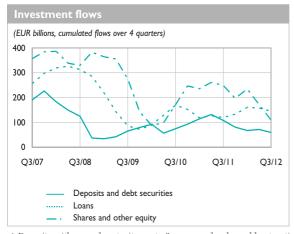
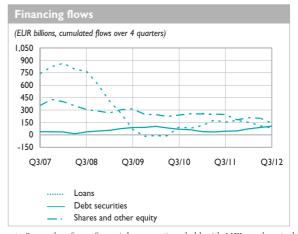


Table 20 Investment and financing - Non-financial corporations - Euro area

	Cumu	Cumulated transaction flows over 4 quarters					
	20	П		2012			
	Q3	Q4	QI	Q2	Q3	Sept.	
Financial assets							
Currency and deposits	107.1	74.8	62.0	52.3	47.8	2,053.9	
of which deposits included in M3 <sup>a)</sup>	41.7	-5.5	4.1	4.0	26.3	1,598.2	
Debt securities	1.2	6.4	5.5	19.6	12.0	382.3	
Loans	120.0	133.2	160.4	158.0	145.3	3,118.3	
Shares and other equity	248.9	197.0	234.6	172.4	109.7	7,658.0	
Insurance technical reserves	4.7	9.4	8.1	5.6	3.8	174.1	
Remaining net assets	-58.5	-43.1	-78.3	-53.9	34.5	-202.2	
Financing							
Debt	202.6	227.7	230.3	204.1	192.2	9,842.9	
Loans	155.4	174.8	152.8	109.4	82.5	8,478.8	
of which from euro area MFIs	80.4	56.6	12.3	-29.9	-71.4	4,652.8	
Debt securities	43.7	48.2	72.9	90.1	105.3	1,016.7	
Pension fund reserves	3.5	4.6	4.6	4.6	4.4	347.4	
Shares and other equity	244.5	181.6	206.9	200.8	142.5	12,596.9	
Quoted shares	27.8	26.5	19.4	15.1	15.5	3,555.2	
Unquoted shares and other equity	216.7	155.1	187.5	185.6	127.0	9,041.8	
Net lending/net borrowing (B9B)	-23.6	-31.5	-44.9	-50.9	18.5		



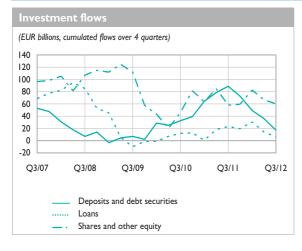


a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of non-financial corporations held with MFIs and central government.

Source: European Central Bank.

Table 21
Investment and financing – Non-financial corporations – France

	Cumu	Cumulated transaction flows over 4 quarters					
	20	П		2012		2012	
	Q3	Q4	QI	Q2	Q3	Sept.	
Financial assets							
Currency and deposits	84.2	64.8	42.6	32.8	23.1	433.8	
Debt securities	4.6	7.5	6.7	3.0	-5.9	63.0	
Loans	22.9	19.4	30.6	13.8	6.1	779.5	
Shares and other equity	57.9	59.6	82.5	66.5	60.0	2,580.9	
Insurance technical reserves	0.3	0.5	0.0	0.3	0.3	53.0	
Remaining net assets	-39.0	-28.9	-1.6	6.9	51.9	3.9	
Financing							
Debt	77.1	81.6	104.9	111.0	82.6	2,163.1	
Loans	56.2	52.7	64.6	57.6	30.9	1,668.3	
Debt securities	20.9	28.9	40.3	53.4	51.7	494.8	
Shares and other equity	89.6	86.4	105.2	87.4	83.7	3,999.5	
Quoted shares	10.4	10.3	10.6	7.0	6.7	1,049.7	
Unquoted shares and other equity	79.3	76.1	94.6	80.4	77.0	2,949.8	
Net lending/net borrowing (B9B)	-35.8	-45.0	-49.2	-75.I	-31.0		



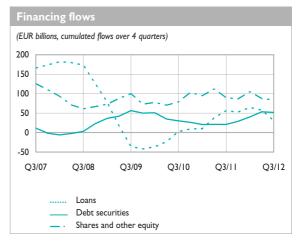
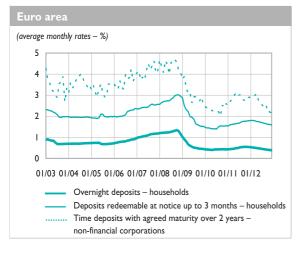


Table 22
Interest rates on deposits – France and the euro area

(average monthly rates - %)

	2011	2012	2011	2012				
	Dec.	Dec.	Dec.	Aug.	Sept.	Oct.	Nov.	Dec.
Euro area								
Overnight deposits – households	0.54	0.39	0.54	0.44	0.42	0.41	0.40	0.39
Deposits redeemable at notice up to 3 months – households	1.79	1.60	1.79	1.68	1.65	1.62	1.61	1.60
Time deposits with agreed maturity over 2 years –								
non-financial corporations	2.90	2.16	2.90	2.42	2.53	2.21	2.21	2.16
France								
"A" passbooks (end of period)	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Regulated savings deposits	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Market rate savings deposits	2.07	1.84	2.07	1.96	1.90	1.84	1.85	1.84
Deposits with agreed maturity up to 2 years	2.47	2.26	2.47	2.28	2.33	2.31	2.28	2.26
Deposits with agreed maturity over 2 years	3.12	3.02	3.12	3.06	3.12	3.03	3.08	3.02



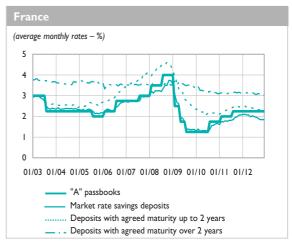
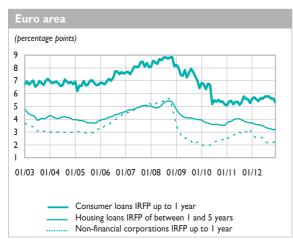
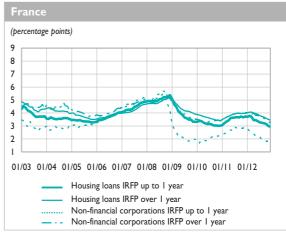


Table 23
Cost of credit – France and the euro area

(average monthly rate - %)

/						20	12					
	Jan.	Feb.	March	April	Мау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Euro area												
Consumer loans												
Floating rate and IRFP of up to 1 year <sup>a)</sup> <b>Loans for house purchase</b>	5.62	5.70	5.55	5.43	5.65	5.61	5.76	5.79	5.78	5.61	5.61	5.32
Floating rate and IRFP of between												
I and 5 years	3.71	3.64	3.57	3.58	3.54	3.48	3.40	3.33	3.27	3.24	3.18	3.24
Non financial corporations												
of over EUR I million												
IRFP of up to 1 year a)	2.80	2.65	2.52	2.54	2.58	2.56	2.40	2.16	2.21	2.22	2.18	2.28
France												
Consumer loans	6.59	6.66	6.63	6.53	6.52	6.43	6.34	6.37	6.21	6.12	6.14	6.06
Loans for house purchase												
IRFP of up to 1 year a)	3.70	3.78	3.71	3.45	3.46	3.37	3.28	3.25	3.21	3.16	3.01	2.95
IRFP of over I year a)	4.02	4.06	4.07	4.01	3.96	3.89	3.80	3.73	3.68	3.59	3.51	3.45
Non-financial corporations												
IRFP of up to 1 year a)	2.79	2.62	2.48	2.39	2.23	2.22	2.15	1.95	1.87	1.83	1.83	1.92
IRFP of over 1 year a)	4.01	4.03	3.90	3.98	3.81	3.81	3.70	3.59	3.60	3.43	3.41	3.20





a) IRFP: initial rate fixation period i.e. the period for which the rate of a loan is fixed.

 $IRFP \le 1$  year: loans for which the rate is adjusted at least once a year + fixed-rate loans with an initial maturity of up to 1 year. IRFP > 1 year: loans for which the rate is adjusted less than once a year + fixed-rate loans with an initial maturity of over 1 year.

Table 24
Cost of credit – France

(%

Harry acilian with affect from the let day of the reference posited		2012		2013
Usury ceiling with effect from the 1st day of the reference period	April	July	Oct.	Jan.
Loans to households (under Articles L312-1 to L312-36 of the French Consu	mer Code)			
Housing loans				
Fixed-rate loans	6.32	6.36	5.99	5.72
Floating-rate loans	5.88	5.81	5.64	5.37
Bridge loans	6.48	6.32	5.89	5.79
Consumer loans				
Loans up to and including EUR 1.524	20.56	20.25	20.30	20.30
Overdraft facilities, revolving loans, and instalment credit loans of over	19.15	19.24	19.58	19.89
EUR 1.524 and loans up to EUR 3.000 and reverse annuity mortgage loans	17.13	17.21	17.50	17.07
Personal loans and other loans of over EUR 1.524 and loans up to EUR 3.000	15.27	16.40	17.67	18.95
Overdraft facilities, revolving loans, and instalment credit loans of over EUR 3.000 and loans up to EUR 6.000 and reverse annuity mortgage loans	17.15	16.88	16.75	16.49
Personal loans and other loans of over EUR 3.000 and loans up to EUR 6.000	13.27	14.04	14.84	15.55
Overdraft facilities, revolving loans, and instalment credit loans of over EUR 6.000 and reverse annuity mortgage loans	14.81	14.07	13.11	12.19
Personal loans and other loans or over EUR 6.000	10.93	11.23	11.20	11.24

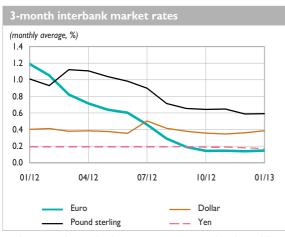
	2011		20	112	
	Q4	QI	Q2	Q3	Q4
Loans to enterprises					
Discount					
up to EUR 15,245	3.53	3.30	3.22	3.29	2.70
EUR 15,245 to EUR 45,735	3.65	3.61	3.27	3.32	3.12
EUR 45,735 to EUR 76,225	3.39	3.33	3.09	3.10	3.07
EUR 76,225 to EUR 304,898	3.20	3.17	2.74	2.26	2.13
EUR 304,898 to EUR 1,524,490	2.57	2.27	1.74	1.53	1.20
over EUR 1,524,490	2.28	1.87	1.40	0.75	0.76
Overdrafts					
up to EUR 15,245	10.21	9.96	9.85	9.76	9.73
EUR 15,245 to EUR 45,735	7.60	7.21	6.62	6.48	6.27
EUR 45,735 to EUR 76,225	5.59	5.57	5.21	5.12	4.93
EUR 76,225 to EUR 304,898	3.93	3.69	3.33	3.18	2.96
EUR 304,898 to EUR 1,524,490	2.79	2.53	2.18	2.17	1.89
over EUR 1,524,490	2.14	1.98	1.70	1.58	1.34
Other short-term loans					
up to EUR 15,245	4.24	4.18	3.90	3.70	3.76
EUR 15,245 to EUR 45,735	4.14	3.91	3.49	3.37	3.30
EUR 45,735 to EUR 76,225	3.67	3.48	3.18	2.88	2.68
EUR 76,225 to EUR 304,898	3.17	3.01	2.69	2.49	2.07
EUR 304,898 to EUR 1,524,490	2.69	2.52	2.04	1.90	1.66
over EUR 1,524,490	2.41	2.38	1.98	1.95	1.57
Medium and long-term loans					
up to EUR 15,245	4.06	4.21	4.13	4.01	3.63
EUR 15,245 to EUR 45,735	3.85	3.98	3.80	3.62	3.34
EUR 45,735 to EUR 76,225	3.86	3.97	3.77	3.58	3.31
EUR 76,225 to EUR 304,898	3.90	4.00	3.83	3.60	3.38
EUR 304,898 to EUR 1,524,490	3.80	3.95	3.61	3.44	3.26
over EUR 1,524,490	3.47	3.23	2.84	2.83	2.64

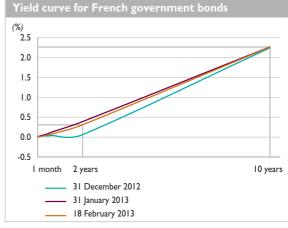
Source: Banque de France.

Table 25 Interest rates

(%)

						iverage a)					Key
					2012					2013	interes
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	rates a
Short-term interban	k interest	rates									18/02/1
Euro											0.7
Overnight	0.27	0.28	0.27	0.14	0.07	0.05	0.05	0.04	0.02	0.02	
3-month	0.71	0.64	0.60	0.46	0.29	0.19	0.14	0.15	0.14	0.15	
I-year	1.24	1.17	1.14	1.00	0.79	0.69	0.54	0.51	0.47	0.51	
Pound sterling											0.5
Overnight	0.58	0.54	0.56	0.55	0.49	0.49	0.47	0.47	0.44	0.45	
3-month	1.11	1.04	0.98	0.90	0.71	0.65	0.64	0.65	0.59	0.59	
I-year	1.69	1.69	1.54	1.51	1.21	1.20	0.98	1.01	1.02	0.92	
Dollar											0.2
Overnight	0.12	0.15	0.14	0.10	0.11	0.13	0.13	0.11	0.12	0.14	
3-month	0.39	0.38	0.36	0.50	0.42	0.38	0.36	0.35	0.36	0.39	
I-year	1.04	1.14	1.09	1.11	1.14	1.09	1.00	0.95	0.89	0.87	
Yen											0.1
Overnight	0.11	0.11	0.11	0.10	0.10	0.10	0.10	0.09	0.09	0.09	
3-month	0.20	0.20	0.20	0.20	0.19	0.19	0.19	0.19	0.18	0.17	
I-year	0.56	0.52	0.53	0.52	0.65	0.62	0.58	0.53	0.46	0.45	
l 0-year benchmark ;	governmer	nt bond yi	elds <sup>b)</sup>								
France	2.99	2.75	2.57	2.28	2.12	2.24	2.19	2.14	2.01	2.17	
Germany	1.72	1.46	1.43	1.31	1.42	1.54	1.52	1.39	1.35	1.57	
Euro area	3.39	3.53	3.41	3.25	3.01	2.43	2.31	2.25	2.10	2.40	
United Kingdom	2.12	1.87	1.67	1.55	1.57	1.77	1.81	1.79	1.84	2.05	
United States	2.03	1.79	1.61	1.51	1.67	1.70	1.73	1.65	1.70	1.89	
Japan	0.95	0.86	0.84	0.78	0.81	0.80	0.78	0.74	0.74	0.78	





a) Short-term: the interbank average of rates situated in the middle of the range between bid and ask rates. Quotes taken from Reuters, posted at 4.30pm for the euro and 11.30am for other currencies.

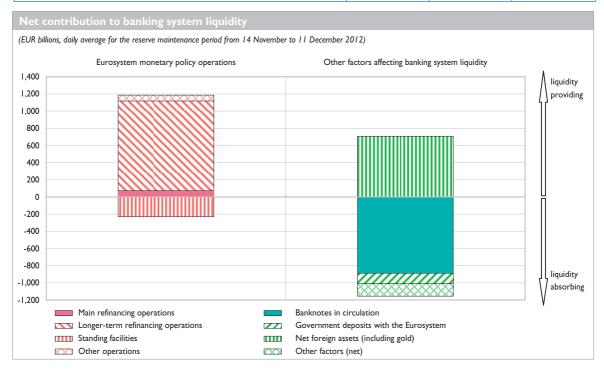
Sources: Banque de France, European Central Bank.

b) Benchmark bonds: rates posted by Reuters at 4.30pm.

Table 26
Banking system liquidity and refinancing operations – Euro area

(EUR billions, daily average for the reserve maintenance period from 14 November to 11 December 2012)

	Liquidity providing	Liquidity absorbing	Net contribution
Contribution to banking system liquidity			
(a) Eurosystem monetary policy operations	1,397.0	440.3	956.7
Main refinancing operations	74.0		74.0
Longer-term refinancing operations	1,044.1		1,044.1
Standing facilities	1.6	231.8	-230.3
Other	277.3	208.5	68.8
(b) Other factors affecting banking system liquidity	563.6	1,010.4	-446.8
Banknotes in circulation		889.3	-889.3
Government deposits with the Eurosystem		121.1	-121.1
Net foreign assets (including gold)	708.0		708.0
Other factors (net)	-144.5		-144.5
(c) Reserves maintained by credit institutions (a) + (b)			509.9
including reserve requirements			106.4



Sources: Banque de France, European Central Bank.

Table 27
Eurosystem key rates; minimum reserve

(%

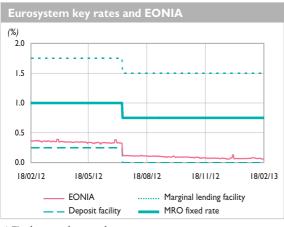
Key rates for tl	Ley rates for the Eurosystem (latest changes)										
M	Main refinancing operations			Standing facilities							
Da	te of	Fixed rate	Dat	te of	Domosit	Marginal					
decision	settlement	rixed rate	decision	settlement	Deposit	lending					
03/11/11	09/11/11	1.25	03/11/11	09/11/11	0.50	2.00					
08/12/11	14/12/11	1.00	08/12/11	14/12/11	0.25	1.75					
05/07/12	11/07/12	0.75	05/07/12	11/07/12	0.00	1.50					

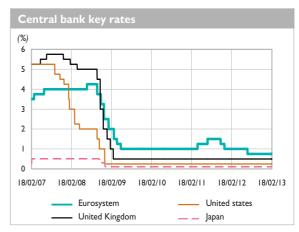
(%)

Main refin	ancing operation	ns		Longer-term refinancing operations			
		Marginal rate	Weighted average rate		Marginal rate		
2013	3 January a)	0.75	0.75	2012 14 November	0.75		
	9 January	0.75	0.75	29 November	0.75		
	16 January	0.75	0.75	19 December	0.75		
	23 January	0.75	0.75	2013 16 January	0.75		
	30 January	0.75	0.75	31 January	0.75		
	6 February	0.75	0.75	13 February	0.75		

(EUR billions - rates as a %)

Minimum	Minimum reserves (daily averages)												
Reserve	maintenance	Required	reserves	Current	accounts	Excess r	eserves	Interest rate					
period e	ending on	Euro area	France	Euro area	France	Euro area	France	on minimum reserves					
2012	II September	107.12	19.88	546.15	90.64	439.02	70.77	0.75					
	9 October	107.02	20.06	538.11	95.64	431.09	75.58	0.75					
	13 November	106.43	19.74	529.15	83.28	422.72	63.54	0.75					
	II December	106.35	19.54	509.87	66.97	485.79	47.43	0.75					
2013	15 January	106.11	19.36	489.00	75.92	488.99	56.55	0.75					
	12 February	105.40	19.00	466.20	71.90	466.20	52.90	0.75					



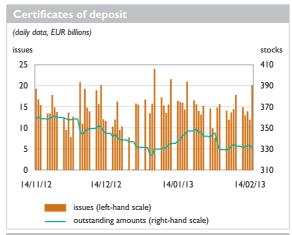


a) Fixed rate tender procedure.

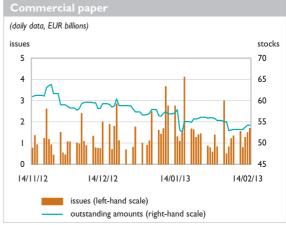
Sources: European Central Bank, ESCB.

Table 28
Negotiable debt securities – France

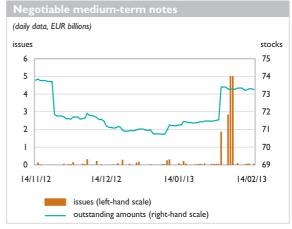
Certificates of depos	it		
	EUR bi	llions <sup>a)</sup>	Number
	Issues	Stocks	of issuers
17/11/12 to 23/11/12	73.10	359.99	160
24/11/12 to 30/11/12	55.70	358.47	160
01/12/12 to 07/12/12	79.68	349.33	164
08/12/12 to 14/12/12	78.12	344.79	165
15/12/12 to 21/12/12	58.05	338.56	163
22/12/12 to 28/12/12	39.03	331.57	163
29/12/12 to 04/01/13	69.79	329.88	160
05/01/13 to 11/01/13	82.91	335.27	162
12/01/13 to 18/01/13	83.71	347.03	161
19/01/13 to 25/01/13	74.33	342.08	163
26/01/13 to 01/02/13	62.37	329.32	161
02/02/13 to 08/02/13	71.67	332.48	163
09/02/13 to 15/02/13	73.65	330.91	161



Commercial paper			
	EUR bi	llions <sup>a)</sup>	Number
	Issues	Stocks	of issuers
17/11/12 to 23/11/12	6.37	61.66	84
24/11/12 to 30/11/12	4.66	58.27	85
01/12/12 to 07/12/12	6.36	59.63	85
08/12/12 to 14/12/12	5.62	59.27	84
15/12/12 to 21/12/12	8.35	58.83	80
22/12/12 to 28/12/12	3.26	57.35	77
29/12/12 to 04/01/13	5.50	57.91	78
05/01/13 to 11/01/13	11.15	56.90	79
12/01/13 to 18/01/13	10.77	55.05	80
19/01/13 to 25/01/13	7.41	56.08	86
26/01/13 to 01/02/13	4.46	55.32	84
02/02/13 to 08/02/13	6.89	53.21	88
09/02/13 to 15/02/13	6.82	54.24	90



Negotiable medium-t	erm notes		
	EUR bi	llions <sup>a)</sup>	Number
	Issues	Stocks	of issuers
17/11/12 to 23/11/12	0.01	71.76	120
24/11/12 to 30/11/12	0.22	71.70	119
01/12/12 to 07/12/12	0.39	71.79	119
08/12/12 to 14/12/12	0.22	71.22	119
15/12/12 to 21/12/12	0.37	70.95	119
22/12/12 to 28/12/12	0.32	71.02	119
29/12/12 to 04/01/13	0.02	70.75	119
05/01/13 to 11/01/13	0.59	71.21	119
12/01/13 to 18/01/13	0.34	71.39	118
19/01/13 to 25/01/13	0.16	71.47	118
26/01/13 to 01/02/13	2.01	73.39	118
02/02/13 to 08/02/13	12.92	73.34	118
09/02/13 to 15/02/13	0.16	73.25	118



a) Issues in euro are cumulative over the reference period. Outstanding amounts are calculated from the cut-off date (the last day of the period under review).

Table 29
Negotiable debt securities – France



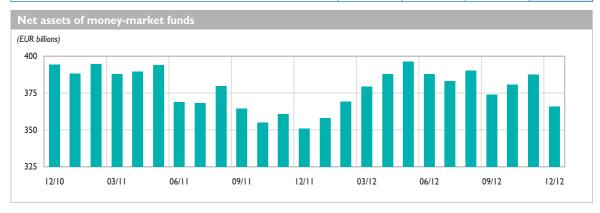






Table 30 Mutual fund shares/units – France

			2012		2012
		March	June	Sept.	Dec.
Net assets of mutual fund shares/units by category	·				
Money-market funds		379.52	387.89	374.01	365.76
Bond mutual funds		205.55	201.31	207.66	
Equity mutual funds		241.94	223.54	230.17	
Mixed funds		246.54	237.74	247.45	
Funds of alternative funds		15.47	15.09	14.45	
Guaranteed-performance mutual funds		0.00	0.00	0.00	
Structured funds ("fonds à formule")		52.68	49.12	48.74	



Debt securities and quoted shares issued by French residents

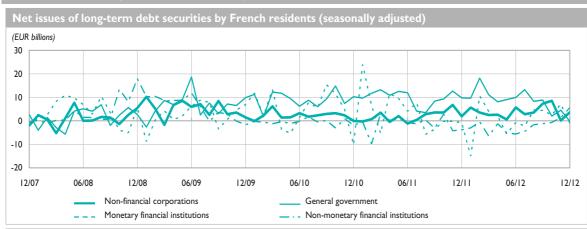
	Outstanding amounts a) Net issues b)					
	2011	2012	12-month		2012	
	Dec. c)	Dec. c)	total	Oct. c)	Nov. c)	Dec. c)
Debt securities issued by French residents						
Total	3,228.0	3,309.1	81.1	0.7	-5.2	-10.5
Non-financial corporations	426.9	477.6	50.7	9.2	-0.4	3.5
Short-term (≤ 1 year)	30.4	35.8	5.3	0.6	-0.5	-0.2
Long-term (> 1 year)	396.5	441.8	45.4	8.6	0.1	3.7
General government	1,467.0	1,543.4	76.4	-0.6	-2.8	-7.1
Short-term (≤ 1 year)	226.3	197.5	-28.8	-2.7	-7.4	-6.9
Long-term (> 1 year)	1,240.7	1,345.9	105.2	2.1	4.5	-0.2
Monetary financial institutions <sup>d)</sup>	1,165.7	1,147.4	-18.3	-7.0	-3.0	-11.8
Short-term (≤ 1 year)	334.2	302.4	-31.9	-9.6	-10.1	-10.9
Long-term (> 1 year) <sup>d)</sup>	831.5	845.0	13.6	2.5	7.1	-0.9
Non-monetary financial institutions <sup>e)</sup>	168.4	140.7	-27.7	-0.8	1.0	4.8

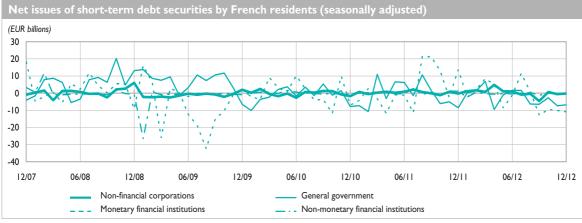
(EUR billions)

(LON bintonia)												
	Outstanding	g amounts <sup>f)</sup>	I	Net issues b)	)	Gross issues <sup>g)</sup>	Repurchases g)					
	2011	2012	12-month	12-month 2012		12-month	I2-month					
	Dec.	Dec.	total	Nov.	Dec.	total	total					
French quoted shares												
Total	1,101.4	1,269.6	11.8	0.8	-0.1	16.2	4.4					
Non-financial corporations	988.7	1,114.2	10.4	0.8	0.2	14.3	3.9					
Monetary financial institutions	74.6	105.6	0.7	-0.1	-0.3	1.2	0.5					
Non-monetary financial institutions	38.1	49.7	0.7	0.0	0.0	0.7	0.0					

- a) Nominal values for outstanding amounts of debt securities.
- b) Monthly data are seasonally adjusted. The 12-month total is unadjusted.
- c) Data possibly revised.
- d) Excluding the impact of intra-group transactions between banks.
  e) Including units issued by SPVs.
- f) Market values for outstanding amounts of quoted shares.
- g) Non-seasonally adjusted data.

Table 32
Debt securities and quoted shares issued by French residents, by sector





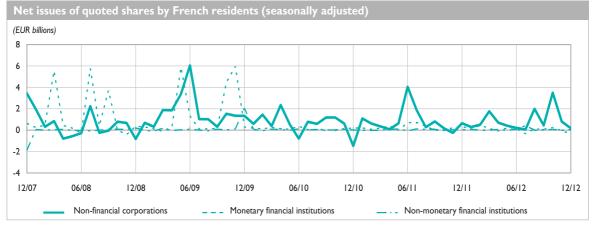
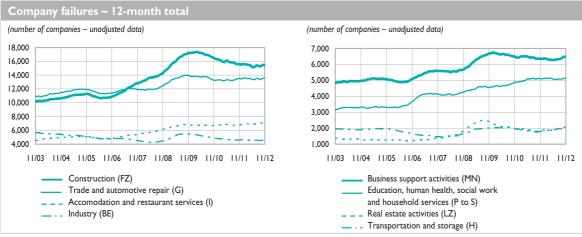


Table 33
Company failures by economic sector – France

(number of companies, unadjusted data, 12-month total)

(number o) companies, unac	<u> </u>	)H						2012					
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.
Agriculture, forestry and fishing (AZ)	1,250	1,243	1,261	1,275	1,258	1,269	1,263	1,249	1,260	1,255	1,219	1,232	1,235
Industry (BE)	4,593	4,627	4,695	4,700	4,606	4,614	4,509	4,569	4,584	4,556	4,528	4,609	4,599
Construction (FZ)	15,591	15,527	15,603	15,586	15,482	15,465	15,154	15,154	15,401	15,359	15,245	15,486	15,448
Trade and automotive repair (G)	13,533	13,448	13,566	13,590	13,476	13,532	13,379	13,331	13,530	13,490	13,354	13,534	13,578
Transportation and storage (H)	1,800	1,811	1,835	1,879	1,868	1,925	1,907	1,901	1,961	1,968	1,966	2,018	2,000
Accomodation and restaurant services (I)	6,816	6,828	6,870	6,887	6,931	6,937	6,843	6,859	6,985	7,009	6,985	7,135	7,143
Information and communication sector (JZ)	1,530	1,547	1,588	1,588	1,537	1,553	1,562	1,561	1,574	1,564	1,563	1,578	1,569
Financial and insurance activities (KZ)	1,158	1,150	1,177	1,197	1,170	1,183	1,163	1,191	1,207	1,201	1,166	1,172	1,162
Real estate activities (LZ)	1,864	1,886	1,891	1,866	1,847	1,877	1,853	1,897	1,970	1,973	2,001	2,053	2,058
Business support activities (MN)	6,351	6,345	6,383	6,345	6,302	6,290	6,274	6,281	6,325	6,325	6,378	6,482	6,487
Education, human health, social work and household services (P to S)	5,099	5,091	5,126	5,130	5,134	5,150	5,073	5,053	5,077	5,082	5,080	5,111	5,145
Sector unknown Total sectors	102 <b>59,687</b>	102 <b>59,605</b>	108 <b>60,103</b>	104 <b>60,147</b>	104 <b>59,715</b>	105 <b>59,900</b>	98 <b>59,078</b>	98 <b>59,144</b>	96 <b>59,970</b>	96 <b>59,878</b>	93 <b>59,578</b>	97 <b>60,507</b>	99 <b>60,523</b>



NB: The two-letter codes correspond to the aggregation level A10, and the one-letter codes to revised NAF sections 2 A21.

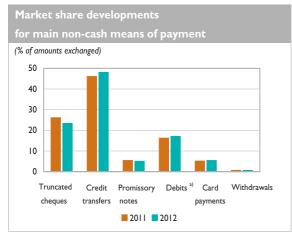
Table 34 Retail payment systems – France

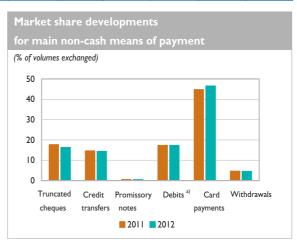
(daily average in EUR millions, % share for the last month)

	2009	2010	2011	2012	20	12	2013	2013
					Nov.	Dec.	Jan.	Share
Cheques	5,700	5,590	5,478	4,947	4,560	5,342	4,417	21.3
Credit transfers	8,473	8,865	9,646	10,167	9,481	12,313	10,177	49.1
of which SEPA credit transfers	95	683	2,555	4,130	4,005	5,578	4,604	22.2
Promissory notes	1,250	1,138	1,142	1,079	1,112	1,209	999	4.8
Direct debits	1,801	1,827	1,938	2,004	1,978	2,273	2,012	9.7
Interbank payment orders	143	133	130	131	214	121	95	0.5
Electronic payment orders	1,082	1,141	1,343	1,491	1,215	2,067	1,764	8.5
Card payments	957	1,009	1,085	1,152	1,122	1,534	1,125	5.4
ATM withdrawals	143	140	145	146	136	169	126	0.6
Total	19,550	19,844	20,907	21,116	19,818	25,028	20,715	100.0

(daily average in thousands of transactions, % share for the last month)

	2009	2010	2011	2012	20	12	2013	2013
					Nov.	Dec.	Jan.	Share
Cheques	10,206	9,507	9,112	8,588	8,413	10,199	8,527	16.5
Credit transfers	7,500	7,356	7,549	7,593	7,251	8,855	7,630	14.8
of which SEPA credit transfers	39	270	1,400	2,154	2,146	2,924	2,531	4.9
Promissory notes	332	311	303	291	304	327	271	0.5
Direct debits	8,165	8,194	8,502	8,680	8,001	8,888	8,567	16.6
Interbank payment orders	394	364	342	320	385	357	288	0.6
Electronic payment orders	56	66	76	101	129	142	124	0.2
Card payments	20,420	21,505	22,969	24,489	24,044	31,170	24,021	46.6
ATM withdrawals	2,456	2,375	2,422	2,407	2,272	2,644	2,097	4.1
Total	49,530	49,677	51,275	52,469	50,799	62,581	51,524	100.0





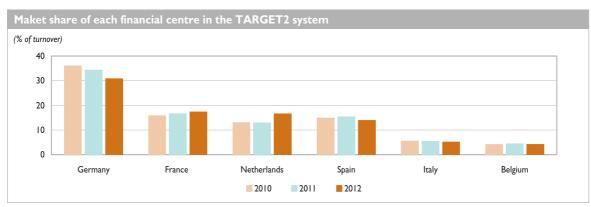
a) Debits: direct debits, interbank payment orders and electronic payment orders.

Sources: GSIT, STET. Produced 20 February 2013

Table 35 Large-value payment systems – EU

(daily average in EUR billions, % share for the last month)

	2009	2010	2011	2012	2012		2013	2013
					Nov.	Dec.	Jan.	Share
France	367	365	398	431	370	400	323	15.6
Germany	669	829	818	764	620	675	614	29.7
Austria	28	27	27	25	19	21	18	0.9
Belgium	106	95	106	104	92	101	83	4.0
Cyprus	2	2	2	3	3	2	- 1	0.0
Spain	356	342	367	345	303	373	362	17.5
Finland	28	35	47	85	62	63	46	2.2
Greece	29	28	23	20	7	14	32	1.5
Ireland	30	30	21	17	13	15	13	0.7
Italy	126	129	129	128	127	150	140	6.8
Luxembourg	40	40	57	70	65	70	66	3.2
Malta	0	0	0	1	1	I	1	0.1
Netherlands <sup>a)</sup>	287	300	308	412	306	309	298	14.4
Portugal	17	20	22	14	10	14	- 11	0.6
Slovakia	3	3	3	3	3	3	2	0.1
Slovenia	2	2	2	3	3	3	2	0.1
EPM-ECB	47	37	36	35	28	35	32	1.5
Total TARGET2 euro area b)	2,137	2,283	2,367	2,460	2,032	2,249	2,044	98.9
Non-euro area	16	16	17	17	17	17	23	1.1
Total TARGET2 EU b)	2,153	2,299	2,383	2,477	2,049	2,266	2,067	100.0
Euro I c)	255	241	249	226	189	221	206	



The sum of the components may not be equal to the total (or to 100) due to rounding.

Since January 2009, a new methodology for collecting and reporting statistics has been established on the TARGET2 data to improve data quality. This must be taken into account when comparing 2009 data with previous data.

- a) Since 19 May 2008, the operations of the United Kingdom pass in transit by this country.
- b) Variable composition according to the countries which participate in the systems of payment in euro.
- c) Euro1 (EBA): clearing system of the Euro Banking Association. Euro1 data include retail payments recorded in STEP1.

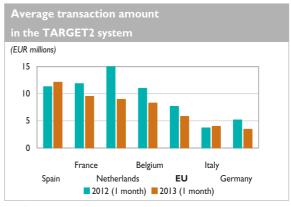
Sources: Banque de France, European Central Bank.

Table 36
Large-value payment systems – EU

(daily average in number of transactions, % share for the last month)

	2009	2010	2011	2012	2012		2013	2013
					Nov.	Dec.	Jan.	Share
France	39,441	31,850	34,141	33,830	32,440	38,258	34,360	9.7
Germany	174,602	173,218	172,884	175,611	168,266	191,038	175,205	49.4
Austria	6,539	5,266	6,294	6,711	6,730	8,120	4,766	1.3
Belgium	8,517	9,454	10,265	9,955	9,593	10,562	9,221	2.6
Cyprus	389	466	515	613	590	757	617	0.2
Spain	29,580	29,195	29,509	29,760	28,975	35,693	30,507	8.6
Finland	1,652	1,589	1,571	1,611	1,553	1,665	1,557	0.4
Greece	5,692	5,904	5,861	4,335	3,918	4,712	3,536	1.0
reland	4,824	4,961	4,376	4,012	3,831	4,261	3,542	1.0
Italy	33,824	33,649	33,643	34,837	33,711	43,577	39,423	11.1
Luxembourg	2,847	3,033	3,229	3,509	3,860	4,533	4,120	1.2
Malta	59	65	72	157	166	164	164	0.0
Netherlands <sup>a)</sup>	36,930	33,304	32,490	33,144	32,690	35,757	32,265	9.1
Portugal	4,190	4,206	4,165	4,166	3,837	4,654	4,192	1.2
Slovakia	606	582	730	1,090	1,141	1,205	1,078	0.3
Slovenia	3,073	3,023	3,039	2,786	2,615	2,973	2,516	0.7
EPM-ECB	312	333	379	553	564	583	577	0.2
Total TARGET2 euro area <sup>b)</sup>	353,076	340,099	343,160	346,680	334,480	388,513	347,645	98.0
Non-euro area	-7,304	3,281	5,344	7,505	7,572	8,018	6,982	2.0
Total TARGET2 EU b)	345,772	343,380	348,505	354,185	342,051	396,531	354,627	100.0
Euro I <sup>c)</sup>	227,674	230,124	242,499	260,135	249,491	278,404	246,122	





The sum of the components may not be equal to the total (or to 100) due to rounding.

Since January 2009, a new methodology for collecting and reporting statistics has been established on the TARGET2 data to improve data quality. This must be taken into account when comparing 2009 data with previous data.

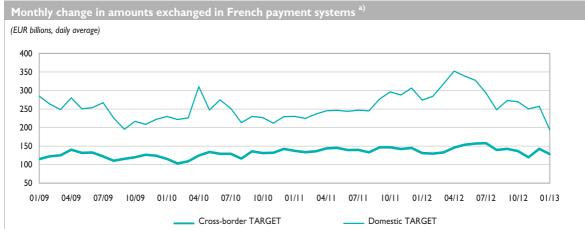
- a) Since 19 May 2008, the operations of the United Kingdom pass in transit by this country.
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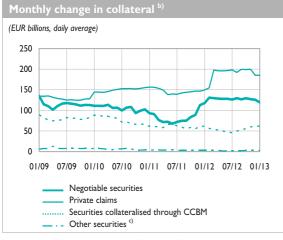
Sources: Banque de France, European Central Bank.

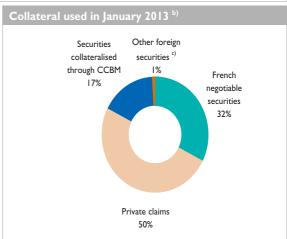
Table 37 Large-value payment systems – France

(daily average in EUR billions, % share for the last month)

	2009	2010	2011	2012	2012		2013	2013
					Nov.	Dec.	Jan.	Share
Collateral used in domestic TARGET b)								
French negotiable securities	114.6	105.7	81.6	127.3	127.2	125.7	119.4	32.4
Private claims	129.0	149.8	146.4	188.7	199.8	185.2	185.1	50.2
Securities collateralised through CCBM	79.9	76.9	60.5	53.9	60.0	61.8	61.6	16.7
Other securities c)	7.9	5.9	3.5	2.7	3.1	3.1	2.7	0.7
Total	331.3	338.3	292.0	372.6	390.I	375.8	368.8	100.0







a) Since 18 February 2008, TBF (the French component of TARGET) and PNS systems have been replaced by TARGET2-Banque de France, the single French large-value payment system.

b) Until 15 February 2008, the indicated amounts corresponded to collateral used for intraday credit in TBF. Since the go-live of the "3G" system (Global management of collateral) and TARGET2-Banque de France on 18 February 2008, the amounts represent the collateral posted in a single pool of assets and that can be used for monetary policy and/or intraday credit operations.

c) Other foreign securities submitted via links between securities settlement systems.

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