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Firms' wage policies during the crisis: survey findings

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The findings of surveys conducted by the Banque de France¹ suggest that base wages in France are rigid in that the average lapse of time between two changes in wages is one year and the propensity of French firms to reduce nominal base wages is very slight. It also appears that the indexation of wages to inflation is partial, with only a third of firms reporting that they informally link changes in base wages to inflation.

In response to the significant decline in activity in the first half of 2009, firms have adopted strategies aimed mainly at reducing labour costs. Cuts in base wages appear however to have been exceptional since the onset of the crisis. The adjustment has mainly taken place through reductions in temporary and permanent staff and, to a lesser extent, through variable components of compensation.

Keywords: Wage-setting, wage stickiness, survey data.

JEL codes: E24, D4, L11.

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¹ Two specific surveys on wage-setting practices were carried out by the Banque de France in 2007 and 2009 within the framework of the Eurosystem's WDN. The main aim of the first survey was to gather information on the nature and frequency of wage changes within firms. The purpose of the second survey was to shed light on the way in which firms have adjusted their wage bill in response to the economic crisis.

Box I**Presentation of the surveys**

The findings set out below are derived from two surveys on wage-setting practices. The first was carried out in September-October 2007. The questions mainly concern the setting of and changes in wages, the downward rigidity of wages and links between wage and price adjustments (see Montornès and Sauner-Leroy, 2009 for details of the questionnaire). The second survey, conducted in June-July 2009, focuses more specifically on the impact of the recession on wages. Harmonised surveys were carried out in parallel in several other European countries.

The scope of the surveys

The surveys conducted by the Banque de France as part of the Wage Dynamics Network (WDN) were carried out among the sample of firms usually questioned for the monthly business survey. In total, nearly 6,540 firms were questioned for the first survey and 6,675 for the second. The reply rate was roughly 31% for each survey. The firms questioned have at least five employees and carry out their activity in the manufacturing and market services sectors in mainland France. The results are weighted at individual level by the size of the firm in terms of the number of staff employed and then adjusted for value added at sector level. Industrial groups were not questioned as such and the results presented are not consolidated.

Methodology

Unless otherwise indicated, the questions concern base wages during the year not taking into account compensation for overtime or bonuses. The questions concerning the transmission channels of the crisis, adjustment strategies, cost-cutting strategies and the reasons for the absence of wage cuts are qualitative. Companies were questioned by traditional mail or e-mail, as well as via face-to-face or telephone interviews.

Wage developments and the way in which they interact with price variations constitute a central issue for the conduct of economic policy, and monetary policy in particular. Within a monetary union such as the euro area, in which labour markets are segmented, the degree of wage flexibility is an important factor in the process of adjustment to macroeconomic imbalances. In particular, the existence of wage rigidities reduces the speed of adjustment to shocks and increases the associated costs.

In monetary policy terms, the existence of wage rigidities has several consequences. First of all, nominal rigidities affect the determination of a range for inflation that allows real wages to adjust to labour market conditions and to thus have a "grease effect" on the wheels of this market (Tobin, 1972). Second, the existence of real rigidities resulting for example from the indexation of wages to inflation reduces the effectiveness of monetary policy. The indexation of wages to inflation can lead to a self-perpetuating increase in underlying inflation following a sectoral inflation shock via "second round" effects. Having a good understanding of wage-setting practices and the way in which wages adjust to shocks is therefore an important consideration for the conduct of monetary policy.

Much research on wage rigidities² has been carried out in recent years, but the findings are sometimes divergent and difficult to compare on account of the diverse nature of the sources used (administrative data, surveys of households or enterprises) and differences in the periods covered. The European System of Central Banks therefore set up a research network on wage dynamics (the Wage Dynamics Network) aimed at improving the understanding of wage-setting mechanisms using original databases.³ In this framework, an extensive survey on wage-setting practices was conducted among business managers in the tradition of the work of Blinder et al. (1990, 1998). A first wave of the survey was carried out in autumn 2007 by central banks in 17 countries.⁴ The survey was conducted at a time when the European economy was growing at a rate close to its potential. It was supplemented in the second quarter of 2009 by a second wave, conducted by a smaller number of countries and designed to shed light on the way in which firms have adapted to the new environment brought about by the onset of the economic and financial crisis (see Box 1 for a description of the surveys).

The purpose of this article is to present a summary of the two surveys' main findings. Two findings may be highlighted. First, it appears that, while nominal wages are relatively rigid in France, the partial nature of their indexation to inflation introduces an element of flexibility in their real developments. Second, employment has been the main variable of adjustment for firms in the period of marked recession and low inflation that prevailed in the first half of 2009.

2 See for example Dickens et al. (2007).

3 The WDN has given rise to microeconomic and macroeconomic research on wage dynamics, labour costs and their implications for monetary policy. A brief presentation of the research network as well as its activity reports are available at: http://www.ecb.int/home/html/researcher_wdn.en.html.

4 The surveys were conducted in Austria, Belgium, the Czech Republic, Estonia, France, Greece, Hungary, Ireland, Italy, Lithuania, the Netherlands, Poland, Portugal, Slovenia and Spain.

I | The characteristics of wage-setting in France

The survey conducted in 2007 provides information about the mechanisms that govern wage developments in France, and in particular the effect of institutional rules on wage dynamics. In addition, it makes it possible to capture the magnitude of nominal rigidities in base wages using indicators of frequency and seasonal variation in wage developments. Lastly, the survey data also make it possible to measure the degree of wage indexation to inflation.

I | I Wage-setting takes place within a decentralised institutional framework

Wage-setting in France occurs within the framework of negotiations that take place at sector and company level (see Box 2). Despite a rate of trade union membership below 10%, the coverage of wage agreements in France is virtually total, notably on account of procedures that extend the scope of collective wage agreements. Of the respondents to the survey, 98% of enterprises are covered by collective agreements.

Sector-level agreements are not systematically binding and firms also have their own specific wage policies. The results of the first wave of the WDN survey indicate that the wages actually paid are higher than the wages

Box 2

Wage bargaining

Wage-setting in France results from a process of negotiation between employers and staff representatives or individual employees. The 1982 Auroux Acts made annual wage bargaining compulsory at both firm and sector level. In addition, the government intervenes indirectly via sectoral agreement extension mechanisms and, at the bottom of the wage structure, via increases in the minimum wage.

At company level, employers must negotiate wages collectively when there is a trade union representative within the firm. In practice, this obligation is only complied with when there are more than 50 employees. Not all firms are therefore obliged to negotiate wages but almost all are covered by a sector-level agreement (and must adhere to the minimum wage for that sector). At sector level, the opening of annual negotiations is compulsory but the two sides are not obliged to reach an agreement. If the negotiations fail (as they do in 20% of cases), the pay scale in place remains applicable. To ensure fair competition within a sector of activity, sector-level agreements may be extended to cover all firms within that sector by a decision of the Ministry of Labour.

Table 1 Indicators of wage bargaining coverage*(as a %)*

	Coverage rate (a)	Specific wage policy	Differential from wage negotiated
Total	98	47	6
Industry	99	50	6
Services	97	43	7
SMEs	97	43	7
Large firms	100	57	8

*Note: See Box 1**(a) The coverage rate is defined as the proportion of firms covered by collective agreements.*

negotiated in nearly one-half of enterprises (see Table 1). According to the data from the WDN survey, there is a differential in level terms of around 6% between sector-level pay scales and the wages actually paid by firms.

The frequency of wage changes is moreover determined by the collective bargaining timetable. Avouyi-Dovi et al. (2009) show that in France wage agreements are most often signed in December and come into effect in January. Overall, collective bargaining plays a crucial role in wage developments as it partly determines the magnitude of wage changes as well as the dates these changes take effect.

I | 2 Nominal wage stickiness

Nominal wage stickiness traditionally covers two complementary aspects. Wage stickiness can first of all be defined by the fact that nominal wages vary little over time and respond with a lag to changes in their fundamentals. According to the 2007 WDN survey, wages are relatively rigid in the sense that they are generally adjusted once a year (base wages are changed once a year in 74% of firms). Base wages are therefore set for one year on average, with only 20% of firms reporting that they change base wages more than once a year (see Table 2). Across the euro area as a whole, 60% of wages change exactly once a year and 27% more than

Table 2 Frequency of wage changes*(as a %)*

	More than once a year	Once a year	Less than once a year	Never
Total	20	74	5	1
Industry	24	72	4	1
Services	16	76	6	1
SMEs	17	75	6	1
Large firms	26	72	2	—

once a year. The frequency observed in France is therefore quite close to that in other euro area countries. The survey also shows a low degree of divergence in the frequency of wage changes between sectors (ECB, 2009).

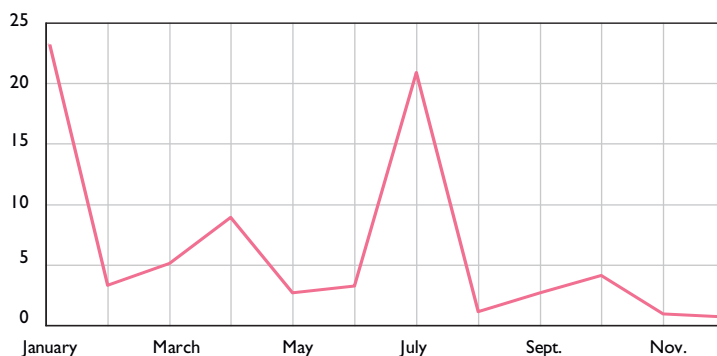
Wage-setting also follows a seasonal pattern and is staggered. In France, the vast majority of firms report that they change wages in a particular month of the year. The months of January and July are those in which the largest number of wage changes occur (see Chart 1). This "January effect" is linked to the collective bargaining calendar (see section 1|1) while the peak in wage changes in July is due to the annual upward adjustment in the minimum wage. This stylised fact tends to bear out the model for wage contracts proposed by Taylor (1980). Typically, wage contracts include clauses providing for annual reviews of base wages. Between two review dates, wages are fixed and therefore disconnected from developments on the labour market. It is only at the later review date that adjustments are made.

Second, wage stickiness can be evaluated by considering the asymmetry of the distribution of wage changes. In France, the downward rigidity of nominal wages is enshrined in the Labour Code. Indeed, a cut in the contractual wage constitutes a change to a significant element of the employment contract that requires the signature of an amendment to the contract by the employee. The ability of firms to cut nominal wages is therefore subject to a highly regulated procedure.

The WDN survey data show however that there are exceptions to downward wage stickiness in France. Questioned about their wage policies over the past five years, 2% of firms report that they have cut individual wages at least once. The distinction between an individual wage cut and a measurement error is traditionally difficult to draw using individual data

Chart 1 Monthly frequency of wage changes

(as a %)



Note: The total amounts to 78%. The remainder corresponds to firms that do not apply a specific rule.

due to rounding effects and the effect of changes in working patterns.⁵ Although based solely on reports by firms, these data confirm the existence of downward wage adjustments. Wage cuts are more frequent in industry and only occur when there is a marked deterioration in the firm's financial position (see section 2|2). In spite of this downward rigidity, it is still possible for employers to freeze wages.

1|3 Wage indexation to inflation is partial

The degree of wage indexation to inflation is linked first of all to the automatic upward adjustment of the minimum wage (*salaire minimum interprofessionnel de croissance* – SMIC) but also to the de facto wage indexation that occurs periodically in the context of wage bargaining. The SMIC is the sole legal mechanism for wage indexation to inflation.⁶ It is indexed to inflation and increases in it may not be below half of the increase in the purchasing power of a manual worker's basic hourly wage.⁷ In addition, changes to the SMIC have a structuring effect on firms' pay scales. In order to maintain the wage structure within firms, the latter may be encouraged to simultaneously increase wages that are close to the SMIC.⁸

The WDN survey also provides a measure of the degree of de facto wage indexation to inflation (see Table 3). According to the survey, about a third of firms (32%) report that they use inflation indexation when raising wages: this indexation is applied on a case-by-case basis over the course

Table 3 Wage indexation

(as a %)

	Complete automatic indexation		Inflation rate used		Degree of indexation
	Past inflation	Expected inflation	Past inflation	Expected inflation	
Total	4	2	18	8	32
Industry	4	1	23	10	38
Services	5	2	14	6	27
SMEs	4	1	20	7	32
Large firms	6	2	14	10	32

Note: The degree of indexation is the sum of the percentages of replies indicating complete automatic indexation or a factoring-in of inflation.

⁵ For example, switches from full-time to part-time work or from night work to day work. See Biscourp et al. (2005) for further details.

⁶ Wage increases based on indexation to prices or the SMIC are forbidden (see Order 58-1374 of 30 December 1958, Article 79-3, and Article L. 3231-3 of the Labour Code).

⁷ In addition, the SMIC may benefit from discretionary increases decided by the Government. There is also an additional upward adjustment when the increase in prices since the previous upward adjustment exceeds 2%. Since the creation of the single currency in 1999, the latter measure was only used in 2008. From 2010, the upward adjustment takes place on 1 January, in accordance with the Act of 3 December 2008.

⁸ According to the study by Koubi and Lhommeau (2006), an increase in the SMIC on average passes through to wages up to 1.4 times the SMIC, with large disparities between sectors.

of wage bargaining. Moreover, about 4% of firms report that they have an automatic mechanism for the complete indexation of wages to inflation. Behaviour varies significantly between sectors, as nearly 38% of industrial firms report using a form of indexation as against 27% of firms in the services sector. For 26% of firms, price developments are taken into account in the upward adjustment of wages, either with respect to past inflation (18%) or expected future inflation (8%). This is in line with the results of Heckel et al. (2008), who also show that there is indexation to past and future inflation. The indexation to past inflation coefficient is between 20% and 50%. The weight of expected inflation is around 10%.⁹ The results obtained using the WDN survey data confirm therefore that wage indexation to inflation is partial.

To sum up, in periods of sustained growth and moderate inflation, wage rigidities do not constitute a constraint for firms. However, in periods of recession and zero inflation, wage rigidities may become "biting".

2| In response to the crisis, French firms have adjusted staff levels rather than wages

In the first half of 2009, the economic environment was marked by a deterioration in activity of greater magnitude than that seen during the 1992-1993 recession and by negative inflation. When questioned about the effect of this change in environment in the second phase of the WDN survey, firms reported being affected mainly via falling demand. Nearly 58% reported a drop in sales and have mainly adopted cost-cutting strategies. A reduction in labour costs has been sought through adjusting the variable components of compensation (paid overtime and bonuses). However, the scope for this type of adjustment is limited and the main ways of cutting labour costs are changes in temporary employment and, ultimately, permanent employment.

2| I A marked fall in demand

According to the WDN survey, the main impact of the crisis on firms has been falling demand: more than one-half of firms report a decline in sales of their main product (see Table 4). In second place, firms, and in particular SMEs, mention difficulties in accessing bank financing. Lastly, one year after the entry into force of the 2008 Modernisation of the Economy guaranteeing

⁹ Horny and Sevestre (2009) use a microeconomic approach to simultaneously study the pass-through of inflation to wages and the pass-through of wages to the prices set by firms.

Table 4 Impact of the crisis*(Proportion of responses indicating considerable or very considerable difficulties, as a %)*

	Falling sales	Difficulties in accessing financing	Payment periods	Supply difficulties
Total	58	18	18	6
Industry	60	15	15	9
Services	56	21	21	2
SMEs	58	19	17	6
Large firms	57	15	22	7

SMEs payment of invoices at the latest 60 days after their being issued, longer payment periods have affected large firms more. These findings are generally homogenous across each economic sector.

In order to adjust to this demand shock, nearly half of firms have cut costs and nearly a third have been forced to reduce production levels. Adjusting sales prices or sales margins is not regarded as the principal means of adjustment for the great majority of firms questioned (see Table 5). Thus, the fall in production has been accompanied in one-half of cases by the use of short-time working schemes.¹⁰ This government mechanism makes it possible to reduce production and labour costs temporarily.¹¹ In total, short-time working schemes were used by 20% of firms.¹² In the services sector, firms have mainly adopted cost-cutting strategies. Firms in the industrial sector, on the other hand, have primarily reduced production or costs. Behaviour is also different depending on the size of firms: compared to SMEs, large firms have a greater propensity to cut costs.

Table 5 Adjustment strategies*(Proportion of responses indicating cuts among the different possible strategies, as a %)*

	Cuts in					
	Prices	Margins	Production	Costs (a)	Production and costs (a)	Production and margins (a)
Total	46	50	54	81	35	20
Industry	42	51	75	88	50	21
Services	50	49	33	75	17	18
SMEs	50	59	76	84	35	14
Large firms	40	50	72	91	48	15

Note: As they are multiple choice questions, the sum totals by sector and firm size may be greater than 100%.

(a) Proportion of firms using two adjustment strategies simultaneously. Only the two most extensively used strategies are taken into account.

¹⁰ The survey includes a question on the use of government mechanisms aimed at avoiding redundancies or wage cuts. The mechanism reported in 95% of cases consists of short-time working schemes.

¹¹ Payment of the employee's wage is replaced by the payment of an allowance amounting to 50% of employee's gross hourly pay, to which the State contributes. INSEE's statistics do not allow us to measure the effect of this mechanism.

¹² In particular, the proportion of firms making use of short-time working schemes stood at 88% of firms in the automobile construction sector.

Firms sometimes use several strategies simultaneously. Table 5 also shows the two strategies most used by firms. Cuts in production have thus generally been accompanied by cutting costs or, to a lesser extent, by cutting margins. The main adjustment strategies have therefore involved the quantities produced rather than lowering prices.

2|2 Adjusting costs has not primarily affected base wages ...

The 2009 survey indicates that the onset of the current crisis has not led to an increase in cuts in base wages. Indeed, base wages have been lowered in only 1 % of firms. Cuts in base wages have therefore been as infrequent as during the 2002-2007 period. On the other hand, wages have been kept at the same level in the great majority of firms and are not expected to increase over the short term (see Table 6). The proportion of wage freezes has thus risen sharply compared with the 2002-2007 period when 10% of firms implemented them. These findings are common to many euro area countries, where the proportion of individual wage cuts has not grown since the start of the crisis (except in Spain) whereas the proportion of wage freezes (except in Austria and the Netherlands) has increased (ECB, 2009). Wage freezes appear therefore to be a substitute for wage cuts, indicating that wage stickiness has been at work.

The survey also reveals that the sources of base wage stickiness derive more from the behaviour of firms than from labour market institutions (see Table 7). According to firms, the absence of pay cuts stems from the desire to maintain "positive incentives". In particular, firms report the negative consequences of potential wage cuts on their employees' input and motivation (81 % and 85% respectively) more than reasons linked to the legal framework (58%). These findings are consistent with the surveys conducted among firms in Sweden during the recession in the early 1990s (see Agell and Lundborg, 2003). However, the reasons for wage stickiness vary between economic sectors. In the services sector, cutting wages is

Table 6 Wage cuts and freezes

(Proportion of firms reporting that they have implemented wage cuts or freezes or that they plan to do so, as a %)

	Cuts		Freezes	
	Implemented	Planned	Implemented	Planned
Total	1	1	81	78
Industry	2	2	80	77
Services	0	1	82	78
SMEs	1	1	78	77
Large firms	1	2	86	84

Table 7 Reasons for base wage stickiness

(as a %)

	Legal prohibition	Drop		Corporate image	Loss of best employees	Cost of staff training	Future hiring difficulties	Maintaining wages in periods of recession	Comparisons between firms
		In input	In motivation						
Total	58	81	85	52	63	53	48	34	51
Industry	56	84	88	49	49	35	38	38	38
Services	59	78	83	53	72	64	55	31	60
SMEs	65	84	88	49	61	52	47	39	49
Large firms	42	72	76	62	69	56	51	17	57

Note: As they are multiple choice questions, the sum totals by sector and firm size may be greater than 100%.

regarded as increasing the risk of the best workers leaving (72%) and of difficulties in hiring in the future (55%), whereas in industry, firms emphasise the effect on the productivity of their employees.

2 | 3 ... but has partially affected variable pay components ...

However, base wages are only part of employees' compensation. This may include a number of variable components that depend on the firm's wage policy (payment of individual or collective bonuses, or of bonuses linked to company earnings or the meeting of specific objectives) or the organisation of working time (overtime). By their nature, these variable elements introduce a degree of flexibility into wage cost developments as they depend either on the meeting of objectives possibly set in consultation with staff, or on a temporary or seasonal increase in activity.

The 2009 survey indicates that adjustments to compensation have primarily concerned these variable components, i.e. overtime and bonuses.

Table 8 Cuts in variable pay components

(as a %)

	Implemented	Planned
Total	30	33
Industry	39	44
Services	28	32
SMEs	28	32
Large firms	36	35

Note: As they are multiple choice questions, the sum totals by sector and firm size may be greater than 100%.

They have been adjusted downwards in nearly a third of firms. The scope for adjusting these components is however limited at the aggregate level as they represented on average only 12% of employees' gross remuneration in 2006 (Bignon and Folques (2009)).

2|4 ... and mainly employment

Besides wages, firms have numerous strategies for adjusting their wage bill. Questioned about the main strategy used to cut costs, over half of firms reported opting to reduce staff, primarily temporary posts (fixed-term contracts and temporary workers, 32%) but also permanent posts (23%). The cost-cutting strategy chosen depends in particular on the sector of activity and the size of the firm. In industry, more than half of firms have chosen to cut temporary employment. In the services sector, firms have most frequently reduced permanent posts (30%) and non-wage costs (27%).

All in all, the adjustment of labour costs has mainly concerned employment, temporary but also permanent employment, rather than wages. Faced with a major macroeconomic shock and against the backdrop of low inflation, the degree of base wage stickiness has not lessened even as unemployment has risen sharply.

Table 9 Cost-cutting strategies

(Proportion of firms that have used one of the proposed strategies as their main strategy, as a %)

	Base wage	Bonuses	Permanent staff	Temporary staff	Hours worked	Non-wage costs
Total	0	10	23	33	10	24
Industry	0	8	11	53	9	19
Services	0	11	31	19	11	28
SMEs	0	10	23	33	12	22
Large firms	0	11	23	32	6	28

Note: Tables 6, 8 and 9 show the proportion of firms that have cut wages or plan to do so, irrespective of whether this is the main cost-cutting strategy or not. The results are therefore different from those presented in Table 8.

The findings of the surveys conducted by the Banque de France on wage developments have made it possible to highlight the fact that nominal base wages in France appear relatively sticky.

This rigidity, which appears to be less marked than in the other euro area countries (ECB, 2009) stems from the combination of two major characteristics of wage dynamics. First, the respective calendars for collective bargaining and the increase in the minimum wage are reflected in the fact that the average lapse of time separating two wage changes is one year, and the months of January and July are those in which wage rises occur most often. Second, firms themselves are not in favour of cuts in base wages for fear of the negative effects they could have on the motivation and efforts of their employees.

The findings also show that, due to the partial indexation of nominal wages to inflation, wage adjustments occur in real terms over time. These stylised facts are essentially common to the whole of the euro area and suggest that a positive range for the inflation target allows monetary policy to introduce a "grease effect" into the wheels of the labour market so that real wages can adjust to the conditions prevailing in this market.

Nonetheless, in the economic environment that prevailed in the first half of 2009 and as a result of deflationary pressures, this "grease effect" appears not to have been sufficient to allow firms to adjust to falling demand.

The survey on adjustment strategies in the face of the current crisis conducted in the summer of 2009 suggests that in France firms have responded to the marked drop in their sales by adopting strategies combining cuts in production and in labour costs. Firms have adjusted their wage bills by reducing variable components of compensation and the number of hours worked, but above all by cutting the number of temporary and permanent posts.

The outlook for wage developments appears to be closely linked to that for the macroeconomic environment. With the high level of uncertainty surrounding the economy's emergence from the crisis, it is likely that firms will look for further scope for adjustment. Given the wage stickiness that exists, the persistence of macroeconomic instability could therefore reinforce the segmentation of the labour market both in France and the other euro area countries. Moreover, firms may be inclined to delay raising base wages in order to offset the absence of nominal wage adjustments during the crisis. This would reinforce the durably limited outlook for increases in individual wages.

References

Agell (J.) and Lundborg (P.) (2003)

"Survey evidence on wage rigidity and unemployment: Sweden in the 1990s", *Scandinavian Journal of Economics*, 105 (1), p. 15-29.

Avouyi-Dovi (S.), Fougère (D.) and Gautier (E.) (2009)

"Négociation et rigidités salariales en France : une analyse à partir de données individuelles d'accords de salaires", to be published in *Économie et Statistique*.

Bignon (N.) and Folques (D.) (2009)

"La structure des rémunérations en 2006", DARES, *Premières Informations Premières Synthèses*, No. 31.4, July.

Bircourp (P.), Dessy (O.) and Fourcade (N.) (2005)

"Les salaires sont-ils rigides ? Le cas de la France à la fin des années 1990", *Économie et Statistique*, 386, p. 59-89.

Blinder (A.) and Choi Don (H.) (1990)

"A shred of evidence on theories of wage stickiness", *The Quarterly Journal of Economics*, 105, 1003–15.

Blinder (A.), Canetti (E.), Lebow (D.) and Rudd (J.) (1998)

"Asking about prices: a new approach to understand price stickiness", New York, Russel Sage Foundation.

Dickens (W.), Goette (L.), Groshen (E. L.), Holden (S.), Messina (J.), Schweitzer (M. E.), Turunen (J.), and Ward (M.) (2007)

"How wages change: microevidence from the international wage flexibility project", *Journal of Economic Perspectives*, 21(2), 195–214.

European Central Bank (2009)

WDN final report, available at the following address: http://www.ecb.int/home/pdf/wdn_finalreport_dec2009.pdf.

Heckel (T.), Le Bihan (H.) and Montornès (J.) (2008)

"Sticky wages. Evidence from quarterly microeconomic data", *Note d'études et de recherche*, No. 208, Banque de France.

Horny (G.) and Sevestre (P.) (2009)

"Wage and price joint dynamics at the firm level: an empirical analysis", Mimeo, Banque de France.

Koubi (M.) and Lhommeau (B.) (2006)

"La revalorisation du SMIC et ses effets de diffusion dans l'échelle des salaires sur la période 2000-2005", DARES, *Preliminary summaries*.

Montornès (J.) and Sauner-Leroy (J.-B.) (2009)

"Wage-setting behavior: additional evidence from an ad-hoc survey", ECB, *Working paper series*, No. 1102.

Taylor (J. B.) (1980)

"Aggregate Dynamics and Staggered Contracts", *Journal of Political Economy*, vol. 88 (1), p. 1-23.

Tobin (J.) (1972)

"Inflation and unemployment", *American Economic Review* 62, p. 1-18.

The economic impact of business failures in 2008 and 2009

Companies Directorate

Companies Observatory

Business failures, defined as the initiation of legal proceedings, are reported to the Banque de France on a monthly basis.¹ At the end of August 2009, the number of business failures cumulated over 12 months exceeded 63,000, representing an increase of 19.1% on August 2008. The number of business failures has been steadily rising from a low point (3.5%) in July 2008.

These business failures largely concern companies for which no risk has been reported or which are not included in the FIBEN databases² (balance sheet and/or risk databases) due to threshold effects in the data collection process.

Conversely, the other failing companies, i.e. those that are larger and therefore were recorded in the balance sheet and/or risk databases at the time of the initiation of legal proceedings, have increased in numbers at a faster pace than total business failures.

This deterioration mainly concerns SMEs excluding microenterprises in a few branches of the manufacturing industry (metalworking, transport equipment, textile), building and civil engineering and the catering and hotel business.

There appears to be a stabilisation since summer.

Keywords: Failures, economic impact, risk.

JEL codes: D21, E32, G33.

NB: The balance sheet data are those available at early October (provisional data for August and September 2009). The data on loans reported by credit institutions are those available at early November (provisional data for September 2009).

¹ See Business failures in France at the following address: <http://www.banque-france.fr/fr/statistiques/economie/economie-entreprises/defaillances.htm>.

² See appendix 1 Sources and methodological explanations.

Since the summer of 2008, the increasingly harsh economic conditions have resulted in a marked increase in the number of business failures. This phenomenon persisted over the first nine months of 2009. These failures – defined as both receiverships and liquidation proceedings – mainly concern companies for which no risk has been reported or which are not included in the FIBEN databases.

To complete this count and assess its economic impact, this study puts forward two other approaches. They both show that the other failing companies, i.e. those that are larger and therefore were recorded in the balance sheet and/or risk databases at the time of the initiation of legal proceedings, have increased in numbers at a faster pace than total business failures.

Table 1 Business failures and their economic impact

	Total failures (over 12 months)		Failures reported to the Central Credit Register (CCR)		Failures recorded in the balance sheet database (FIBEN)	
	2008	August 2009	2008	August 2009 (cumulated over 12 months)	2008	July 2009 (cumulated over 7 months)
Count (year-on-year change)	56,294 (+9.5%)	63,024 (+19.1%)	16,360 (+23.2%)	20,012 (+37.8%)	3,478 (+15.8%)	3,038 (+65%)
Reference			1.8 million entities with reported outstanding loans (a)		300,000 entities with balance sheets (a)	
Change in the number of failures according to company size (year-on-year change)						
Microenterprises			14,467 (+22%)	17,242 (+33%)	1,224 (+13%)	1,034 (+65%)
Small and medium-sized enterprises excl. microenterprises			587 (+36%)	956 (+97%)	2,194 (+17%)	1,976 (+66%)
Large companies and holdings			323 (-10%)	452 (+49%)	60 (+40%)	28 (+22%)
Real estate and financial activities			983 (+60%)	1,362 (+75%)		
Change in the economic impact (year-on-year change)						
Loans drawn			+21%	+42%		
Staff					+29%	+74%
Value added					+38%	+90%
Economic weight relative to the reference population (resident companies)						
Loans drawn			0.47%	0.5%		
Staff					0.8%	0.7%
Value added					0.5%	0.4%

(a) Entities subject to reporting threshold effects, less representative of the population of very small businesses.

Source: Banque de France (FIBEN databases).

The first approach consists in identifying the failing companies whose outstanding loans have been reported by credit institutions and recorded in the FIBEN database. Based on the information available at the time of the failures, we measure their relative weight in terms of reported risks on an annual basis by category of company.

The second approach consists in identifying the failing companies whose balance sheet is recorded in the FIBEN database and measuring, in addition to an analysis in terms of staff numbers concerned, the weight of these failures relative to a set of accounting aggregates.

In 2008, failing companies weighed much more in terms of outstanding loans, staff or value added than the previous year and, at the end of August 2009, this deterioration was even more pronounced than at end-2008. This deterioration mainly concerns small and medium-sized enterprises (SMEs) excluding microenterprises.

However, at this stage, the size of the deterioration should be put into perspective: the weight of companies whose balance sheet is recorded in FIBEN was not more than 2% in any sector – often below 1% – in terms of staff, trade payables or value added. Since the end of the second quarter, the number of failures has been on an upward trend, but the relative economic impact appears to have stabilized.

I | Business failures: a strong rise since summer 2008

In August 2009, a further increase in 12-month cumulated business failures

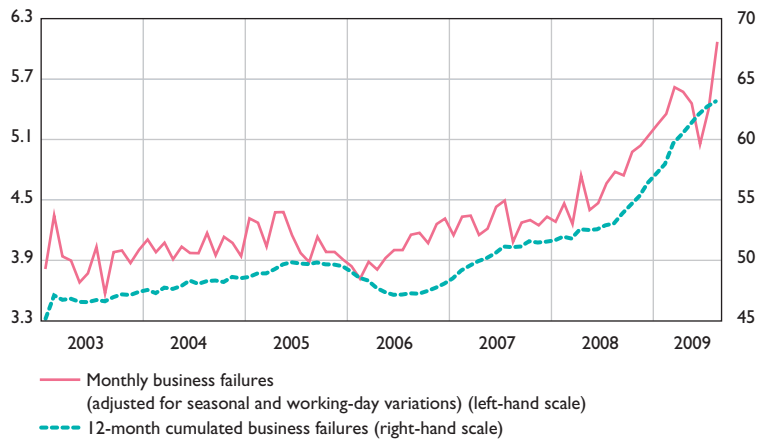
At the end of August 2009, the number of business failures cumulated over 12 months exceeded 63,000, representing an increase of 19.1% compared with August 2008. This figure has been steadily rising from a low point in July 2008 (3.5%). According to the incomplete data at end-September 2009, the year-on-year change in unadjusted data cumulated over 12 months reached 18%.

The monthly data adjusted for seasonal and working-day variations posted a marked increase for the second month in a row, mainly on account of the deterioration in the construction, hotel, trade and transport sectors.

According to the annualised data adjusted for seasonal and working-day variations, the 3-month cumulated business failures posted a 3% decline on the previous three months. This can be attributed to a base effect linked to the very high number of failures at the start of the year.

Chart 1 Business failures

(EUR thousands)



NB: Data at August 2009.

Source: Banque de France (FIBEN databases).

Table 2 Business failures

Breakdown by sector at end-August 2009

Sectors of activity (a)	12-month cumulated data (unadjusted) level and year-on-year (b)			3-month cumulated data (adjusted for seasonal and working day variations) (c)
	August 2009	August 2009/ August 2008 (%)	Sept. 2009/ Sept. 2008 (%)	August 2009 (%)
Industry	5,574	25.5	23.5	-22.1
Construction	16,871	21.8	21.7	23.4
Trade and car repair	13,818	13.5	14.5	-9.4
Transport and storage	2,009	30.6	25.9	-23.5
Catering and hotel	6,958	18.2	17.5	13.1
Information and communication	1,624	14.4	12.6	8.8
Real estate activities	2,548	58.7	49.2	-38.2
Service activities	6,506	16.3	13.9	8.2
Other services	3,152	15.8	12.9	-14.7
Total (a)	63,024	19.1	18.3	-3.3

(a) Not all sectors are listed.

(b) 12-month cumulated data compared with the same month one year earlier.

(c) 3-month cumulated data compared with the previous three months.

NB: Data concerning September are provisional (incomplete).

Source: Banque de France (FIBEN databases).

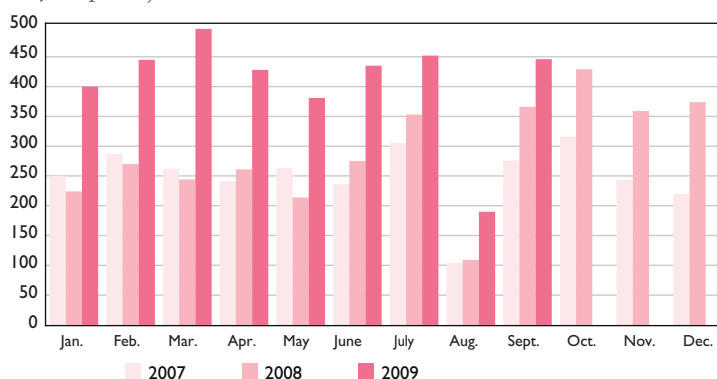
This rise concerns increasingly large companies

For the past few months, increasingly large companies have been failing, more so than in the past. The failing companies that are larger and therefore are recorded in the balance sheet and/or risk databases of the Banque de France at the time of the initiation of legal proceedings have increased in numbers at a much faster pace than total business failures.

This trend became more pronounced in 2009. The cumulated number of companies whose balance sheet is recorded in the FIBEN accounting database was up by 65% over the first seven months of 2009, compared with 19% for total business failures.

Chart 2 Failing businesses whose balance sheet is recorded in FIBEN

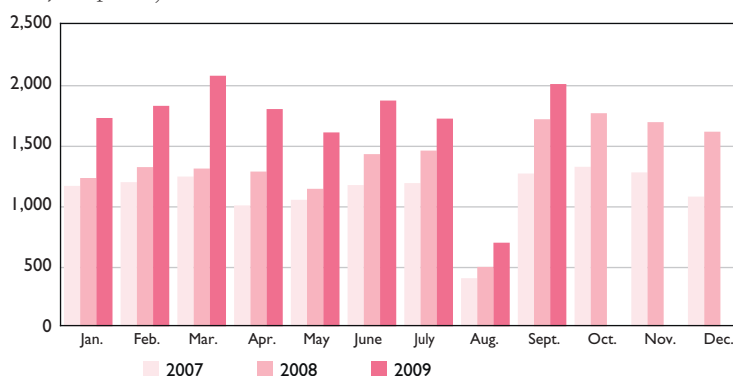
(number of companies)



Source: Banque de France (FIBEN databases).

Chart 3 Failing businesses whose outstanding loans are reported to the Central Credit Register

(number of companies)



Source: Banque de France (FIBEN databases).

In addition, the number of failing companies whose outstanding loans are reported by credit institutions increased by 38% over the last 12 months at end-August 2009 compared with the previous 12 months.

The nature of the legal proceedings: generally a receivership for large companies

The number of business failures should also be assessed according to the nature of the legal proceedings. Most companies that are the subject of legal proceedings are generally liquidated directly: it is the case for over 68% of failures over the last twelve months.

However, in the case of large companies, which are therefore in the FIBEN (risk and/or balance sheet) databases, the legal proceedings are often a receivership, which enables the company to pursue its activity (see Table 3). Over the first seven months of 2009, more than 60% of the failures of companies recorded in the FIBEN databases were receiverships. This figure was more than 75% in the case of the largest companies.

Table 3 Business failures according to the nature of the legal proceedings
First seven months of 2009

(share in %)

	Liquidation	Receivership
Total companies	68.5	31.5
Of which		
Companies whose balance sheet is recorded in FIBEN	39.5	60.5
Small and medium-sized enterprises		
Microenterprises	51.7	48.3
Very small businesses	40.6	59.4
Other	24.8	75.2
Large companies	25.0	75.0
Of which		
Companies whose outstanding loans are reported by credit institutions	54.7	45.3
Microenterprises	56.7	43.3
Small and medium-sized enterprises excl. microenterprises	14.5	85.5
Large companies and holdings	46.9	53.1
Other	62.0	38.0

Source: Banque de France (FIBEN databases).

2| The economic weight of business failures is increasing but remains contained

During the first seven months of 2009, the number of failing companies whose balance sheet was recorded in FIBEN stood at just over 3,000, representing a 65% increase compared with the same period in 2008. The staff of these 3,000 failing businesses came to roughly 73,000, turnover to EUR 12 billion and value added to EUR 3 billion.

At the height of the crisis, the economic impact of these failing businesses increased, as the growth rates of staff numbers and the accounting variables (such as turnover and bank debt) were greater than that of the number of companies (see Table 4).

At 31 July 2009, the economic impact of business failures recorded since the start of the year was significantly higher than in 2008 at the same period: in terms of both numbers and accounting variables, it was equivalent to that recorded after 10-11 months of failures in 2008 (see Charts 4).

Table 4 Failing companies whose balance sheet is recorded in FIBEN

(change in %, accounting data in EUR billions)

	2007	2008	Change 2008/2007	2008 Seven months	2009 Seven months	Change Seven months 2009/ Seven months 2008
Number of companies	3,003	3,478	16	1,841	3,038	65
Staff concerned	68,111	87,800	29	41,647	72,587	74
Turnover	13.1	13.8	5	6.5	11.6	80
Value added	2.6	3.5	38	1.6	3.1	90
Bank debt	1.9	1.7	-9	0.8	1.7	112
Trade payables	2.1	2.6	21	1.2	2.3	84

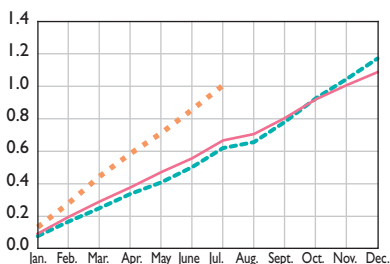
Source: Banque de France (FIBEN databases).

Charts 4 Economic impact of failing businesses whose balance sheet is recorded in FIBEN

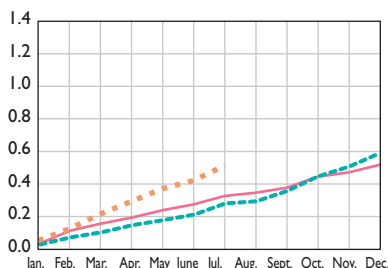
First seven months of 2009

(rates in %)

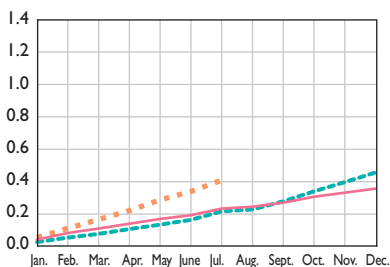
Number



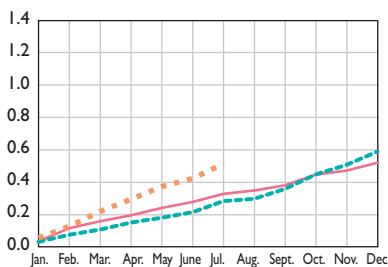
Staff



Value added



Trade payables



— 2007 - - - 2008 . . . 2009

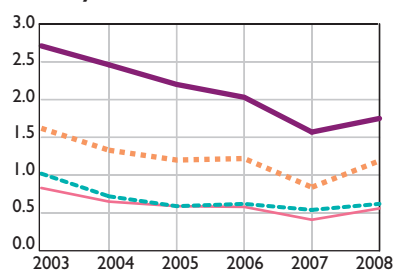
NB: The number of failing businesses since the start of 2009 comes to 3,038; they employ 72,587 people, record EUR 3.1 billion worth of value added and EUR 2.3 billion worth of trade payables. The method used for calculating the rates is explained in appendix 2.
Source: Banque de France (FIBEN databases).

However, when measured in terms of relative weight, the size of this impact may be put into perspective: the share of companies whose balance sheet is recorded in FIBEN (companies with a turnover of over EUR 0.75 million) was not more than 2% in any sector – often below 1% – in terms of staff, trade payables or value added (see Charts 5).

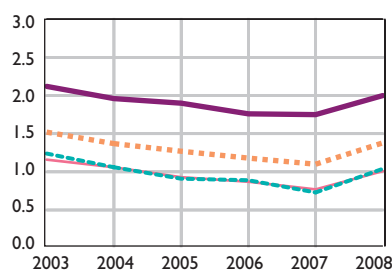
Charts 5 Economic impact of failing businesses whose balance sheet is recorded in FIBEN by economic sector (from 2003 to 2008)

(rates in %)

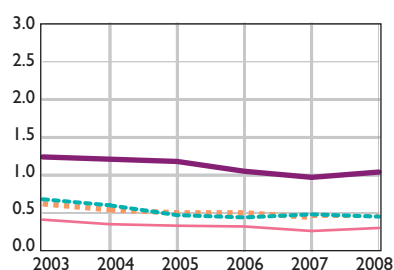
Industry



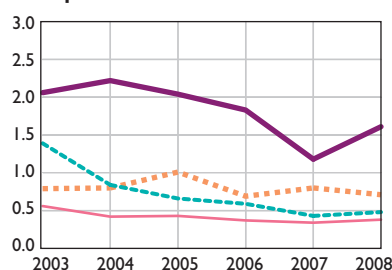
Construction



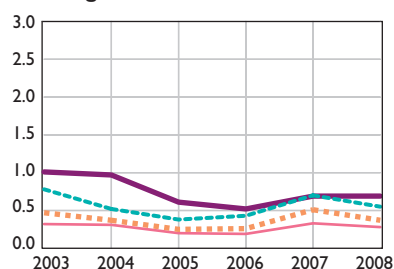
Trade



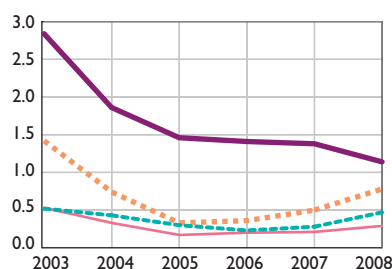
Transport



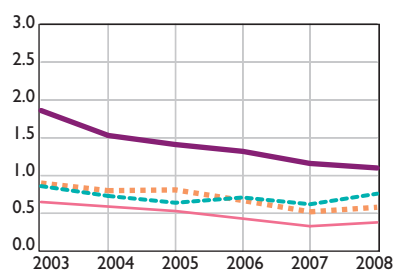
Catering and hotel



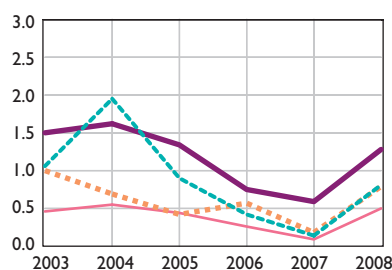
Information and communication



Services



Other services



— Value added - - - Trade payables - - - Staff — Number of failing businesses

NB: As a whole, these sectors, which employ 87,800 people, registered 3,478 failures in 2008. These companies recorded EUR 3.5 billion worth of value added and EUR 2.6 billion worth of trade payables. The method used for calculating the rates is explained in appendix 2.

Source: Banque de France (FIBEN databases).

3| Measured in terms of outstanding loans, the economic impact of business failures is particularly pronounced for SMEs

In August 2009, failing companies whose outstanding loans are reported by credit institutions amounted to a cumulated outstanding of EUR 4.5 billion over the past twelve months, up by 42% in year-on-year terms. The situation has been deteriorating since June 2008: on a monthly average, loans drawn by failing companies have amounted to roughly EUR 400 million, compared with between EUR 200 million and EUR 250 million in 2006 and 2007.

For these failing companies, the share of short-term loans in loans drawn is higher than for all resident companies (70% compared with 20%). This category of short-term loans covers, amongst other short-term loans, non-performing loans.

The rise in outstanding loans is greater for failing SMEs (excl. microenterprises) than for microenterprises alone (see Table 5).

However, since June 2009, the situation appears to have stabilised. On the basis of average amounts over the past twelve months, outstanding loans drawn by failing companies have ceased to increase and have remained stable at just under EUR 400 million (see Chart 6).

Table 5 Failures of companies whose outstanding loans are reported by credit institutions
August 2009

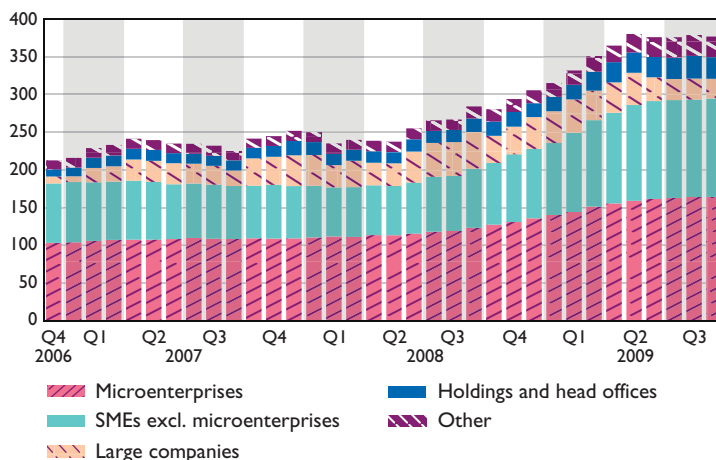
(cumulated outstandings over the past twelve months, in EUR billions; change in %)

	Number	Change over 1 year	Outstanding loans	Change over 1 year
Microenterprises	17,242	33	2.0	38
Small and medium-sized enterprises excl. microenterprises	956	97	1.5	77
Large companies	14	40	0.3	-38
Holdings and head offices	438	52	0.4	87
Other	1,362	73	0.3	101
Total	20,012	38	4.5	42

Source: Banque de France (FIBEN databases).

Chart 6 Failures of companies whose outstanding loans are reported by credit institutions

(average outstanding amounts of loans drawn over the past twelve months, in EUR millions)



Source: Banque de France (FIBEN databases).

In relative terms, SMEs and the manufacturing industry are the most strongly affected

The loans of failing SMEs (excl. microenterprises) accounted for over 1.5% of total loans to SMEs reported by credit institutions in September 2009, up from 0.8% in May 2008. This share exceeds that of microenterprises, which has increased more moderately since the start of the crisis (see Chart 7A).

However, this share has ceased to increase since June 2009 and has even tended to decline, in particular for independent SMEs.

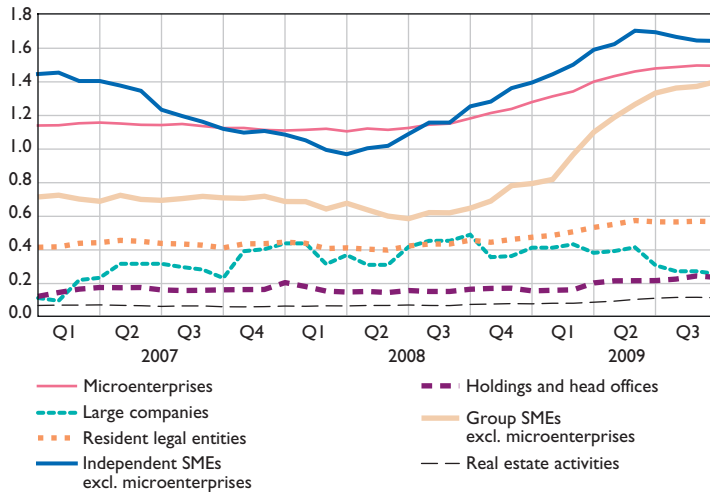
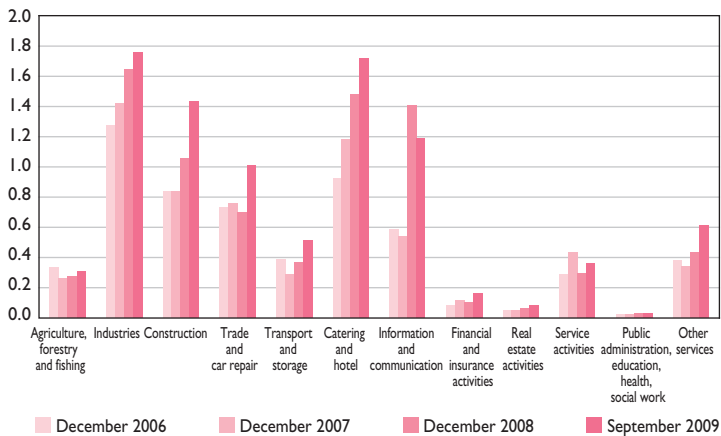
In the case of group SMEs, the rise occurred later and was more pronounced, yet remained below the level reached for microenterprises and independent SMEs.

In the catering and hotel sector and the industrial sector, the relative impact of business failures is significant: in September 2009, it amounted to 1.7% of reported loans, and reached 2.1% for the manufacturing industry alone (see Chart 7B).

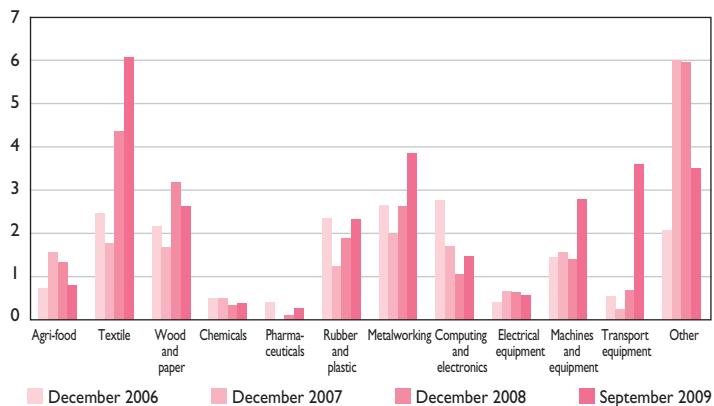
Some sectors of the manufacturing industry are particularly affected: textile, metalworking, capital goods and transport equipment (see Chart 8).

Chart 7 Share of the outstanding loans of failing companies

(12-month cumulated data, as a % of the total outstanding amounts of loans drawn)

A – by business category**B – by economic sector**

Source: Banque de France (FIBEN databases).

Chart 8 Share of outstanding loans of resident failing companies*(12-month cumulated data, as a % of the total outstanding amounts of loans drawn)**Source: Banque de France (FIBEN databases).*

Appendix I

Sources and methodological explanations

Business failures

In this article, business failures are defined as the initiation of receivership proceedings or liquidation proceedings when these are not preceded by a receivership. However, if a business continuation plan or a disposal plan is set up between a receivership and a liquidation or a new receivership, it puts an end to the initial receivership. The liquidation or the second receivership is then considered as the initiation of proceedings, i.e. as a new business failure.

The information is provided by the registries of commercial courts, automatically in 90% of the cases and manually in the remaining cases (companies within the jurisdiction of the Tribunaux de Grande Instance (TGI) with a commercial competence). Once the information about legal proceedings has been recorded by the registries, it is communicated to the Banque de France within 24 hours. Legal notices and the TGI are used to complete this information. Legal information concerning natural persons, such as personal bankruptcies, is not taken into account.

The company accounts database

Company accounts are gathered by the branch network of the Banque de France. These companies represent a third of all companies taxed under the "*bénéfice industriel et commercial* (BIC)" or "*bénéfice réel normal* (BRN)" regimes. The data collection covers all companies operating on the French territory with a turnover of over EUR 0.75 million or a bank debt of over EUR 0.38 million. The rate of company representativeness (excl. microenterprises), measured by the number of companies relative to the ALISSE database of INSEE, is roughly 70%.

The Central Credit Register

The Central Credit Register records every month the loans extended by credit institutions to their clients above a certain threshold (EUR 25,000 since January 2006). The outstanding amounts used are those of loans drawn. Loans drawn include short, medium and long-term loans, finance leases and securitized loans.

Taking account of the 2008 aggregate nomenclature

According to national and European regulations, the revised nomenclature (NAF Rev 2) has replaced the previous nomenclature of 2003 (NAF Rev 1). This new nomenclature provides a better classification of services and facilitates international comparisons.¹ The sectors used correspond to the A10 level of aggregation of the aggregate nomenclature, except for “trade, transport, catering and hotel”, which corresponds to the more detailed A21 level of aggregation. The former sectors entitled “construction”, “trade”, “transport”, “financial activities” and “education, health, social work” are very close to the new aggregate sectors. At the most aggregate level, the different industries (manufacturing, agri-food, extractive, etc.) are grouped together.

Size criteria

Data from the Central Credit Register

Large companies: the level of activity is either above or equal to EUR 50 million, or less than EUR 50 million, unknown or too old, but loans drawn are above a sectoral threshold corresponding to the highest level of debt (95th centile) of small and medium-sized enterprises (SMEs) with a level of activity between EUR 30 million and EUR 50 million.

SMEs: the level of activity is either above or equal to EUR 1.5 million and less than EUR 50 million, or less than EUR 1.5 million, unknown or too old, but loans drawn are above or equal to EUR 1 million and below or equal to a sectoral threshold.

Microenterprises: the level of activity is below EUR 1.5 million, unknown or too old, but loans drawn are below EUR 1 million.

Data from the FIBEN databases

SMEs-Microenterprises: less than 10 employees and a turnover and a balance sheet total of less than EUR 2 million.

SMEs-Very small businesses (VSBs): between 10 and 19 employees and a turnover and balance sheet total of less than EUR 10 million.

SMEs-Other: between 20 and 249 employees and a turnover and balance sheet total of less than EUR 43 million.

Large companies: 250 or more employees or a turnover of over EUR 50 million or a balance sheet total of over EUR 43 million.

¹ http://www.insee.fr/fr/methodes/default.asp?page=nomenclatures/revision_naf_2008/presentation2008.htm#naf.

Appendix 2

The different approaches to monitoring failures

The number of business failures (unadjusted data and data adjusted for seasonal and working-day variations) are published every month.¹

Monitoring the outstanding loans reported to the Central Credit Register

The economic impact is first assessed using the outstanding loans reported every month by credit institutions to the Central Credit Register.² Given the reporting threshold of EUR 25,000 (since January 2006), it is possible to collect information on a large number of companies, in particular small-sized ones. These outstanding loans borne by failing businesses are set against the total centralized amount every month. The rate obtained provides an estimate of the economic impact of business failures in terms of bank debt for a given month. The monthly rates are then cumulated over the last twelve months.

Monitoring the balance sheet data in the FIBEN database

The economic impact is also assessed using the balance sheets of failing companies recorded in the FIBEN database (which covers almost all companies with a turnover of over EUR 0.75 million). The economic impact is measured for this population in terms of the number of companies, the number of employees, value added, financial debt,³ bank debt and commercial debt relative to the reference population.

The disadvantage of this approach is that it covers only a small number of failing companies: less than 10% of failing companies are in FIBEN with a recent balance sheet. There are two reasons for this: first, the threshold mentioned above; second, the fact that a company that is the subject of legal proceedings (receivership or liquidation) does not always communicate its balance sheet data for the last financial years.

¹ Number of business failures (unadjusted data and data adjusted for seasonal and working-day variations) 12-month cumulated data and monthly data. <http://www.banque-france.fr/fr/statistiques/economie/economie-entreprises/defaillances.htm>.

² The economic impact of failures is measured at the time of the initiation of legal proceedings without taking account of the activity of the company in the months or years thereafter. The idea is therefore to measure the economic impact of the new business failures recorded each month. The Companies Observatory is currently conducting a study of the share of outstanding loans of failing companies in total outstandings reported by banks, in the months following the failure.

³ Financial debt = market financing (bonds and negotiable debt securities) + bank debt + other loans.

In order to measure the economic impact of the failures that occurred in year N , balance sheet data for the previous years are needed. However, in 50% of cases, companies no longer communicate their balance sheet data one year before the failure. Therefore, if the data for $N-1$ are missing, the data for $N-2$ will be used and, if necessary, those for $N-3$. Similarly, the reference population is drawn up on the basis of the last known balance sheet over the last three years. This is a way of measuring the economic impact of business failures at a time when these companies still have a significant level of activity.

The failure rate is the ratio of the number of companies that are the subject of legal proceedings (receivership or direct liquidation) over the reference population. The economic impact is measured by setting the economic variables affected by the failure against those of the reference population.

Housing markets after the crisis: lessons for the macroeconomy

Olivier de Bandt, Laurent Ferrara and Olivier Vigna

Business Conditions and Macroeconomic Forecasting Directorate

The global crisis, which deeply affected the majority of economies in 2008-2009, highlighted the role of housing markets in worsening, or even triggering in some countries, major economic disruptions or imbalances, and not only in the United States. In the euro area itself, a number of economies suffered, or are still suffering, from their very depressed housing markets.

Yet, given that fluctuations in housing activity or prices affect consumption and investment behaviour, and ultimately, the general level of prices, the question arises as to their impact on monetary policy and financial stability. This was the focus of the international symposium organised in Paris on 3 and 4 December 2009 by the Banque de France, in conjunction with the central banks of the other three largest euro area countries, i.e. the Deutsche Bundesbank, Banca d'Italia and Banco de España.

The conclusion of the symposium is that, on the one hand, housing market cycles are still relatively heterogeneous across countries (the German market is atypical), even though there has been considerable convergence since the creation of Monetary Union and, on the other hand, housing markets give rise to significant macroeconomic shocks, as the current crisis has shown. This therefore calls for regular monitoring of housing markets by the authorities responsible for the single monetary policy and financial stability.

This two-day symposium comprised four sessions on the following topics: a cyclical analysis of housing markets, modelling, wealth effects and relevance for monetary policy and financial stability. The research conducted by these four euro area central banks was discussed by representatives of international institutions, leading academics and central bank researchers. Both days opened with an introductory lecture: Matteo Iacoviello (Boston College, United States) discussed the conclusions of the latest-generation of macroeconomic models augmented with a housing sector and John Muellbauer (Oxford University, United Kingdom) discussed "wealth effects"

Keywords: Housing, cycles, wealth effects, financial stability.

JEL codes: E21, E32, R21, R31, G01.

I | Is housing a leading indicator of the business cycle?

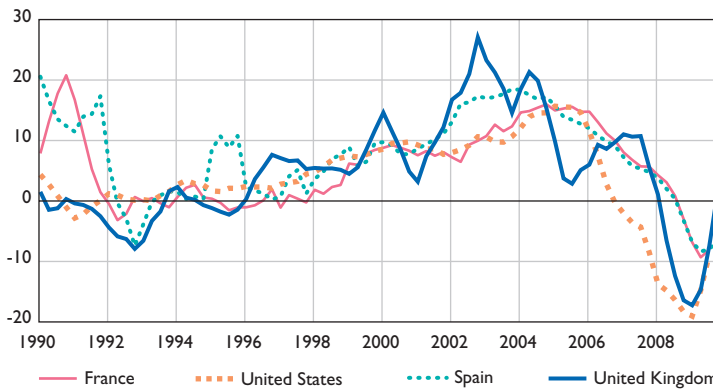
In his introductory lecture, Matteo Iacoviello (Boston College) stressed the extent to which housing was often underestimated in economic research, while, in the United States for example, it accounts for half of the total capital stock, outstanding housing debt is comparable to that of public debt and house price volatility is at least twice as high as that of inflation. According to Matteo Iacoviello, based on dynamic stochastic general equilibrium models (DSGE), the rise in house prices, due above all to weak technological progress in construction, contributed, in the United States, 0.5 percentage point per year to private consumption growth between 2002 and 2004. It is therefore important to better analyse the formation of house prices, whose fluctuations show a relatively smaller degree of inertia than on financial markets, by more efficiently incorporating expectations, the confidence of economic agents and other financial factors (wealth effects, credit standards and banks' credit supply capacity).

The papers presented in the first session then examined the links between housing cycles and general economic activity in certain countries. While the housing cycle lags fluctuations in economic activity in Italy according to Guido Bulligan (Banca d'Italia), in France, according to Laurent Ferrara and Olivier Vigna (Banque de France), the housing market tends to be a leading indicator of the business cycle, which is useful for general economic forecasting. Furthermore, in France, there tends to be downward price rigidity, which explains why house prices fell less sharply than in other countries. Luis Alvarez and Alberto Cabrero (Banco de España) also demonstrate that housing acts as a leading indicator of activity in Spain.

However, it is essential to analyse housing market developments at the international level. The four main euro area countries share a common business cycle, but housing cycles are still largely specific to each country, even though business and housing cycles have been converging across countries since the creation of the euro, according to a study conducted jointly by Laurent Ferrara (Banque de France), Guido Bulligan (Banca d'Italia), Luis Alvarez (Banco de España) and Harald Stahl (Deutsche Bundesbank). These conclusions have been corroborated by Siem Jan Koopman (VU University Amsterdam) and Laurent Ferrara (Banque de France), who show that, for Spain, the dependence between the housing market and economic activity is stronger than elsewhere. Extending the analysis to OECD countries, Olivier de Bandt (Banque de France), Karim Barhoumi (Banque de France) and Catherine Bruneau (Université Paris-Ouest Nanterre and Banque de France) highlight the existence of powerful factors for the international transmission of house price shocks, in particular those originating in the United States (see Chart 1).

Chart 1 Housing cycles

(y-o-y, %)



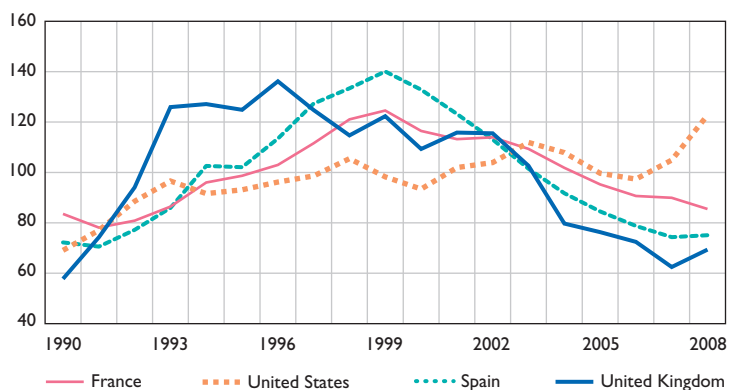
Sources: INSEE (France), Ministry of Housing (Spain), Halifax (United Kingdom), Case-Shiller (United States).

2| What drives housing cycles?

The second session focused more closely on the structural determinants of the housing market and their impact on the economy. Rémy Lecat and Pamfil Antipa (Banque de France) presented a model showing that, in both France and Spain, residential property prices were around 20% above the level explained by their fundamentals (households' disposable income, housing stock, interest rates, etc.). Nevertheless, this overvaluation is greatly reduced when taking into account other indicators measuring changes in financial and demographic factors. For Germany, Thomas Knetsch (Deutsche Bundesbank) analyses the lasting impact of reunification on house prices, showing that government intervention in the housing sector made household residential investment less sensitive to changes in their disposable income.

The existence of such a link between government housing subsidies and housing market dynamics is borne out for France by Pamfil Antipa and Christophe Schalck (Banque de France): according to this research, to influence residential investment and stabilise the housing cycle, subsidies are the most appropriate tool, in particular tax breaks and interest rate cuts. More generally, trends in households' property affordability, measured by the number of m² that a household can acquire based on the price of the property, interest rates, disposable income and the average maturity of housing loans granted, have been broadly similar in countries that experienced strong increases in house prices (see Chart 2).

Chart 2 Households' property affordability

(in m²)

Note: 100 = average 1990-2008 for France and Spain and average 1st quarter 1990 – 3rd quarter 2009 for the United States and the United Kingdom.

Source: Banque de France calculations.

This key role of interest rates was also examined by Angel Gavilan, Oscar Arce and Jose Manuel Campa (Banco de España), with a view to determining, within the national economy, the weight of the housing sector vis-à-vis other productive sectors. According to these authors, investors decide in which sectors to invest depending, on the one hand, on total rents extracted from the projects and, on the other, on the size of the projects that they can afford to fund: when interest rates are high, projects are small and the differences in unit rents across sectors dominate the differences in project sizes. In this case, a drop in interest rates, investors move toward the most productive sector. Instead, when interest rates are low, projects are large, but much larger in the sector with the best financial conditions, which are based on its ability to offer better collateral, like in the construction sector, even if it is not the most productive one. In this case, the differences in project sizes across sectors dominate the differences in unit rents and a drop in interest rates moves investors towards the least productive sector but with the best access to external funding. Such conclusions can no doubt be applied to the Spanish situation in recent years, characterised by very high investment in the property sector, driven by the very attractive interest rates.

For Italy, Filippo Scoccianti (Banca d'Italia) supplements the positive role of low real interest rates by factoring in the influence of a reduction in downpayment requirements: this research concludes that this easing of financing conditions is beneficial to households managing to access home-ownership in that it enables them to absorb the negative impact, for their property affordability, of the rise in house prices. Similarly, it also benefits households that are already home-owners since the capital appreciates.

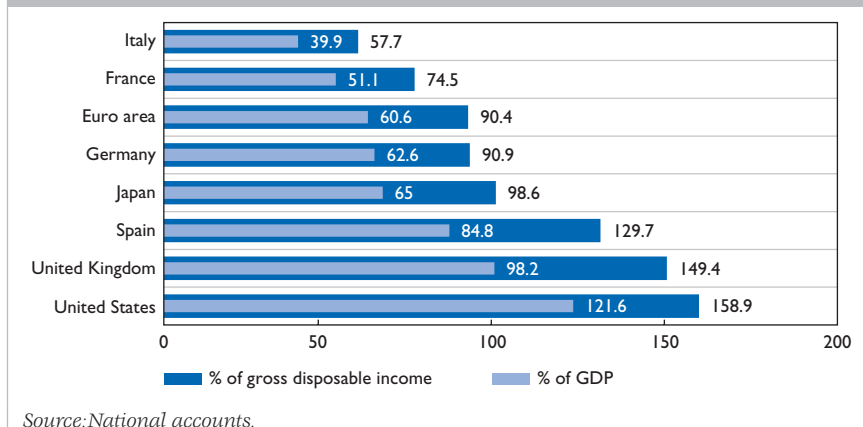
3| Wealth effects from housing

In order to assess the links between housing, access to credit and household consumption, John Mullbauer (Oxford University) recalled in his introductory lecture the role of housing in the economic crisis of 2008-2009: if the demand for housing declines (because past price rises ends up pricing out an increasing number of first-time buyers), so do prices and production in the construction sector, which drives down private consumption and ultimately aggregate growth. However, for a given country, the final impact of this sometimes sharp slump in house prices depends, on the one hand, on the owner-tenant ratio and, on the other hand, on the structure of the financial system, in particular the supply of credit. Indeed, a housing price crash can bring about a decline in housing costs for tenants and/or easier access to home-ownership: yet, both cases are likely to boost consumption, since constrained spending on dwellings (rental or ownership) are lower than beforehand. Conversely, in a country with a strong rate of growth of bank credit, whose amount depends on the value of property financed or mortgaged as collateral, a fall in house prices reduces the present value of collateral. In particular, in the United States and the United Kingdom interest rates have a significant impact on private consumption, whereas in Japan, the latter is more affected by the rise in public debt, which has stimulated household savings (Ricardian effects).

The measurement of wealth effects, i.e. the impact of an increase or decrease in housing wealth on consumption, was also studied more specifically for three countries at the start of the third session: in France (Valérie Chauvin and Olivier Damette, Banque de France), in Italy (Antonio Bassanetti and Francesco Zollino, Banca d'Italia) and in the United States (Simon Dubecq and Imen Ghattassi, Banque de France), where levels of household debt levels vary considerably (see Chart 3). These three studies reach a number of common conclusions: an equilibrium relationship appears to exist at the macroeconomic level between housing wealth, financial wealth, the purchasing power of income and private consumption. First, as soon as households perceive the rise in housing wealth to be permanent, it has less impact on private consumption than financial wealth. Second, this impact is more marked in the United States than in France or Italy. Third, and lastly, household consumption behaviour, over the recent period, has been significantly influenced by their expectations regarding, for the United States, financial asset prices and, for France and Italy, the purchasing power of their income.

Supplementing this macroeconomic analysis with a microeconomic study, Luc Arrondel and Frédérique Savignac (Banque de France) analysed households' trade-off between housing wealth and financial wealth. Indeed, households not wishing to take excessive risk favour at times housing assets and at times equities. Thus, the fact that the share of

Chart 3 Household debt – mid-2009



financial assets in French households' aggregate assets is lower than in other countries indicates their greater preference for housing assets.

4| Conclusions for monetary policy and financial stability

Given that interrelations between general economic activity, household consumption and changes in housing or financial wealth vary across countries, the question arises as to the most suitable monetary policy to be implemented in such situations. The fourth session was therefore given over to analysing the links between housing, credit and monetary policy.

First, Tobias Dümmler and Stefan Kienle (Deutsche Bundesbank) study the impact of credit constraints on housing investment and underscore the rise in constraints affecting investment over the past two decades, which also explains why the German market is relatively “atypical” (see above, the analysis of Thomas Knetsch on the impact of reunification).

Dealing more directly with the question of monetary policy, Sébastien Frappa and Jean-Stéphane Mésonnier (Banque de France) establish that the countries in which central banks have pursued an inflation targeting regime, i.e. setting an inflation target that guides monetary policy action in the short term, also experienced a sharp rise in house prices at the end of the 1990s and the start of the 2000s. This is the conclusion reached by an in-depth econometric study based on the techniques used for assessing public policies.

As regards the risks that housing markets pose for financial stability, Vladimir Borgy, Laurent Clerc and Jean-Paul Renne (Banque de France), put forward a method to identify asset-price or housing-price bubbles *ex ante*, by isolating in particular the episodes where the bursting of a bubble leads to a marked slowdown in activity. The authors thus considered the periods in which GDP growth is at least three percentage points lower than potential growth for the three years following the bursting of the bubble. They conclude that this type of situation is found more frequently in cases where bubbles develop in housing markets than in stock markets. Moreover, it is important to analyse the level of real interest rates, credit and investment growth when house price bubbles start to form.

To sum up, the studies presented at the symposium showed both the diversity of housing market situations and their common factors. In particular, it is essential to analyse their determinants and the consequences of house price trends in order to assess the impact of housing on economic activity in general and on consumption and wealth effects in particular. Similarly, for central banks and macroprudential regulatory authorities, it is vital to extend the framework of this study in order to better anticipate and, if possible, prevent the developments that many countries experienced in the recent period from reoccurring.

Borrowing requirements and external debt sustainability of Sub-Saharan African countries

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The external debt of developing countries has declined significantly in the last decade. Improved macroeconomic performance, coupled with better management of public finances and the positive impact of favourable terms of trade on current account balances have helped these countries to reduce their external debt burden. The Heavily Indebted Poor Countries (HIPC) initiative and the Multilateral Debt Relief Initiative (MDRI) have also played a part in bringing debt down.

Despite these positive developments, which have been partly offset by the recent surge in internal debt, low-income countries (LICs) are still vulnerable to a number of factors that could make their debt less sustainable, such as structural weaknesses in their economies, exposure to shocks, particularly external ones, limited debt management capacity and irregular access to external financing sources. LICs look especially vulnerable because the current financial crisis could increase their borrowing requirements. The crisis has spread chiefly through a sharp shock to the terms of trade, resulting, notably among commodity-exporting LICs, in a pronounced deterioration in public finances (owing to the highly negative impact on fiscal revenue) and external accounts. This has been compounded by a decline in direct investment flows, which are often concentrated in the commodities sector, as well as in remittances. These developments have increased the risk of renewed public and external debt distress. The emergence of new emerging-country lenders, whose lending terms are not always consistent with the framework used by traditional lenders, further aggravates this risk.

The purpose of this paper is to review the issue of debt sustainability among Sub-Saharan African (SSA) LICs. Part One examines the sources of financing for least developed countries and the debt sustainability framework (DSF). Part Two highlights the persistent vulnerability of LICs to the risk of debt distress in an international environment characterised by a financial crisis, soaring internal debt, and the rise of emerging countries in development financing.

Finally, the paper describes the international initiatives taken to more effectively address the increased borrowing requirements of LICs and make the DSF more flexible.

Keywords: IMF, World Bank, debt sustainability framework, HIPC initiative — MDRI, Sub-Saharan Africa.

JEL codes: F33, F34, O55.

NB: The authors wish to thank Emmanuel Rocher, Marc Lanteri, Luc Jacolin (Franc Zone and Development Financing Studies Division), Pierre-Michel Bardet-Fremann and Bruno Cabrillac of the Banque de France for their comments and suggestions. This paper also benefited from the comments of Hervé Joly and Julien Hartley from the IMF (Strategy, Policy and Review Department) and from Claire Cheremetinski and Gabrielle d'Arailh of the Directorate General, Treasury and Economic Policy (Multifin I Desk).

I | Debt sustainability: a decisive issue for LICs as borrowing increases

I | I Debt situation of LICs in Sub-Saharan Africa

A variety of financing approaches

Low-income countries (LICs) need to borrow substantial amounts to finance their development. Because local savings are generally insufficient (22.7% of GDP on average in Sub-Saharan Africa (SSA) in 2008, compared with 47.7% in developing Asia, cf. Table 1), local financial markets are underdeveloped and access to international financial markets is limited, LICs only have three main sources of financing to cover their borrowing requirements: foreign direct investment (FDI), remittances and public development aid, in the shape of grants or loans.

Obviously, the financing method has an impact on the sustainability of a country's debt. It is generally agreed, for example, that FDI is a preferred kind of financing, insofar as it may be accompanied by technology transfers and could potentially create jobs. Also, FDI flows are less volatile than private capital flows. They may nevertheless result in a long-term transfer of resources that exceeds that of a conventional loan.

Borrowing creates future commitments and necessitates being in a position to generate sufficient income to make regular payments. From an economic and financial perspective, debt financing is however more appropriate than grants when it does not affect the country's solvency and when the interest rate paid is lower than the growth rate of the economy. In the case of LICs

Table 1 Saving rates

(as a % of GDP)

	1990	2000	2005	2008
Sub-Saharan Africa	17.1	17.6	18.9	22.7
North Africa and Middle East	21.8	31.3	41.1	41.6
Developing Asia	29.0	31.1	41.3	47.7
Newly Industrialised Asia	34.4	31.7	31.4	32.1
Latin America	18.6	19.0	22.0	22.1
CIS (excluding Russia)	19.2	17.5	26.3	28.5
India	22.7	23.8	33.4	37.0
China	39.2	36.8	51.2	58.9
OECD	22.2	21.5	20.0	19.3

Source: IMF

whose public resources, particularly fiscal, are limited, concessional loans¹ can be used to raise larger amounts of financing than grants, especially if they can be combined with funds raised on the markets.

Sharp growth in financing flows to LICs, combined with a change in the structure of these flows

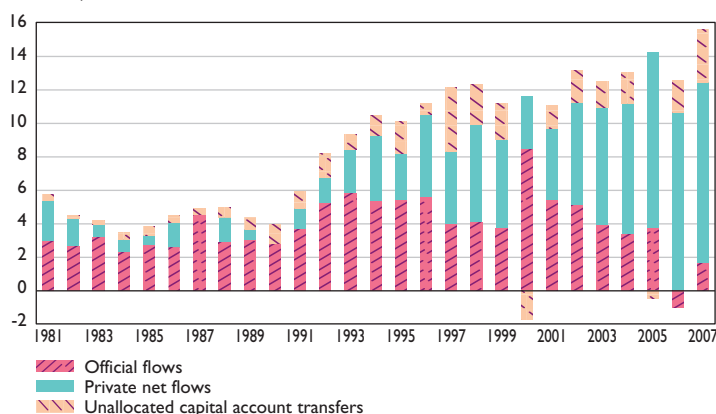
Flows of financing to LICs have risen strongly in the last 20 years (cf. Chart 1), from approximately 5% of LIC GDP in the early 1980s to an average of around 15% in 2007.

Since the beginning of the 1980s, the increase in flows of capital to LICs has been accompanied by a change in the composition of those flows. According to Dorsey et alii (2008), flows of private capital (FDI and remittances) quadrupled from the start of the 1980s to become the main source of financing over the period, averaging 8% of LIC GDP. By contrast, official net inflows changed little over the period, accounting for slightly over 2% of LIC GDP between 1981 and 2005.

The structure of official flows has also changed, with grants and debt cancellations overtaking loans. Grants tripled from 0.5% of LIC GDP in the early 1980s to 1.5% in 2006. This shift also reflects the effects of debt relief measures through the HIPC initiative and the MDRI (Box 1).

Chart 1 Flows of financing to LICs

(as a % of GDP)



Source: IMF, "Changing patterns in low-income country financing ..." – 25 February 2009.

¹ Concessional loans are loans that offer more favourable terms than commercial loans (lower interest rates and longer grace period and maturity). These loans may be considered to comprise a grant element (corresponding to the interest subsidy) and a commercial loan element (particularly the obligation to repay in full).

Box I

Debt relief under the HIPC initiative and the MDRI¹

Introduced by the IMF and the World Bank in 1996 following the G7 summit in Lyons, the Heavily Indebted Poor Countries (HIPC) initiative is designed to reduce the debt burden of HIPCs to sustainable levels (i.e. levels that allow them to service their debt without hindering their development), through external debt relief from the international community. In 1999, the initiative was modified to provide faster, deeper, and broader debt relief and strengthen the links between debt relief, poverty reduction and social policies.

As the table below shows, multilateral creditors make a substantial contribution to the debt relief granted within the framework of the HIPC initiative.

In 2005, to help accelerate progress towards the UN Millennium Development Goals, the HIPC initiative was supplemented by the Multilateral Debt Relief Initiative (MDRI). The MDRI allows for 100% relief on eligible debts by multilateral institutions (chiefly

Cost of the HIPC initiative to the main creditors

(USD billions, net present value at end-2008)

	Post-completion-point countries (26)	Interim countries (9)	Post-decision-point countries (35)	Pre-decision-point countries (5)	Total
	I	II	III = I + II	IV	V = III + IV
Multilateral creditors	21.4	6.7	28.1	5.3	33.4
International Development Association (IDA)	10.6	2.6	13.2	1.5	14.7
International Monetary Fund (IMF)	3.0	1.5	4.6	1.8	6.4
African Development Bank (AfDB)	2.9	1.9	4.8	0.5	5.3
Inter-American Development Bank (IDB)	1.7	0.0	1.7	0.0	1.7
Other	3.1	0.7	3.8	1.5	5.3
Bilateral and commercial creditors	17.4	11.8	29.2	11.3	40.4
Paris Club	12.4	8.7	20.9	5.6	26.5
Other official bilateral	4.2	0.7	4.9	4.7	9.6
Commercial	0.9	2.4	3.4	1.0	4.3
Total costs	38.8	18.5	57.3	16.6	73.8

Source: "HIPC Initiative and MDRI – Status of implementation", IMF, September 2009.

1 Source: IMF.

.../...

the IMF, the IDA of the World Bank and the African Development Fund (AfDF)) for countries that have reached the completion point of the HIPC initiative.²

To benefit from the relief, a country must first meet a number of criteria:

- be an IDA-only country,³ i.e. be eligible only for concessional assistance from the IDA, and be entitled to use the Extended Credit Facility (which replaced the Poverty Reduction and Growth Facility – PRGF);
- face an unsustainable debt burden that cannot be addressed through traditional debt relief mechanisms;
- have established a track record of reform and sound policies through IMF and World Bank supported programs;
- have developed a Poverty Reduction Strategy Paper (PRSP) through a broad-based participatory process.

Once a country has met or made sufficient progress in meeting the criteria, the Executive Boards of the IMF and World Bank formally decide on its eligibility for debt relief, and the international community commits to reducing debt to a level that is considered sustainable. This is referred to as the decision point. Once a country reaches its decision point, it may immediately begin receiving interim relief on its debt service falling due.

In order to receive full and irrevocable reduction in debt available under the HIPC initiative, a country must:

- execute satisfactorily IMF and IDA-supported programmes;
- implement satisfactorily key reforms agreed at the decision point;
- adopt and implement its PRSP for at least one year.

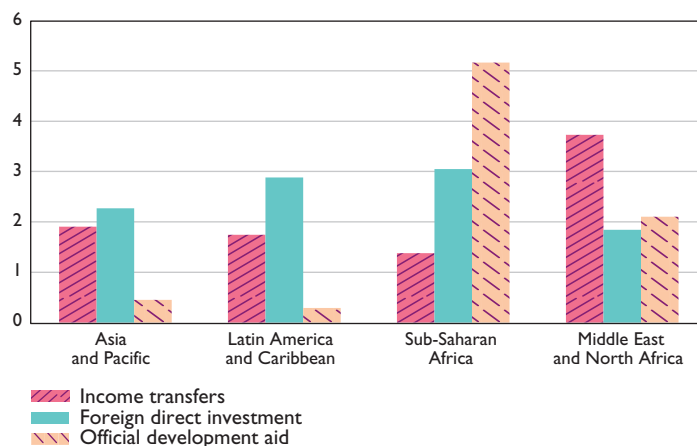
Once a country has met these criteria, it can reach its completion point, which allows it to receive the full debt relief committed at decision point.

2 In 2007, the IDB joined the three institutions by cancelling all the unpaid debt of HIPCs that had reached the completion point.

3 Two criteria are used to determine the eligibility of countries for IDA support: (i) relative poverty defined as GNI per capita below an established threshold (in fiscal year 2010: USD 1,135); (ii) insufficient solvency to borrow at market rates, creating a need for concessional financing to pay for development programmes.

Chart 2 Main sources of external financing, by developing region, 2001-2007

(as a % of GDP)



Source: World Bank.

Compared with LICs overall, however, SSA has a special financing profile and remains the region that is most dependent on official aid (cf. Chart 2). Official aid remained the main source of external financing over the 2001-2007 period. Since 2000, SSA has nonetheless reported a sizeable increase in private capital inflows, particularly remittances and FDI.

The HIPC initiative and MDRI also substantially changed the structure of LIC external debt by creditor type. According to the IMF (2009), countries that had reached the HIPC completion point reported an increase in the share of debt owing to non-Paris Club creditor countries (official and private), whereas debt owing to Paris Club creditors is now virtually zero.

Despite the major debt relief effort by the international community, because LICs are vulnerable to external shocks, they may be suddenly faced with debt crises if their debt is not kept at sustainable levels. The debt sustainability framework was created to prevent new situations of debt distress.

1|2 Debt sustainability framework

In April 2005, the World Bank (WB) and the IMF adopted a methodological framework for monitoring the sustainability of LIC debt. The debt sustainability framework (DSF) is intended to facilitate the introduction of development strategies while avoiding the risks of debt distress.

It is therefore designed to help guide LICs in mobilising the resources needed for their development, while reducing the chances of an excessive build-up of debt in the future.² It is used to prepare recommendations on a medium-term debt strategy that is consistent with the country's progress on fiscal policy and structural reforms. The framework thus seeks to incorporate the policies introduced by countries to meet the Millennium Development Goals (MDGs) as well as the rationale behind IMF and WB financial programming.

As Djoufelkit-Cottenet and Raffinot (2008) point out, the DSF is a tool for coordinating donors and borrowers that operates on the principle that donors must stop lending and borrowers borrowing when debt sustainability thresholds are breached.

Under the DSF, the IMF and WB conduct country debt sustainability analyses (DSAs). Two types of analysis are performed, depending on how the framework is being used: LIC-DSAs for low-income countries and HIPC-DSAs, which are used to calculate debt relief for HIPCs (the IMF and the WB are ultimately planning to have just one DSA method based on the LIC-DSA framework). Methodological differences between the two instruments are substantial. Notably, in HIPC-DSAs, indicative thresholds are standardised for all countries, the denominators used for debt indicators (exports and revenues) are three-year backward-looking averages, and the discount rate is determined directly based on the country's currency. DSAs conducted within the HIPC framework are therefore based on backward-looking data and are used to determine the amount of relief at the decision point. LIC-DSAs are based on forward-looking projections and follow a broader analytical framework. Moreover, they use annual denominators that include exchange rate projections and a uniform discount rate of 4%.^{3,4}

The debt sustainability of a country is therefore assessed based on the measurement of debt indicators derived from assumptions about the country's current and future macroeconomic situation. These indicators (debt and debt service expressed as a percentage of exports, GDP and fiscal revenue for the current year) are calculated for the following cases:

- a baseline scenario that uses backward-looking data and macroeconomic assumptions to project the long-run trajectory (20 years) of debt to reflect the long maturity of LIC debt (often linked to rescheduling);

2 The IMF (2002) defines sustainable debt as a situation in which a borrower is able to continue honouring its debt service obligations without having to make unrealistic adjustments to the balance of income and expenditures.

3 "Staff guidance note on the application of the joint fund-bank debt sustainability framework for low-income countries (LICs)", IMF, 6 October 2008.

4 The discount rate is used to calculate the net present value of loans. To estimate the NPV of loans to non-HIPC countries, and in order to avoid excessive fluctuations, this rate was set at 5% in 2004. According to the rules, the rate may be adjusted by 100 basis points when it deviates from the commercial interest reference rate (CIRR) on the dollar (six-month average) by more than 100 bps for a period of at least six consecutive months. As a result of interest rate movements in 2009, the discount rate was reduced to 4%.

- alternative scenarios (key variables at historical averages, growth rate permanently lower than that of the baseline, primary balance unchanged in constant terms, interest rates on new loans 200 basis points (bps) higher than baseline);
- stress tests⁵ designed to estimate the sensitivity of the baseline to different shocks (including growth, interest rate, exchange rate and balance of payments shocks).

The risk of payment difficulties is assessed by comparing the ratios obtained with indicative thresholds corresponding to external debt that is viewed as sustainable. These thresholds are determined based on the quality of the country's institutions and policies, which in turn is gauged by the country policy and institutional assessment (CPIA) score measured by the World Bank (cf. Table 2).

Since interest rates and maturities on loans to LICs vary considerably, the DSF uses the net present value (NPV) of the debt by applying a uniform discount rate: the commercial interest reference rate (CIRR).⁶ The results are thus comparable over time and between countries.

An external debt indicator above the indicative level signals a risk that debt might be unsustainable. There are four risk levels:

- weak, if all the debt indicators are well below the thresholds in the baseline scenario and thresholds are not breached in the alternative scenarios and stress tests;

Table 2 Relationship between CPIA (a) scores and DSF debt indicators (applied to external public debt)

Policy and institutional performance	Net present value (NPV) of debt as a percentage of			Debt service as a percentage of	
	Exports	GDP	Fiscal revenue	Exports	Fiscal revenue
Weak (CPIA \leq 3.25)	100	30	200	15	25
Medium (3.25 < CPIA \leq 3.75)	150	40	250	20	30
Strong (CPIA \geq 3.75)	200	50	300	25	35

(a) Country policy and institutional assessment.

Source: IMF.

⁵ The stress tests are calibrated to ensure that the debt ratio that they provide has a 25% likelihood of occurring over ten years.

⁶ Cf. footnote 4. The CIRRs are published by the OECD. These rates are key to calculating the grant element. The IMF uses 10-year average CIRRs for credits whose maturity is 15 years or over, and six-month average CIRRs for shorter-dated loans.

- moderate, if the debt indicators are below the thresholds in the baseline scenario but exceed thresholds in alternative scenarios or stress tests;
- high, if at least one debt indicator exceeds thresholds in the baseline scenario;
- in distress, if the indicative thresholds are breached; in this case, the country is generally already facing payment difficulties and experiencing debt distress.

As an illustration, Table 3 presents the results of the DSA for the Central African Republic (CAR), prior to the HIPC completion point reached in late June 2009.

Based on this analysis, the CAR is at a high risk of debt distress. One of the main debt indicators, the NPV of external debt-to-exports ratio, is significantly higher than the performance thresholds over the recent period, justifying the CAR's inclusion in the HIPC initiative.

Table 3 External debt sustainability analysis, Central African Republic

Simulated scenarios	Weak performance threshold	NPV of debt as a % of exports	
		2008	Projection 2018
Under baseline	100	287	104
Under alternative scenarios including:			
A1. Key variables at their historical averages in 2008-2028	100	287	51
A2. New public sector loans on less favourable terms in 2008-2028	100	287	107
A3. Full delivery of HIPC assistance and MDRI	100	125	62
Under stress tests including:			
B1. Real GDP growth at historical average minus one standard deviation in 2009-2010	100	287	103
B2. Export value growth at historical average minus one standard deviation in 2009-2010	100	287	157
B3. US dollar GDP deflator at historical average minus one standard deviation in 2009-2010	100	287	103
B4. Net non-debt creating flows at historical average minus one standard deviation in 2009-2010	100	287	132
B5. Combination of B1-B4 using one-half standard deviation shocks	100	287	156
B6. One-time 30 percent nominal depreciation relative to the baseline in 2009	100	287	103

Source: "Joint IMF/IDA Debt Sustainability Analysis 2008 – CAR", IDA and IMF, 4 December 2008.

I | 3 Incorporating the DSF within bilateral and multilateral cooperation

The DSF was developed explicitly to provide a framework to deal with the renewed increase in LIC debt following substantial efforts to relieve multilateral and bilateral debt. Thus, whatever their role in macroeconomic monitoring and debt policy guidance, DSAs, which are conducted on a case by case basis using the DSF, are also intended to provide a framework for bilateral and multilateral debt management-related exchanges between LICs and their main donors. The risk analysis provided by the DSA has a significant impact on the amount of funds provided, the way funds are allocated between grants and loans, and the level of loan concessionality.

Within bilateral and multilateral cooperation, the DSF is used in the following mechanisms:

Multilateral cooperation

- The DSAs produced using the DSF are taken into account in IMF and WB financial programming for LICs.⁷ In particular, DSAs enable the IMF to determine, within the framework of its programmes, the limits for non-concessional loans to LICs, since access to concessional loans is not restricted (case-by-case flexibility is allowed as regards accessing certain non-concessional loans when circumstances justify this). The concessionality of a loan is measured by its grant element. The grant element is defined as the difference between the loan's nominal value (face value) and the sum of the future debt-service payments in NPV to be made by the borrower, expressed as a percentage of the loan's face value. A loan is considered to be concessional if its grant element is at least equal to 35%.
- The IDA, which distributes concessional loans for the WB, uses DSAs to determine the share of grants and concessional loans that it provides to indebted countries. It is guided by a classification system of "traffic lights" that differs from the approaches used by the IMF and the WB. When allocating financing, the IDA provides countries in the high-risk or "red light" category with all-grant financing, countries in the moderate-risk or "yellow light" category get a mix of 50% loans and 50% grants, while financing to countries in the low-risk or "green light" category is entirely made up of loans.⁸
- The African Development Fund (AfDF), which distributes concessional loans for the African Development Bank Group (AfDBG),⁹ also uses IMF/WB

7 Around 80% of IMF loan programmes are concluded with LICs (source: Finance & Development, September 2008).

8 See Djoufelkit-Cottenet and Raffinot (2008) for a more detailed description.

9 The AfDBG was set up in 1964. Comprising 53 African member countries, its main task is to promote economic and social development in Africa. In this capacity, it runs the AfDF, which was created in 1972.

DSAs to measure the debt distress risk of African countries and determine financing procedures, especially grant eligibility. The AfDF's classification system, which decides on the distribution of funds based on debt levels, is similar to that of the IDA.

Bilateral cooperation

Under Paris Club agreements, LIC debt is treated on condition that the country is enrolled in an IMF programme, many of which use DSAs. Based on DSA results, the Paris Club may therefore grant debt relief to countries that the IMF and WB declare to be eligible for the HIPC initiative. When the DSA shows an HIPC's NPV of debt-to-exports ratio to be over 150%, the Club can reduce the country's external debt levels by bringing its debt burden down to a manageable level. For commodity-exporting countries, the criterion for granting debt relief is that the NPV of debt-to-fiscal-revenue ratio must exceed 250%.

In October 2003, the Paris Club adopted the "Evian approach",¹⁰ a flexible mechanism for addressing debt sustainability concerns in non-HIPC countries. Under this approach, Club creditors agreed to participate in comprehensive debt treatment for countries whose debt is considered to be unsustainable according to certain criteria, provided the countries have committed to policies that will secure an exit from the Paris Club in the framework of their IMF arrangements. They must also seek comparable treatment from their other external creditors, including the private sector. The Paris Club then determines what relief to provide based on the DSA conducted by the IMF.

Finally, for countries whose debts have been reduced or cancelled (HIPC initiative and MDRI), DSAs are used to guide decisions on new lending, insofar as bilateral and multilateral donors must in principle make sure that the new debt does not create fresh payment difficulties for the country in question.

I | 4 Criticism of the DSF

The DSF is a tool used by the international community to analyse and regulate debt flows. However, it has been criticised and challenged on a number of points, including the following:

- **Difficulties in assessing sustainability and using the DSF in economic policymaking:** for Wyplosz (2005), assessing sustainability runs up against the "impossibility principle" because there is no sure way to accurately

10 IMF (2005), Annual Report, Chapter 3, "Strengthening IMF program support and crisis resolution".

determine the level beyond which debt would become unsustainable in response to a shock. The forward-looking approach uses a set of assumptions (change in debt, macroeconomic data) for which the DSF can only supply debt-distress probabilities, which are additionally variable over time. The use of medium- and long-term forecasts (20 years) means the results have to be seen in context. Furthermore, from an operational standpoint, it is hard for a country to implement economic policies that might entail major social costs based on mere probabilities. While Wyplosz's analysis does not necessarily cast doubt over the usefulness of the DSF, it is an incentive to take a flexible approach to using the framework.

- **Limitations of stress testing:** stress tests have been criticised notably for not taking account of correlations between shocks, second-round effects,¹¹ or the impact of government action plans to address shocks. Another complaint is that they do not make it possible to sufficiently differentiate shocks between countries (an event that is considered as highly risky for one country might not necessarily have the same impact in another country).

- **Reliance on CPIA ratings to establish indicative thresholds for sustainable debt:** because of the way it differentiates between countries, an index based on a qualitative assessment of the institutional and policy framework of a country inherently raises questions about its appropriateness and/or objectiveness. Country classification according to the CPIA/Debt ratio matrix creates threshold effects, notably for countries on the border between two categories. Switching from one category to another because of a small change in CPIA rating may have a massive effect on a country because the rating change is accompanied by a change in applicable debt thresholds (cf. Table 2 above) and hence in the assessment of the country's debt risk. When a country is well placed in a group, there is therefore a risk that its capacity to meet debt obligations may be overestimated. By the same token, the ability of poorly placed countries may be underestimated.

- **The ability of DSF debt indicators to measure debt sustainability:** DSF debt indicators are ratios that reflect the capacity of countries to honour their external debt, either through the wealth that they generate (GDP, income), or through the share of that wealth that can be used to generate transferable resources (exports). Comparing the nominal value of a country's debt against the NPV of expected payments to creditors is more akin to assessing the solvency of a borrower country than the sustainability of its debt. Some analysts think that the notion of sustainability should take account of the repayment burden relative to the expenditures needed to achieve MDGs and use other indicators that track, for example, the actual ratio of the debt burden to investment or government spending on

11 Second-round effects are changes in the trajectory of economic and financial variables caused by responses/reactions to shocks by economic agents and authorities.

healthcare and education. Others believe that the DSF should take account of the effects on growth of increased use of new loans (Reisen, 2008) or FDI. Debt sustainability should also be considered in relation to the use made of financing.

- Finally, the financial crisis, which caused a simultaneous deterioration in the prospects for LIC external revenues and an increase in borrowing requirements, highlighted **the need to adjust the DSF more effectively to reflect cyclical movements**.

2| Continued exposure of LICs to debt distress

2|1 Persistent factors of weakness, despite improved debt indicators

Since the beginning of the 2000s, a number of factors have helped to reduce developing countries' debt. Improved macroeconomic performance, coupled with better management of public finances and consolidation of institutional quality, against a recent backdrop of high commodity prices and favourable terms of trade, have aided these countries to reduce their debt burden. Improved external positions (cf. Table 4), particularly among oil-exporting countries, also played a part in reducing external borrowing requirements. The HIPC initiative and MDRI were also key to these changes.

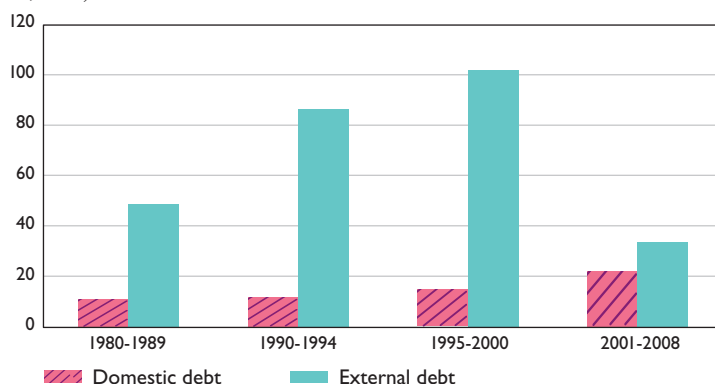
Table 4 Reserves and current account balances

(current account balance, as a % of GDP)

	1997-2002	2003	2004	2005	2006	2007	2008
Reserves (months of imports of goods and services)							
SSA	3.8	3.4	4.3	4.7	5.9	6.0	5.3
Oil-exporting countries	3.9	2.3	4.9	6.7	10.8	9.6	8.4
LICs	3.7	5.4	5.0	4.0	4.0	4.4	3.2
Franc zone	2.4	3.4	3.5	3.5	4.9	5.3	5.1
SADC (a)	3.6	3.2	3.5	3.7	4.2	4.4	4.1
Current account balance (inc. grants)							
SSA	-2.5	-2.8	-1.3	-0.4	4.1	1.1	1.0
Oil-exporting countries	-3.5	-5.9	2.6	7.2	21.2	14.4	14.0
LICs	-6.0	-4.6	-4.2	-6.0	-6.2	-7.5	-9.7
Franc zone	-4.2	-4.9	-4.6	-1.1	-0.6	-2.6	-1.0
SADC	-1.8	-1.4	-2.4	-2.0	-1.3	-3.2	-4.9

(a) SADC: Southern African Development Community.

Source: Regional Economic Outlook, October 2009, IMF.

Chart 3 SSA: Domestic and external debt*(as a % of GDP)*

Source: Adelegan (O.J.) and Radzewicz-Bak (B.) (2009), IMF, Working Paper 09/213.

As a result, SSA external debt, which averaged 103% of GDP between 1995-2000, fell to around 34% of GDP between 2001-2008 (Adelegan and Radzewicz-Bak, 2009) (cf. Chart 3).

In 1990, approximately 82% of SSA long-term external debt was held by governments and public entities. By 2008, the share of public and guaranteed private debt was around 64% of SSA total external debt (cf. Table 5). The decline in the portion of public external debt is partly due to the decline in total public debt (which went from 48% of GDP in 2000 to 15% in 2007) and to the increase in private external debt. The proportion of non-guaranteed private external debt in total external debt rose from 3% in 1990 to 10% in 2008.

Table 5 SSA external debt*(debt and use of IMF credit in USD million, share of debt as a %)*

	1990	2000	2005	2006	2007	2008
Total external debt (stock)	176,547.9	211,948.2	216,250.5	173,526.2	193,760.7	199,677.0
Long-term debt	149,372.1	173,385.4	178,090.8	126,940.5	146,104.1	146,200.0
<i>o/w: publicly guaranteed debt</i>	<i>144,096.0</i>	<i>162,009.4</i>	<i>169,551.8</i>	<i>117,682.6</i>	<i>126,026.4</i>	<i>127,631.0</i>
<i>non-guaranteed private debt</i>	<i>5,276.1</i>	<i>11,376.0</i>	<i>8,539.0</i>	<i>9,257.9</i>	<i>20,077.7</i>	<i>18,569.0</i>
Use of IMF credit	6,611.8	6,739.3	5,947.3	3,140.3	3,203.3	3,986.0
Outstanding short-term debt	20,564.0	31,823.5	32,212.4	43,445.4	44,453.3	49,490.0
Share of publicly guaranteed debt in total external debt	81.6	76.4	78.4	67.8	65.0	63.9
Share of non-guaranteed private debt in total external debt	3.0	5.4	3.9	5.3	10.4	9.3

Source: Global Development Finance 2009, World Bank.

Table 6 Decomposition of long-term external debt by creditor type

(USD millions)

	2000	2005	2006	2007	2008
Publicly guaranteed debt	162,009.4	169,551.8	117,682.6	126,026.4	127,631.0
owed to official creditors	136,040.6	135,559.1	88,591.5	91,654.8	97,470.0
o/w: multilateral	54,705.9	73,511.8	44,260.6	48,565.8	50,787.0
bilateral	81,334.7	62,047.3	44,330.9	43,089.0	46,683.0
owed to private creditors	25,968.8	33,992.7	29,091.1	34,371.6	30,161.0
Non-guaranteed private debt	11,376.0	8,539.0	9,257.9	20,077.7	18,569.0
o/w: bonds	1,360.3	1,307.0	1,484.0	4,286.3	4,295.0
banks	10,015.8	7,232.0	7,773.9	15,791.3	14,274.0

Source: Global Development Finance 2009, World Bank.

The structure of external debt by creditor type also changed. The share of publicly guaranteed debt owed to official creditors fell from 84% in 2000 to 76% in 2008, while the share owed to private creditors rose by 8 percentage points to 23% in 2008 (cf. Table 6). The share of publicly guaranteed debt owed to multilateral official creditors, which stood at 34% of total publicly guaranteed debt in 2000, totalled 40% in 2008, while the share of publicly guaranteed debt owed to bilateral official creditors went from 50% to 37% over the same period.

The improved external solvency of SSA countries has nevertheless been accompanied by increased domestic debt.¹²

Cabrillac and Rocher (2009) point out that the implementation by African countries of public policies aimed at diversifying their financing approaches has played a part in this trend. Domestic debt in SSA increased from 15% of GDP on average over 1995-2000 to over 22% in the 2001-2008 period. Not all countries have seen the same increase, and cross-country disparities exist, partly reflecting a lack of domestic savings, underdeveloped financial intermediation and overly shallow, illiquid local financial markets. Whereas domestic debt was equal to more than 30% of GDP on average over 2001-2008 in South Africa, Namibia and the Seychelles, it was less than 5% in West African Economic and Monetary Union (WAEMU) countries (Adelegan and Radzewicz-Bak, 2009).

Moreover, LICs remain vulnerable to a number of factors that could affect the sustainability of their external debt. The IMF has assessed the debt prospects for countries that have reached the HIPC completion point. While the MDRI allows countries that have passed the HIPC completion point to benefit from almost total relief on their outstanding bilateral debt towards Paris Club creditors as well as debt relief from multilateral creditors, over 60% of beneficiary countries are still at moderate or high risk of distress.¹³

¹² For a detailed analysis of the costs and risks associated with external versus domestic financing, see Beaugrand, Loko and Mlachila (2002).

¹³ "Heavily indebted poor countries (HIPC) initiative and multilateral debt relief initiative (MDRI) – Status of implementation", IMF, September 2008 and September 2009.

Table 7 HIPC post-completion point SSA countries at a high risk of debt distress

	Last DSA	Results
Burkina Faso	June 2009	The NPV of debt-to-exports ratio exceeds the indicative thresholds, reaching 196.4% in 2024 on long-term decline in cotton exports.
Burundi	March 2009	The NPV of debt-to-exports ratio is expected to reach 169% by the end of 2011. Exports remain weak and depend heavily on a single product, coffee.
Gambia	February 2009	According to 20-year projections, the NPV of debt-to-exports ratio (147% in 2018) is above the reference threshold.
Sao Tomé	February 2009	The baseline points to areas of weakness before planned start-up of oil production in 2014. Some indicators, notably the NPV of debt-to-exports ratio, exceed the indicative thresholds for the 2009-2014 period.

Sources: IMF and World Bank, "Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI) – Status of Implementation", September 2009 and joint assessments of debt sustainability.

Thus, of the 26 countries that had reached the HIPC completion point by end-July 2009, 12 SSA countries were at moderate risk of debt distress and 4 were at high risk (cf. Table 7).

Similarly, of the 35 SSA countries that are potentially eligible for a PRGF programme (cf. Table 8), 17 are at moderate or high risk of debt distress. These countries share a number of the same vulnerabilities. High risk is generally linked to a narrow export base, concentrated on a few primary products and thus extremely sensitive to shocks (weather and price volatility), and to the quality of generally weak or deteriorating policies and institutions.¹⁴ Oil-exporting countries are not immune to debt distress: Angola and Chad are at moderate risk and Congo is at a high risk, although this country, which reached the HIPC completion point on 28 January 2010, should nevertheless see a sharp reduction in its debt ratios.

Table 8 Risk to debt sustainability of PRGF-eligible African countries

Low risk	Moderate risk	High risk	Debt distress
Cameroon, Cape Verde, Kenya, Madagascar, Mali, Mozambique, Nigeria, Senegal, Tanzania, Uganda, Zambia	Angola, Benin, Ethiopia, Ghana, Lesotho, Malawi, Niger Central African Republic, Sierra Leone, Chad, Rwanda	Burkina Faso, Burundi, Congo, Côte d'Ivoire, Gambia, Sao Tomé and Principe	Comoros, DRC, Guinea, Guinea-Bissau, Liberia, Togo, Zimbabwe

Source: IMF website, updated on 4 September 2009. Presentations of debt distress risk to IMF Board cover 2007, 2008 and 2009. Countries that had reached HIPC completion point at 1 July 2009 are in *italics*.

¹⁴ "Heavily indebted poor countries (HIPC) initiative and multilateral debt relief initiative (MDRI) – Status of implementation", IMF, September 2008.

Furthermore, DSAs of countries that reached the HIPC completion point show that the prospects for the future path of debt remain highly sensitive to the terms of new financing (IMF, 2008). In that paper, the assessment of debt sustainability includes a scenario based on less favourable (notably less concessional) new financing. In 60% of DSAs for these countries, the NPV of debt-to-exports ratio goes above the indicative threshold in the alternative scenario, compared with 30% of DSAs of non-HIPC countries.

2|2 The financial crisis has exacerbated the risk of debt distress¹⁵

The crisis could affect the external financing channels of some SSA LICs

Given how SSA countries specialise in commodities, which make up their main source of income, the crisis has affected them through a sharp shock to their exports and terms of trade, which has impacted current accounts and fiscal revenue.

While SSA countries account for just around 2% of global trade, their openness to international trade¹⁶ is considerable and rising (it rose from 65% in 2000 to 79% in 2008). According to the IMF (2009), a 1% decline in global growth reduces SSA growth by approximately five-tenths of a percentage point. Furthermore, the external accounts of SSA countries are extremely sensitive to changes in the terms of trade.¹⁷ The current account balance of SSA countries went from a USD 1.86 billion surplus in 2008 to a USD 34.27 billion deficit in 2009 (or 0.2% and 3.7% of GDP respectively, cf. Table 9).

Direct investment flows have been supported in recent years by commodity-related projects and held steady in 2008. However, they declined in 2009 as projects in these sectors were postponed or cancelled. Remittances, estimated at USD 20 billion in 2008 in SSA, are also down. According to the World Bank, after growing by 13.4% in 2008, remittance flows to SSA are expected to contract by approximately 3% in 2009. However, the impact of the decline will vary according to how dependent local economies are on remittances.¹⁸

Overall, these developments will slow the growth in foreign reserves. However, reserves should remain at comfortable levels for oil-exporting SSA countries (7.9 months of imports of goods and services in 2009¹⁹ compared

¹⁵ Chauvin and Lanteri (2009), "How the financial crisis is affecting Sub-Saharan Africa", presentation to Banco de España, Madrid, 21-22 September 2009.

¹⁶ Measured by ratio of (exports + imports)/GDP.

¹⁷ According to the WEO of last October, the terms of trade for goods fell by 3.3% in 2009, after increasing by more than 15% in 2008. However, in the oil-producing region of the CAEMC, the BCAS estimates the decline at close to 40%.

¹⁸ Countries that are heavily dependent, such as Lesotho (24.5% of GDP) and Gambia (12.5%), will be more affected than Kenya (5.3%), Swaziland (3.7%) and Benin (3.6%). World Bank, November 2009, "Migration and Development Brief: Outlook for Remittance Flows 2008-2010".

¹⁹ Regional Economic Outlook Africa, IMF October 2009.

Table 9 Main balance of payment items, SSA

(USD billions)

	2006	2007	2008	2009	2010	2011
Current account	22.63	2.05	1.86	-34.27	-27.71	-24.90
<i>o/w: balance of goods</i>						
and services	26.41	17.70	23.05	-30.92	-12.80	-4.55
net current transfers	32.72	35.94	39.59	43.52	36.89	37.97
net income	-36.62	-51.66	-61.04	-47.12	-51.97	-58.46
Capital account	39.22	15.24	6.57	9.79	11.87	6.91
Financial account	-46.39	1.15	6.06	45.19	41.61	44.52
<i>o/w: net direct investment</i>	13.26	26.42	35.87	23.54	27.93	34.25
net portfolio investment	19.53	11.54	-22.62	5.92	11.97	14.65
other net investment	-47.47	-8.49	9.76	-0.01	12.21	12.26
reserves	-31.72	-28.31	-16.94	15.74	-10.51	-16.65
Pro memoria:						
Official flows, net	8.37	7.39	5.89	15.36	16.06	11.56
Private flows, net	10.90	25.79	21.40	16.79	39.22	47.93

Source: IMF

with 8.4 months in 2008), while oil-importing countries are likely to see their reserves stabilise, albeit at relatively low levels (4.3 months in 2009, compared with 3.8 in 2008).

Fears have also been voiced concerning the possibility of a reduction in bilateral public development aid if developed countries reassess their commitments because of a shift in fiscal policies. A reduction could have a significant direct impact because most African countries are highly dependent on international aid, which typically accounts for more than 10% of their GDP. However, these fears need to be tempered, since developed countries, including France, confirmed that they would stand by their commitments at the G20²⁰ meeting in London in April 2009.

Countries with borrowing potential may seek to offset this possible reduction in external financing sources by increasing their non-concessional debt, notably from emerging creditors, which could threaten the sustainability of their debt.

Little room for manoeuvre to respond to the crisis

The space that SSA countries have in which to manoeuvre to support activity essentially hinges on their fiscal situation and borrowing capacity. Oil-importing countries are subject to especially significant fiscal constraints. In 2009, the deficit (excluding grants) of non-oil-producing LICs was expected at close to 8.1% of GDP (compared with 6.6% in 2008) while the deficit of fragile countries was estimated at 5.7% (compared with 3.9% in 2008). In these countries, however, the downturn is relatively less

20 The G20 comprises members of the G7 (Germany, Canada, USA, France, UK, Italy, Japan) as well as South Africa, Saudi Arabia, Argentina, Australia, Brazil, China, South Korea, India, Indonesia, Mexico, Russia, Turkey and the EU. Basically, the G20 is made up of the major industrialised economies of the G8 plus 11 large emerging economies and the EU.

Table 10 Estimated vulnerability of African countries to the effects of the crisis

Vulnerability	Country
High	Angola, Burundi, Zambia, DRC, CAR, Sudan, Nigeria, Liberia, Côte d'Ivoire, Ghana, Lesotho, Mauritania
Medium	Mozambique, Malawi, Tanzania, Madagascar, Ethiopia, Eritrea, Chad, Niger, Cameroon, Congo, Niger, Burkina, Guinea, Sierra Leone
Low	Kenya, Mali, Senegal

Source: IMF, "The implications of the global financial crisis for low income countries", March 2009.

severe because they already had large deficits. For oil-exporting countries, the relative decline in oil prices has undermined their fiscal positions, with their fiscal balance (excluding grants) moving from a surplus of 6.2% of GDP in 2008 to a deficit of 6.1 % of GDP in 2009.

According to an IMF study²¹ on the effects of the financial crisis on LICs, 28 LICs already have debt levels in excess of 60% of GDP. Simulations indicate that additional loans to make up for the shortfall in external financing²² would quickly cause them to breach thresholds indicating high risk of debt distress. Exacerbating this situation is the fact that more than half of LICs' public debt is external and denominated in foreign currencies, which means, for countries with flexible exchange rate regimes, that a depreciation in exchange rates resulting from the deterioration of external balances will likely aggravate debt-to-GDP ratios. The currencies of several countries fell sharply between June 2008 and October 2009: the Ghanaian currency lost 33% against the US dollar, while Nigeria fell 22% and Zambia by 20%.

According to the IMF (2009), around one-third of LICs, of which half in SSA, are highly vulnerable²³ to the negative effects of the crisis on trade, FDI, aid and transfers (cf. Table 10).

2 | 3 The growing presence of emerging lenders: a source of uncertainty for the debt sustainability of African countries

In recent years, the resumption of borrowing by some countries reflects a changing international environment in which new lenders, particularly among emerging countries, are coming forward. The financing practices of these new lenders differ from the consensual rules applied by traditional donors. For example, emerging lenders offer large amounts of financing, in some cases well above the amounts likely to be provided by the IMF and

21 "The implications of the global financial crisis for LICs", March 2009. This IMF study looks at a sample of 71 LICs, of which half are in SSA.

22 Simulations assume that investment expenditure financing from public development aid and FDI is replaced with public external borrowing.

23 Vulnerability is based on simulations intended to estimate the impact of shocks to trade (decline in commodity prices to 1995-2007 average levels and 10% decline in other exports of goods and services), remittances (36% decline for SSA LICs), aid (20% decline on 2008) and FDI (30% decline relative to 2008 value) in terms of lost GDP and the reserves-to-imports ratio.

the IDA, and without conditionality, particularly on governance. These financing arrangements are often semi- or non-concessional and may be secured by natural resources or associated with commitments by the borrower countries (capital goods purchases, supply of oil at prearranged price, etc.).²⁴

The lending strategies of emerging countries are routinely criticised because these countries do not belong to the multilateral bodies that manage and monitor debt and are therefore not bound by the collective rules that members have established over time. China is often cited among the group of new lenders.²⁵

At the second forum on China/Africa cooperation in Beijing²⁶ in November 2006, China announced that it would double its aid to Africa and supply USD 5 billion in additional financing in the shape of loans and credit over a three-year period. In Sharm El-Sheikh in November 2009, at the third China/Africa forum, China said it would grant USD 10 billion in subsidised loans to Africa as part of a three-year programme.

The financial aid provided by China comes in three forms: grants (generally aid in kind); zero-interest loans; and semi-concessional loans (distributed by China Exim Bank and China Development Bank).²⁷ However, Chinese financing (cf. Table 11) is often criticised for failing to comply with the principles of the Paris declaration, governance rules and international standards.

Table 11 Stock and flows of Chinese FDI in Africa

(% of total FDI in Africa)				(% of total FDI to Africa)			
Stock of Chinese FDI in Africa				Flows of Chinese FDI to main African countries			
	2003		2008		2003		2008
Zambia	29.3	South Africa	39.1	Nigeria	32.6	South Africa	87.6
South Africa	9.1	Nigeria	10.2	Mauritius	13.7	Zambia	3.9
Zimbabwe	7.5	Zambia	8.3	South Africa	11.8	Nigeria	3.0
Nigeria	6.5	Sudan	6.8	Zambia	7.4	Madagascar	1.1
Madagascar	5.7	Algeria	6.5	Mali	7.2	Algeria	0.8
Kenya	5.2	Mauritius	2.9	Algeria	3.3	Mauritius	0.6
Gabon	4.9	Tanzania	2.4	Egypt	2.8	Gabon	0.6
Guinea	2.9	Madagascar	1.9	Benin	2.8	DRC	0.4
Egypt	2.9	Niger	1.7	Mauritania	2.3	Kenya	0.4
Mauritius	2.6	DRC	1.7	Uganda	1.3	Tanzania	0.3

Source: 2008 Statistical Bulletin of China's Outward Foreign Direct Investment.

24 Rocher (E) (2007), "Les risques de ré-endettement des pays en développement après les annulations de dettes", Bulletin de la Banque de France, No. 157, January.

25 "Financing Development in Africa: the growing role of non-DAC development partners", G24 Secretariat, 21 July 2008.

26 The forum on China/Africa cooperation was set up in October 2000 and seeks to strengthen cooperation between China and Africa. The forum meets every three years and gives rise to a three-year action plan.

27 See Reisen (2007).

To limit the potentially negative effects of non-concessional borrowing, the World Bank has introduced a "preventive" framework to gather information about loans taken on by AID clients and their level of concessionality. Reporting obligations are part of the IDA's Non-Concessional Borrowing Policy (NCBP),²⁸ which was approved by the IDA Board in July 2006, then reviewed in June 2008. It defines the deterrent/disciplinary measures that can be taken against free rider behaviour by certain lenders and non-concessional debt arrangements for MDRI beneficiaries. In fact, the reporting mechanism is not yet fully operational because of the breadth of the procedures and the coordination needed between all the creditors involved. However, the annual DSF²⁹ exercises should be an opportunity to sound out countries on the prospects for taking on more loans, including, as the case may be, non-concessional loans. If cross-checks show after

Box 2

The DSF and emerging lenders

On 22 April 2008, the DRC signed a cooperation agreement with a group of Chinese firms on investments in the mining sector and public infrastructure. The total loan amount covered by the agreement was USD 9.2 billion, of which USD 3.2 billion for the mining sector and two USD 3 billion loans for public infrastructure projects.

These loans to non-government structures came with non-concessional terms and were covered by an implicit guarantee from the Congolese government or a commitment to service the debt through earmarked government revenues.

According to criteria established by IDA policy, the arrangements did not have a high enough level of concessionality, which could have led to a reduction in the amount of aid granted to the DRC. Also, the terms of the agreement appeared to undermine the preferred creditor status of the international financial institutions (IFIs). The question was then raised as to whether the planned financial arrangements could compromise debt sustainability and threaten the debt relief that the DRC was likely to receive under the HIPC initiative and the MDRI.

In October 2008, after talks with the IMF and the World Bank, the Congolese authorities reaffirmed their interest in the financing, while recognising the potential cost of guarantees provided by the government. The IMF reiterated that the financing was not concessional and might make Congolese debt less sustainable.

.../...

28 Reference document: "IDA countries and non-concessional debt: dealing with the 'free rider' problem in IDA 14 grant-recipient and post MDRI countries", World Bank, 19 June 2006.

29 See IMF report "Staff guidance note on the application of the joint fund-bank debt sustainability framework for LICs", 6 October 2008 for a detailed presentation of the process for carrying out a DSA and its frequency. A DSA is carried out at least once a year for PRGF-eligible IDA countries.

The World Bank acknowledged the country's need for infrastructure investment, but said that the impact of these projects on long-term growth was not clear.

The IMF and the World Bank proposed that certain terms of the agreement be modified to make it more compatible with the terms of a new three-year agreement under the PRGF, paving the way for debt relief under the HIPC initiative and the MDRI and financing insurance from the Paris Club.

At the IMF Board meeting of 11 March 2009 on the application for assistance under the Rapid Access Component of the Exogenous Shocks Facility, it was indicated that if the renegotiation of the Chinese loans was deemed satisfactory, in June 2009 the Board could examine the question of introducing a PRGF programme.

Progress was made in summer 2009. In November 2009, the Congolese authorities approved an amendment to the Chinese agreement including three clauses:

- *withdrawal of the sovereign guarantee for the mining loan;*
- *cancellation of phase two of the infrastructure project;*
- *restriction of the sovereign guarantee to phase one of the infrastructure project.*

Following the signature of the amendment, the IMF and the World Bank carried out a DSA, which found that the loan's concessionality level included an estimated grant element of between 42% and 46%, which was consistent with IMF requirements and did not significantly alter the DRC's debt sustainability in the medium term. On 11 December 2009, the IMF Board approved the conclusion with the DRC of a three-year SDR 346.45 million programme under the PRGF.

the fact that borrowers have not been transparent, they will be liable for disciplinary measures. According to the NCBP, the disciplinary framework should contain, as a minimum:

- provisions for tightening the terms of assistance to borrowers;
- reductions in the amount of aid.

3| On the need for strengthened international cooperation and transparency

Illustrating the impact of the current crisis, the number of applications from LICs to the IMF for financial assistance has significantly increased, climbing from five in 2007 to 23 in 2008. By mid-September 2009, demand for concessional financing from the IMF had reached SDR 2.1 billion,

compared with SDR 0.8 billion for full-year 2008. The increase in borrowing requirements highlights the need to step up cooperation between all donors (new and traditional), and to make donors' methods more transparent, as part of the current reforms to the debt sustainability framework.

3 | I Forging greater international cooperation and transparency within the DSF

Efforts, particularly by G7 and G20 countries, to promote broader use of the DSF have intensified since 2007. At the G7 meeting in Washington in April 2007, finance ministers stressed the importance for debtor and creditor countries of using the DSF as a support for debt and lending policies. They emphasised the need to avoid the emergence of new cycles of debt distress by involving all parties, including lenders.

This idea was again highlighted in the action plan for good financial governance in Africa put together by the G8 in May 2007.³⁰ The plan emphasised the need for responsible lending practices, based on increased use of the DSF and information-sharing by lenders, to strengthen coordination and promote more effective use of funds.

Meeting in Berlin in October 2007, the G8 finance ministers wanted to further discussions on using the DSF by bringing in commercial creditors to reflect LICs' increased use of private financing sources. Work continued within the G20, which set up a debt sustainability study group in 2008.

This initial round of work has yielded several avenues of discussion, including the following:

- the shared responsibility of lenders and borrowers in minimising the risks of debt distress: borrowers can play their part through efforts to improve transparency, debt management capacity and sound macroeconomic policies; lenders, meanwhile, should use the DSF, which is a key tool in assessing the risks of debt distress and supporting financing decision-making;
- the need to strengthen international cooperation through shared initiatives that make it possible to:
 - exchange views in international fora such as the G20;
 - support borrowers through technical assistance programmes;
 - consider ways to ensure greater coordination in lending decisions;
 - improve information-sharing, transparency and available data on lending decisions.

30 "G8 action plan for good financial governance in Africa", 19 May 2007. G8 2007 finance ministers meeting.

3|2 Looking for greater flexibility from the DSF

Following internal reviews of the DSF³¹ and recommendations by the G20 London meeting (April 2009), the IMF and the World Bank adopted reforms in January 2010 to enhance the framework's flexibility, without impinging on its main objective, i.e. controlling debt strategies. In particular, the reforms seek to reduce the procyclical nature of the DSF (reduction of threshold effects), notably during crises, take into account all stable external resources (including remittances), and encourage budget spending to be redirected towards economic development (recognise impact of public investment expenditure on growth). Specifically, the reform³² covers the following aspects:

- **Mitigate threshold effects:** sustainable external debt limits depend heavily on changes in CPIA scores, which are limited in number. Threshold effects have been the subject of concerns in the past, and modifications were made in 2006 with the decision to use a three-year (rather than a one-year) moving average for these indices. In the future, when the CPIA crosses its boundary, a country's performance category will take place only if the CPIA score changes by more than 0.05 from the boundary for two consecutive years.
- **Enhance recognition of remittances:** developing countries that are classified as medium risk or that are likely to change category, and that receive sizable and stable remittances, could have these funds taken into account in the DSA under certain conditions and thus obtain a more favourable risk rating.
- **Integrate the impact of debt-financed investment on growth:** one shortcoming identified with the DSF was that it did not integrate the likely feedback effects from public investment on economic growth and the budget revenues generated. Nevertheless, despite the methodological difficulties involved in identifying and modelling this impact, a two-stage approach was adopted:
 - pursue the current approach based on case-by-case analyses;
 - extend empirical work by constructing a computable general equilibrium model incorporating the effects of public investment.
- **Define the conditions under which the debt of state-owned enterprises may be excluded.** The new framework considers that debt automatically encompasses all state-owned enterprises. However, in certain cases,

31 IMF and IDA (2008), "Staff guidance note on the application of the joint fund-bank debt sustainability framework for low-income countries", 6 October 2008.

32 IMF (2009), "Debt limits in fund-supported programs – Proposed new guidelines", Strategy, Policy and Review Department, 5 August.

state-owned enterprises that can borrow without a public guarantee and whose operations pose only a limited fiscal risk for the government may be excluded from external public debt. Other specific criteria may also be used to guide decisions, including managerial independence and the existence of subsidies and transfers.

Furthermore, to better take account of changes in the economic environment of LICs, admissible debt ceilings and concessionality terms imposed within the framework of IMF programmes were reviewed in December 2009.

There are several reasons to allow more flexibility on concessionality:³³

- LICs do not have uniform borrowing requirements, debt levels or aid dependency;
- even if new donors follow less concessional lending practices, their funding may be an additional source of financing for project development, particularly in infrastructure;
- the crisis could cause a reduction in private capital flows to LICs and thus increase their borrowing requirements;
- whereas the concessionality requirement for external debt was, among other things, intended to limit exchange rate risk associated with market financing in foreign currency, the increase in the share of local currency debt held by non-resident agents raises the question of whether it is appropriate to consider only external debt. Until now, external debt was defined based on the criterion of creditor residency (non resident) and was often associated with foreign-currency debt. The IMF recommends the following options: for the most advanced LICs with open capital accounts, if concessionality requirements arise, total public debt should be taken into account, eliminating the distinction between external and domestic debt; for LICs with relatively closed capital accounts or limited integration within international financial markets, the use of the residency criterion is still relevant, with some amendments. For LICs in an intermediate situation with a large amount debt excluded from the application of the residency criterion, a currency denomination criterion might be an option. Concessionality requirements could then be applied to foreign-currency denominated debt, irrespective of the residency of the creditor.

Overall, while concessionality requirements are still based on the vulnerability of member countries, they have become more flexible for countries with higher capacity to manage public resources.

33 IMF (2009), "Changing patterns in low-income country financing and implications for fund policies on external financing and debt", 25 February.

This capacity is based on:

- the budget formulation process, particularly the identification of expenditures needed for development (inclusion of an element covering spending quality and guidance);
- the chain of expenditures, internal and external control mechanisms, the medium-term debt management strategy, including the establishment of a performance track record;
- the quality of institutions and the transparency of policies, assessed by combining the CPIA and Public Expenditure and Financial Accountability (PEFA) indicators.

Given the diversity of available information, to ensure that countries are fairly treated, the IMF has adopted a two-stage approach:

- use of indicators with broad coverage of LICs to enable a preliminary identification of higher-capacity countries: for this, a sub-CPIA (derived from the CPIA and comprising two policy-related components (debt and fiscal) and three components rating the quality of financial management and institutions) and the PEFA are used;
- a more precise classification of countries based on these indicators and additional sources of information, such as the Report on the Observance of Standards and Codes (ROSC), Debt Management Performance Assessment (DeMPA), Project Performance Assessment (PPA) and Worldwide Governance Indicators (WGI), plus the expertise of IMF and WB staff.

To the extent that the DSF has increasingly structured IMF financial programming and monitoring since 2005, the proposals to reform debt ceilings are aimed at ensuring increased flexibility of debt conditions and at customising the debt ceilings of member countries.

Accordingly, the new IMF policy based on the DSF is more flexible, offering several options depending on the economic situation of individual LICs, to guarantee access to concessional financing while leaving open the possibility of taking on non-concessional financing. The options proposed (cf. Table 12) are intended to reflect the diverse situations of LICs in terms of their debt vulnerabilities and debt management capacity.

Thus, as regards ceilings on non-concessional borrowing, four different types of capacity-based concessionality requirements apply.

In the group of low-capacity countries, the concessionality threshold for countries with higher debt vulnerability is at least 35% and applicable to

Table 12 Concessional requirements: eligibility of African LICs executing an IMF-supported programme at 7 December 2009

Management capacity	Extent of debt vulnerabilities	
	Lower	Higher
Higher	Minimum average concessional requirement applied to external or total public borrowing; for most advanced LICs, no concessional requirements and overall nominal debt limit if needed	Overall limit on the PV of external or total public debt; for most advanced LICs, ceilings on nominal external or total public debt
	Cape Verde	
Lower	Minimum concessional requirement applicable to each debt, but with added flexibility on non-concessional external debt (e.g., higher and untied nonzero limits, if consistent with maintenance of low debt vulnerabilities)	Maintain minimum concessional requirement applicable to each debt (old system), likely higher than 35 percent, with limited or no room for non-concessional borrowing
	Angola, CAR, Ethiopia, Ghana, Mali, Mauritania, Mozambique, Niger, Senegal, Sierra Leone, Tanzania, Uganda, Zambia	Burkina Faso, Burundi, Comoros, RDC, Congo, Côte d'Ivoire, Djibouti, Gambia, Guinea, Liberia, Sao Tomé and Príncipe, Togo

Source: IMF.

each loan separately. Non-concessional loans should be the exception. For countries with lower debt vulnerability, the threshold would be 35%, with the option of taking on non-concessional loans up to limits that do not exacerbate vulnerabilities.

In the group of higher-capacity countries, annual debt-accumulation limits are set in PV terms for countries with higher debt vulnerability. In the case of the most advanced LICs, these limits might also be set in nominal terms. A minimum average concessional requirement for debts contracted or guaranteed over a given period is established for countries with lower debt vulnerability. For the most advanced LICs, consideration might also be given to dropping concessional requirements.

International cooperation efforts, particularly since 2007, have made the DSF more flexible. These changes, which have taken place while maintaining the DSF's overarching objective, i.e. to preserve the debt sustainability of LICs over the medium term, should make it possible to reflect the new international context in which these countries find themselves, characterised by increased borrowing requirements and a sharp rise in less concessional financing provided by emerging countries.

For this reason, the development of local financial markets operating in local currencies, promoted by a redemption from "original sin", is a key way forward in lessening financing constraints. The development of financial markets in SSA would make it possible to recycle not just local savings, which are insufficient but relatively plentiful when substantial capital flight is factored in, but also migrants' savings and the portion, however tiny, of surplus global

savings drawn by the prospects of diversification. The DSF can play a useful part in building credibility on the way to achieving this desirable shift.

Furthermore, the DSF provides new emerging creditors with a preventive framework to avoid past problems. While their unwillingness to apply rules that they did not help to make is understandable, it is possible to promote awareness about the mutual benefits that the DSF can bring in a multilateral framework. Including the DSF in the G20 development agenda could help in this regard.

References

Adelegan (O.J.) and Radzewicz-Bak (B.) (2009)

"What determines bond market development in sub-Saharan Africa", IMF, *Working Paper* 09/213.

Beaugrand (P.), Loko (B.) and Mlachila (M.) (2002)

"The choice between external and domestic debt in financing budget deficits: the case of Central and West African countries", IMF, *Working Paper* 02/79.

Cabrillac (B.) and Rocher (E.) (2009)

"Les marchés de titres de la dette publique dans les pays africains en développement: évolution récente et principaux défis", *Bulletin de la Banque de France*, No. 176, 2nd quarter.

Chauvin (S.) and Lantéri (M.) (2009)

"How the financial crisis is affecting Sub-Saharan Africa", Banco de España workshop, Madrid, 21-22 September, downloadable at http://www.bde.es/webbde/es/secciones/sobreelbanco/Conferencias/VII_Encuentro_d_6ffa0197150a121.html.

Chinese Trade Ministry (2008)

Statistical Bulletin of China's Outward FDI.

Djoulfelkit-Cottenet (H.) and Raffinot (M.) (2008)

"Viabilité de la dette des pays à faible revenu dans une perspective de réendettement postallègements de dette", AFD, *Document de recherche* No. 75, December.

Dorsey et alii (2008)

"The landscape of capital flows to low income countries", IMF, *Working Paper* 08/51.

IMF (2005)

Annual Report, Chapter 3.

IMF (2006)

"How to do a debt sustainability analysis for low-income countries", October.

IMF (2008)

"The macroeconomics of scaling-up aid scenarios: the cases of Benin, Niger and Togo", African Department, 19 September.

IMF (2008 and 2009)

"Heavily Indebted Poor Countries (HIPC) Initiative and Multilateral Debt Relief Initiative (MDRI) – Status of implementation", September.

IMF (2009)

"Changing patterns in low-income country financing and implications for fund policies on external financing and debt", Strategy, Policy and Review Department, 25 February.

IMF (2009)

"The Fund's facilities and financing framework for low-income countries", Strategy, Policy and Review and Finance Departments, 25 February.

IMF (2009)

Regional Economic Outlook Africa, April and October.

IMF (2009)

"Debt limits in fund-supported programs – Proposed new guidelines", Strategy, Policy and Review Department, 5 August.

IMF (2009)

"Review of some aspects of the low-income country debt sustainability framework", 5 August, Paris.

IMF (2009)

World Economic Outlook, October.

IMF and IDA (2008)

"Staff guidance note on the application of the joint fund-bank debt sustainability framework for low income countries", 6 October.

Paris Club

<http://www.clubdeparis.org/>.

Ratha (D.), Mohapatra (S.) and Silwal (A.) (2009)

"Migration and remittance trends 2009: a better than expected outcome so far, but significant risks ahead", *Migration and Development Brief 11*, Development Prospects Group, World Bank, 3 November.

Reisen (H.) (2007)

"Is China actually helping improve debt sustainability in Africa", *G24 Policy Brief* No. 9.

Reisen (H.) (2008)

"From Old-Donor Debt Relief to Emerging Lenders in Africa", *OECD Development Centre Policy Insights* No. 57, January.

Rocher (E.) (2007)

"Les risques de ré-endettement des pays en développement après les annulations de dettes", *Bulletin de la Banque de France*, No. 157, January.

World Bank (2006)

"IDA countries and non-concessional debt: dealing with the 'free rider' problem in IDA 14 grant-recipient and post-MDRI countries", Resource Mobilization Department (FRM), 19 June.

World Bank (2009)

"Global Development Finance".

Wyplosz (C.) (2005)

"Debt sustainability assessment: the IMF approach and alternatives", *HEI Working Paper* No. 3/2007, Graduate Institute of International Studies, Geneva, December.

Valuation of unquoted foreign direct investment stocks at market value: methods and results for France

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Foreign direct investment equity is valued at book value and at market value in France's International Investment Position. The shares and investment certificates of the companies owned by foreign direct investors are rarely traded on stock exchanges, which means that the book value is observed and the market value is estimated. The International Investment Position at book value is still the main item used for international comparisons of foreign direct investment (FDI) stocks. Estimating market value is a very complex exercise that only a handful of countries engage in.

The IMF and the OECD are the authoritative sources regarding FDI statistics and they recommend valuing FDI equity stocks at market prices to make balance of payment flows, which are by definition valued at market prices, more consistent with the international investment position stocks. Furthermore, this valuation makes the overall international investment position, where other negotiable assets and liabilities are valued at market value, more meaningful. France has long followed this recommendation and it estimates an aggregate foreign direct investment position at market value each year.

Up until 2008, the estimated market value of unquoted foreign direct investment equity stocks was based on the use of two different valuation methods: the market value of outward unquoted FDI equity stocks was the value of the cumulative flows, adjusted for variations in exchange rates and the leading stock exchange indices, whereas the market value of inward unquoted FDI equity stocks was estimated on the basis of the stock exchange prices for listed French companies according to the capitalisation ratio method, which is based on the principle that equivalent assets should be priced the same, with an adjustment for differences in liquidity.

Since 2009, the capitalisation ratio method has been extended to outward FDI so as to have a single conceptual framework for inward and outward FDI stocks, in accordance with recommendations of the IMF and the OECD.

The methods used up until 2008 are discussed in the first part of this article. The procedures for the new method of valuing inward and outward FDI stocks at market value are discussed in the second part. The impact of the methodological changes on FDI stocks at market value is discussed in the third part. .../...

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Under the new methodology, France's outward unquoted FDI equity stocks at the end of 2008 fell from EUR 845 billion to EUR 490 billion at market value, whereas its inward unquoted FDI equity stocks fell from EUR 408 billion to EUR 269 billion. Consequently, the net FDI position at the end of 2008 shrank by EUR 215 billion, but was still broadly positive at EUR 196 billion, equivalent to 10% of GDP.

A glossary of the technical terms used in this article can be found in the appendix.

Keywords: Market value, direct investment, FDI, international group, balance of payments, International Investment Position.

JEL codes: C82, E01, F21, F23, F36, G12.

France's FDI equity stocks are valued both at book value and at market value. The book value of own funds in *direct investment enterprises*¹ is taken from their corporate financial statements. This value can be obtained directly from various databases on financial and non-financial companies in the case of inward FDI. For outward FDI, the value is taken from the tables of subsidiaries and equity interests appended to the balance sheets of resident companies with foreign subsidiaries and equity interests. The market value of equity in direct investment enterprises is calculated directly from the share prices, if the companies are listed on the stock exchange. The market value has to be estimated when the companies are not listed, which is the case for the vast majority of them. Unquoted FDI equity accounts for some 90% of France's outward and inward FDI stocks at book value. The number of quoted resident and non-resident direct investment enterprises is very small. At the end of 2007, only 62 of the 4,300 non-resident direct investment enterprises were listed on the stock exchange and only 95 of the 12,000 resident direct investment enterprises were listed.

Box I

Is market value a good measure of the value of FDI stocks?

The foreign direct investment reference books, such as the Balance of Payments Manual, sixth edition (IMF, 2008) and The OECD Benchmark Definition of Foreign Direct Investment, fourth edition (OECD, 2008), stipulate that FDI equity stocks be valued at market value, meaning the current value on the day the international investment position is compiled. However, some economists feel that financial bubbles and volatile asset prices disqualify market prices as an instrument for measuring the value of companies from a long-term perspective. Furthermore, many statisticians argue that it is impossible to come up with an accurate method for estimating the market prices of equity securities that are not quoted on the stock exchange and have not been traded recently. This explains why there has been only partial adherence to the IMF and OECD recommendation at the international level.

The combination of these two opposition camps, which are particularly powerful in Europe, meant that the European Union's international investment position and that of the euro area are calculated partly on the basis of the stock exchange prices for the shares in listed companies held by direct investors and partly on the basis of the book value of the liability shown on the balance sheets of unlisted direct investment enterprises under the "Own funds at book value" item (see ECB and Eurostat, 2004). Most members of the European Union decided to apply the ECB and Eurostat method, thus deviating from the general valuation principles and methods recommended by the IMF and the OECD.

.../...

¹ See the glossary at the end of this article for the definitions of these terms.

At the conceptual level, France prefers estimating the value at market prices, which can be done with a few acceptable assumptions. This stance is based on the fact that an estimated market value of FDI stocks can be an aggregate measurement of the value of assets acquired at different times that ensures consistency between FDI flows and stocks, and between the various components of the international investment position.

I | Main limitations of previous valuation methods

Up until 2008, two different methods were used to estimate France's outward and inward foreign direct investment.

I | I Valuation of France's outward unquoted foreign direct investment stocks: cumulative flows adjusted by stock exchange indices

Up until 2008, the market value of France's outward unquoted foreign direct investment equity stocks was calculated by adjusting the cumulative flows of France's outward foreign direct investment equity using a compound indicator that tracks share prices on several financial markets and also tracks variations in exchange rates.

The indicator incorporated changes in the stock market indices of the countries that are the leading destinations for France's outward foreign direct investment equity, with each index being weighted according to the country's share in France's outward FDI equity. Thirteen indices were used, including seven in the euro area countries (DAX in Germany, IBEX in Spain, MIB in Italy, AEX in the Netherlands, BEL 20 in Belgium, General in Finland and ATX 50 in Austria) and six in countries outside of the euro area (Dow Jones Industrial, Nikkei in Japan, SMII in Switzerland, FTSE 100 in the UK, KFX in Denmark et OMX 30 in Sweden). The variations in the latter indices also incorporate the "foreign exchange effect".

This valuation rule, which is also used in the United States,² has the specific drawback of relying exclusively on variations in markets and not taking into consideration changes in direct investment enterprises' own funds. This means that the various factors that may affect the value of equity holdings in unlisted companies, such as capital gains and losses, provisions and non-recurring income and dividend rates, are not considered.

² For the calculation of the United States' outward FDI stocks at market value, as estimated by the Bureau of Economic Analysis, see Kozlow, 2002.

According to the data published in the *2007 Annual Report on France's Balance of Payments and International Investment Position*, the ratio of France's outward FDI equity stocks calculated as above to the market capitalisation of the CAC 40 companies stood at 0.92 at the end of 2006 and at the end of 2007. These orders of magnitude reveal that the valuation rule overstated the market value of the FDI stocks. The bulk of non-resident subsidiaries of resident companies are held by CAC 40 groups and it is commonly agreed that foreign countries account for some 80% of these groups' turnover and earnings. Given that 80% of the income from outward foreign direct investment comes from subsidiaries and equity interests owned by CAC 40 groups and given that the illiquidity discount for investments in unlisted companies is 25%, the market value of France's outward FDI equity stocks should be equivalent to 70% to 80% of the value of the CAC 40 companies.³ If we use this target, we see that the market value of France's outward FDI equity stocks was significantly overestimated in the findings published in 2008.

I | 2 Valuation of France's inward FDI stocks using the capitalisation ratio method

Up until 2008, the capitalisation ratio method was used to estimate the value of France's inward unquoted FDI equity stocks. The principle of this method consists of calculating the ratios of market capitalisation to own funds (meaning the ratio of market value to book value) for a benchmark population of listed companies. The ratios were then applied to the book value of comparable unlisted companies with an illiquidity discount to adjust for the differences in the liquidity of unquoted and quoted shares.

According to the findings of the European Working Group on Unquoted Shares⁴ (WGUS, 2003), the theoretical benchmark population for estimating the market value of France's stocks of inward FDI should include all listed French companies (or some 650 companies at the end of 2007), except for EuroStoxx 600 companies (70 listed companies accounting for 80% of France's market capitalisation at the end of 2007) and companies with less than EUR 10 million in own funds (some 120 companies at the end of 2007). These exclusions leave a benchmark population that consists solely of medium-sized companies where the variance of the capitalisation ratio between sectors is the smallest. The benchmark population was then to be broken down into 11 branches of activity derived from NAF⁵ and

3 Or $(0.80/0.80) \times (1 - 0.25) = 0.75$. However, applying the 25% illiquidity discount to France's entire stock of outward FDI equity means that it is assumed that none of the foreign subsidiaries is a listed company. And yet, listed subsidiaries accounted for some 10% of the market value of the stock of FDI equity at the end of 2006 and the end of 2007. Ultimately, the valuation target for France's stocks of outward FDI equity stands at some 77% of the value of the CAC 40 companies.

4 The main recommendations and findings of the Working Group on Unquoted Shares (WGUS) can be found at the following address: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-09-010/EN/KS-RA-09-010-EN.PDF, p. 55 and after.

5 NAF (Nomenclature d'activités française) corresponds to NACE (Statistical Classification of Economic Activities in the European Community) at the European level.

average weighted capitalisation ratios had then to be calculated for each branch using the companies' corporate financial statements and their market capitalisation, with a fixed illiquidity discount of 25%.⁶ The ratios calculated in this manner had then to be applied to the book value of stocks of inward FDI in unquoted resident companies, broken down into the same branches of activity (Durant and Massaro, 2004).

Unlike the method used for valuation of France's stocks of outward FDI, the capitalisation ratio method complies with international recommendations for the valuation of unquoted shares in balance sheet accounts⁷ and with the recommendations on the valuation of FDI stocks.⁸ It was implemented following the recommendations of the Eurostat Working Group on Unquoted Shares, as the first step in a project to calculate capitalisation ratios for a pan-European database of listed corporations. Under the terms stipulated by the Eurostat WGUS, the capitalisation ratio method seems to be fairly robust and seems not to lend itself to any severe criticism.

However, during the preliminary phase, where the method was applied solely to French data, the exclusions of the largest and smallest listed companies had to be dropped because the residual benchmark population was too small. Furthermore, most of the listed corporations in the EuroStoxx 600 index are classified as "holdings", or "financial holdings" under NAF. The capitalisation ratio calculated for the activity branch corresponding to "holdings", when the largest listed corporations are included, is calculated on the basis of a population of corporations where the classification is not at all representative of the businesses that they control. If the activity code is not restated, this branch includes the largest corporations and accounts for the bulk of benchmark population's market capitalisation (54% at the end of 2007, for example) (see Table A1 in the Appendix).

When this method was applied at the national level, the limitations mentioned above were indicated to users. However, the use of a pan-European database to compile a benchmark population of listed corporations and calculate capitalisation ratios for each sector, which was the ultimate objective of European Working Group, was supposed to make it possible to overcome these difficulties eventually (Durant and Massaro, 2004).

The determination to use the same valuation method for both outward and inward unquoted FDI equity, and the difficulties encountered in applying the capitalisation ratio method recommended by the Eurostat WGUS gave rise to the revised methodology implemented in 2009.

6 The flat 25% illiquidity discount stems from empirical research by Picart (2003), see Glossary.

7 European System of Accounts – ESA 95, Paragraphs 7.54 and 7.55

8 OECD Benchmark Definition of Foreign Direct Investment, Annex 5.

2| New methodology for estimating the market value of FDI stocks

2|1 Common conceptual framework and method for inward and outward FDI stocks

The new methodology relies on a single method, the capitalisation ratio method, to estimate the market value of France's inward and outward foreign direct investment uniformly. This method considers both financial market trends, meaning the market capitalisation of listed companies, and the actual changes in companies' individual financial situations, meaning their own funds.

2|2 Definition of the benchmark populations

We restricted our selection of the benchmark population to companies and groups listed in France. We restricted our selection to the population of companies that makes up the SBF 250 index, which accounts for nearly 95% of the market capitalisation of all listed companies in France. The benchmark population for inward FDI is made up of the SBF 250 companies, except for those in the CAC 40 index, whereas the benchmark population for outward FDI stocks is made up of CAC 40 companies.⁹ These choices were made for the following reasons:

- The benchmark population for France's inward FDI stocks is made up of the SBF 250 companies, excluding the CAC 40 companies, in keeping with the recommendation of the Eurostat WGUS (see Part 1|2). These companies represent 98% of the market capitalisation of the theoretical benchmark population for evaluating France's inward FDI stocks at market value. The selection of this benchmark population is based on the assumption that these medium-sized listed companies are comparable to the resident unquoted direct investment enterprises.
- The choice of the CAC 40 companies as the benchmark population for evaluating France's outward FDI stocks is based on the ease of access to information that can be used to calculate the capitalisation ratios over long periods. We also felt that the market capitalisation of the CAC 40 companies constitutes an upper bound for the market value of France's outward FDI equity stocks. The CAC 40 companies own a large share of the non-resident direct investment enterprises and do most of their

⁹ In fact, the population includes the CAC 40 companies, plus a few more, which differ from year to year in order to limit changes in the population between two consecutive years resulting from companies entering or leaving the index. The companies included in the benchmark population used to estimate the market value of France's outward FDI are excluded from the benchmark population used to estimate the market value of France's inward FDI.

Table 1 Share of equity at book value and current operating income of non-resident direct investment enterprises owned by CAC 40 groups

	2005	2006	2007
Own funds	76	74	70
Income	81	79	75

Sources: Outward FDI survey for own funds and current operating performance for non-resident direct investment enterprises; INSEE Financial Links survey for determining the structure of groups where the lead company is a resident CAC 40 company.

business abroad. Furthermore, according to the findings of the Outward FDI survey, 75% to 80% of the income from outward FDI shown in the balance of payments comes from resident groups in the CAC 40 index (see Table 1 below). Taking these elements into account and, after applying a fixed illiquidity discount of 25%, we estimate that the market value of France's outward FDI equity should be equivalent to some three quarters of the value of the CAC 40 companies.

2|3 Using groups' consolidated financial statements to calculate the capitalisation ratios

The individual data on listed groups are used to calculate the capitalisation ratios for the two benchmark populations. The groups' own funds are taken from the consolidated financial statements. As a general rule, the consolidated own funds of a group are greater than the own funds reported in the corporate financial statements. This can be attributed in part to the "structure" effect, since the consolidated financial statements include all of the consolidated subsidiaries, whereas the corporate financial statements include only items relating to directly owned subsidiaries. On the other hand, it can also be attributed to inclusion of all of the group's subsidiaries' earnings over time in the consolidated financial statements, whereas the corporate financial statements report only the historical value of equity holdings (see Glossary). The overall difference between the own-funds reported in the corporate financial statements and those reported in the consolidated financial statements stood at 7.5% at the end of 2007 in the population of resident companies included in the SBF 250 index. The median capitalisation ratio calculated for the same population ranges from 2.74 to 2.14, depending on whether we use the own funds reported in the corporate financial accounts or the figure reported in the consolidated financial statements.

The decision to use the groups' consolidated financial statements, instead of the listed parent company's corporate financial statements to calculate the denominator of the capitalisation ratio (in contrast to the earlier practice) is warranted by the fact that the numerator of the capitalisation

ratio, i.e. the market capitalisation, stems more from the market value of entire groups rather than the market value of the parent companies on their own. This means that the ratios are more consistent.

2|4 A sector approach based on the ICB system¹⁰

It is better to use a system that reflects the main activities of groups to classify the benchmark population of companies by industry, rather than the NAF classification of listed companies in which holdings are overrepresented. More specifically, our approach is based on the use of the Industry Benchmark Classification (ICB) used by financial markets, which provides a comprehensive and detailed framework for making international comparisons of listed companies by industry. Under this system, listed companies are classified by the activity that accounts for the largest share of the group's turnover. We grouped industries into four broad branches in order to calculate the capitalisation ratios. The level of detail is deliberately lower than in the previous method, given the size of the benchmark populations used (see Table A2 in the Appendix).

We also restated the industry code using the same method to classify unlisted direct investment enterprises by industry whenever possible to attenuate the sector distortion caused by the strong presence of holdings in these populations of companies (see Table A4 in the Appendix). Direct investment enterprises classified as holdings under the NAF system were allocated to the ICB industry classification of their group, if the group is listed on the stock exchange. Direct investment enterprises were then allocated to the four branches defined for the purposes of calculating capitalisation ratios.

2|5 The selection of median capitalisation ratios

Our estimates are based on the median capitalisation ratios of the four broad branches of industry used. The median ratios were used rather than the weighted average ratios, which are more sensitive to extreme values.

The ratios calculated in this way were applied, with an illiquidity discount of 25%, to the unquoted direct investment enterprises allocated to the four broad branches of industry. For each year, we applied the same discount that was used under the previous approach, since we did not have a more recent estimate than the one made by Picart (2003).

¹⁰ Industry Classification Benchmark.

The market value of the most recently published FDI stocks, meaning those for 2008, was estimated following the same principles, but based on the ratios calculated for the CAC 40 companies only. Consequently, the capitalisation ratios for France's outward FDI stocks are final. For the stocks of inward FDI, we took the growth rates observed in the median ratios by industry for the CAC 40 companies between 2007 and 2008 and applied them to the 2007 ratios calculated on the basis of the SBF 250 companies, excluding the CAC 40 companies.¹¹

The change in methodology seems to be more satisfactory from the conceptual point of view when it comes to the valuation of inward and outward FDI in unlisted companies. In addition, it seems to attenuate the impact that changes in the benchmark populations and variations in the ratios by industry have on the overall market value. Furthermore, the new methodology for valuation of France's outward FDI stocks results in an estimate that ranges from 60% to 75% of the market capitalisation of the CAC 40 companies, depending on the year. This is more in line with the expected order of magnitude.

3| Impact of the change in methodology on the market value of France's inward and outward FDI stocks

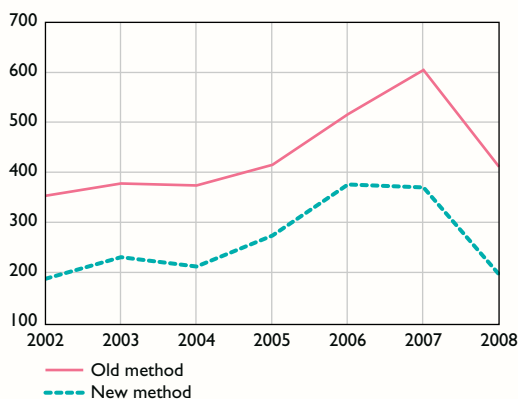
At the end of 2008, for a book value of EUR 583 billion, the market value of France's outward unquoted FDI stocks stood at EUR 490 billion under the new method, compared to EUR 845 billion under the previous valuation method. Meanwhile, France's stocks of inward unquoted FDI equity stocks stood at EUR 292 billion at book value in 2008, whereas the estimated market value stood at EUR 269 billion under the new method, compared to EUR 408 billion under the old method. The net international investment position at market value at the end of 2008, which takes account of all assets and liabilities, shrank from EUR 411 billion to EUR 196 billion under the new method (see Chart 1).

We recalculated the market values using the new methodology for the period from 2002 to 2008. The average differences between the methods stood at EUR 278 billion, or 32%, for France's outward unquoted FDI equity stocks, and at EUR 106 billion, or 24%, for inward stocks. The new method shows a drop in the market value of FDI equity stocks as early as the end of 2007, whereas the market value does not start to fall until the end of 2008 under the previous valuation methods (see Chart 2).

11 The FDI data presented for the end of 2008 (book value and market value) are provisional. When the market value of FDI stocks at the end of 2008 was estimated in April 2009, the 2008 financial statements of the direct investment enterprises were not yet available.

Chart 1 Net foreign direct investment position at market value – All instruments

(EUR billions)

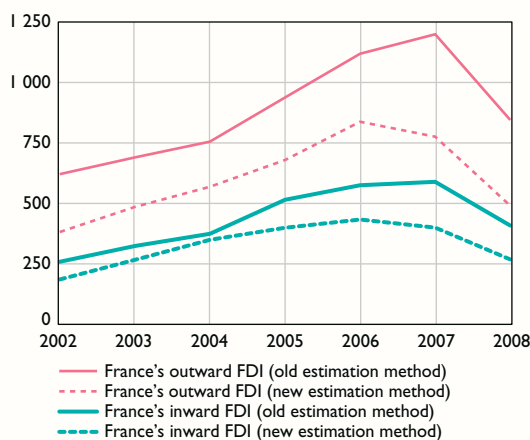


Source : Banque de France, DGS, DESS-SID.

The impact of applying the new methodology was most pronounced in 2008, a year of major market and financial turmoil. This stems from the fact that companies' market capitalisation ratios contracted sharply in 2008, in many cases to less than 1 by the end of the year. Fifteen of the CAC 40 companies had a ratio of less than 1 at the end of 2008. This apparently surprising development was not limited to CAC 40 companies, since more than one-third of the listed companies in the EuroStoxx 600 index also had a capitalisation ratio of less than 1 at the end of 2008.

Chart 2 Market value of unquoted FDI equity stocks

(EUR billions)



Source : Banque de France, DGS, DESS – SID.

Appendix

Table A1 Old valuation method for France's inward unquoted FDI equity stocks – Weights of listed companies in the 11 branches of activity

NACE (or NAF) branches recommended by the Eurostat Working Group on Unquoted Shares (WGUS)	Target population (a)	Benchmark population (b)		
	% of FDI stock at book value	% of number of companies	% of market capitalisation	Ratio with 25% discount
1 – ICT activities	1.3	16.2	5.7	1.4
2 – Mining and Energy	1.0	1.1	11.2	3.6
3 – Manufacturing	17.3	14.6	7.7	4.5
4 – Construction	0.2	0.8	0.6	7.3
5 – Trade	9.4	7.5	0.4	2.0
6 – Hotels and restaurants, transports and communication	1.3	2.7	1.5	3.1
7 – Financial intermediation	13.6	2.3	10.4	1.2
8 – Insurance	1.1	0.6	4.3	0.9
9 – Financial auxiliaries	2.6	1.0	0.1	2.2
10 – Real estate, non-financial services and other activities	8.6	15.7	4.3	1.7
11 – Holdings	39.7	37.5	53.8	1.7
Total	100,0 (a)	100,0	100,0	1,7

a) All resident unlisted companies with non-resident direct investors at the end of 2007. The book value stood at EUR 273 billion out of a total of EUR 301 billion (quoted and unquoted direct investment enterprises). There is no identified activity sector for 3.9% of the stock.

b) Listed companies in France (nearly 650) with an aggregate market value of EUR 1,730 billion on 31 December 2007. Key: 1.3% of the stock of inward unquoted FDI equity stocks at book value concerns the "Information and Communication Technology" branch. The ICT branch also accounts for 16.2% of the listed companies in the benchmark population and 5.7% of the market capitalisation of these companies. The weighted average capitalisation ratio, after applying the 25% discount, is 1.4 in the ICT branch.

Source: Banque de France.

Table A2 – New valuation method for unlisted FDI equity stocks – using the ICB industry sectors

Sectors used	ICB codes corresponding to a position
Energy, basic materials and manufacturing	0 – Oil & gas, 1 – Basic Materials, 2 – Industrials, 3 – Consumer goods, 4 – Health care
Trade and non-financial services	5 – Consumer services, 6 – Telecommunications, 7 – Utilities
Financial services	8 – Financials
New technologies	9 – Technology

Table A3 – Median ratios by sector, with a 25% discount applied to France's outward and inward FDI equity stocks

	2002	2003	2004	2005	2006	2007	2008
Outward FDI							
Energy, basic materials and manufacturing	1.13	1.33	1.66	1.66	2.11	1.67	1.01
Trade and non-financial services	1.10	1.72	1.64	1.66	1.56	1.63	1.06
Financial services	0.87	1.18	1.06	1.31	1.10	0.95	0.37
Median for aggregate	1.10	1.35	1.38	1.62	1.64	1.47	0.90
Inward FDI							
Energy, basic materials and manufacturing	0.98	1.28	1.54	1.78	1.89	1.67	1.01
Trade and non-financial services	1.24	1.49	1.55	1.58	1.58	1.44	0.94
Financial services	0.84	0.84	1.33	1.21	1.33	0.94	0.37
New technologies	1.11	2.01	1.96	2.46	2.24	1.84	1.11
Median for aggregate	1.04	1.29	1.62	1.60	1.63	1.37	0.89

(a) Calculated by applying the growth rates observed between 2007 and 2008 to the 2007 ratios for the inward FDI benchmark population (CAC 40 companies).

Source: Banque de France, DGS, DESS – SID.

Allocation of FDI by sector: the holdings issue

Table A – 4 Sector allocation of France's inward FDI stocks – impact of reclassifying holdings

(EUR billions)

	2004			2005		
	NAF	Restated NAF Code (a)	Difference	NAF	Restated NAF Code (a)	Difference
Agriculture and fisheries	0.4	0.4	0.0	0.5	0.5	0.0
Mining	0.6	11.5	11.0	0.6	13.0	12.3
Manufacturing	79.4	152.1	72.7	90.1	175.1	85.0
Electricity, gas and water	5.7	5.8	0.1	2.6	2.8	0.2
Construction	1.0	1.1	0.0	1.6	1.6	0.0
Trade and repairs	34.6	47.1	12.6	38.4	49.6	11.2
Hotels and restaurants	1.6	2.0	0.4	1.5	2.2	0.7
Transport and telecommunications	10.0	22.4	12.3	12.0	23.6	11.6
Financial intermediation	83.4	73.3	-10.1	91.2	81.8	-9.4
Real estate and business services (holdings, etc.)	247.8	140.0	-107.7	288.0	167.4	-120.6
Other services	2.9	11.7	8.8	2.6	11.5	8.9
Amounts NEC	3.8	3.8	0.0	3.2	3.2	0.0
Total	471.2	471.2	0.0	532.3	532.3	0.0

((a) The field covered here includes both inward FDI equity and lending. Restatement means replacing the NAF codes for direct investment enterprises classified as holdings with the ICB codes of the groups that they belong to, if the latter are listed on the stock exchange. Otherwise, the initial sector information is left unchanged.

Key: FDI stocks are allocated based on their NAF codes. However, this allocation by sector is not very meaningful, because of the predominance of the 'holdings' sector. This predominance stems from the fact that international groups usually put some or all of their subsidiaries and equity interests in holding companies. To eliminate, or at least attenuate, this bias, the allocation of FDI stocks by sector published in the Balance of Payments Annual Report since 2004 has reclassified holding companies on the basis of the ICB sector of the lead company in the group if it is listed on the stock exchange. The reclassification has a significant impact, especially for manufacturing.

Source: Banque de France. DGS. DESS – SID.

Table A5 – Market value of FDI equity stocks

(EUR billions)

	2002	2003	2004	2005	2006	2007	2008
Outward foreign direct investment							
Quoted companies	40	48	54	74	104	133	54
Unquoted companies							
Old estimation method	621	690	755	938	1 119	1 200	845
New estimation method	382	486	569	680	838	776	490
Inward foreign direct investment							
Quoted companies	33	23	30	54	72	63	34
Unquoted companies							
Old estimation method	258	324	374	515	575	589	408
New estimation method	185	267	349	399	433	400	269
Net position							
Quoted companies	7	25	24	20	32	70	20
Unquoted companies							
Old estimation method	362	366	381	423	544	611	437
New estimation method	197	219	219	281	404	376	222
Net FDI position at market value							
All instruments – old method	353	378	374	415	516	605	411
All instruments – new method	187	230	212	273	376	370	196
Market capitalisation of CAC 40 companies	682	772	819	1 089	1 326	1 418	809

NB: The market capitalisation of the CAC 40 companies is taken from the data provided by NYSE-Euronext on the closing prices and numbers of shares at 31 December of each year.

Source: Banque de France, DGS, DESS – SID.

Glossary¹

Market capitalisation: a company's market capitalisation is the market value of its own funds. It is equal to the number of shares in the company's capital multiplied by the price of the share on the stock exchange on a given date.

Own funds: a company's own funds are made up of the resources contributed by the partners or the shareholders (share capital) plus the profits earned by the company (reserves and earnings). Own funds are shown at the top of the liabilities side of the balance sheet. They represent the stable resources of the company and correspond to the book value of the company.

Consolidated financial statements: consolidated financial statements for a group of companies are valued according to International Financial Reporting Standards, under which assets are to be reported at "fair value", meaning their replacement value. Even though this valuation should theoretically bring the book value into line with the market value, some important differences still persist between the two valuations. These differences stem from difficulties valuing certain assets, especially intangible assets, and from the fact that markets arrive at their own valuation of companies.² The consolidated financial statements also recognise "goodwill", which is the difference between the total market value of assets on the balance sheet of a company and the acquisition price paid for the company.

Corporate financial statements: resident companies must present their corporate financial statements (balance sheet, income statement) according to French accounting standards, where assets and liabilities are recorded at their historical cost.

Illiquidity discount: financial risk is the "risk of not being able to sell a financial security for its price. This can result either in the actual impossibility of selling the security, or in an illiquidity discount" (financial glossary in *Manuel de finance d'entreprise*, by Pierre Vernimmen). All else being equal, a valuation differential is justified between shares in a listed company and shares in an unlisted company. The European System of Accounts – ESA 95 – recommends applying such a discount (see paragraph 7.54) when estimating the market value of unquoted shares.

¹ Further information about the international balance of payments and foreign direct investment methodology can be found in the IMF Manual (2008) and the OECD Benchmark Definition of FDI (2008). The Banque de France website has information about the sources and methods specific to France (http://www.banque-france.fr/fr/statistiques/base/methodologie_bdp.htm), which can also be found in the box on pages 2, 3 and 4 of Nivat and Terrien (2009).

² See Ricol, Lasteyrie et associés (2009). This survey shows that the implementation of IFRS did not reconcile market value and book value, and that markets still come up with their own valuation of companies, which, both in good times and bad, sometimes turn out to be very different from the intrinsic value of the company (own funds) determined by the accountants.

Direct investment enterprise: a company resident in one economy where a direct investor resident in another economy directly or indirectly holds 10% or more of the share capital and the voting rights.

CAC 40 index: the main stock market index in Paris. The companies in the CAC 40 index are representative of the various branches of activity, which means that, in principle, changes in the index reflect the business and financial outlook for all leading French companies. The list of companies in the CAC 40 index is reviewed periodically to maintain the representativeness of the index.

EuroStoxx 600 index: a stock exchange index made up of the shares of the 600 largest European companies. It covers companies with large market capitalisations listed in the following countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, United Kingdom and Switzerland.

SBF 250 index: the SBF 250 is the broader index on the Paris stock exchange. It is made up of 250 companies (the 120 companies in the SBF 120 index, plus 130 other companies) listed on the main market and the *second marché*. It is intended to be representative of the entire French economy.

Direct investor: a direct investor is an entity resident in one economy that directly or indirectly acquires 10% or more of the share capital or voting rights in a company resident in another economy. A direct investor owns a direct investment enterprise doing business in a country that is not the direct investor's country of residence.

Capitalisation ratio method or price-to-book ratio (PBR) method: method for valuing companies that are not listed on the stock exchange. It is based on the assumption that two equivalent companies (of the same size and in the same business sector) should have the same valuation multiple (meaning the ratio of market capitalisation to own funds). This multiple is calculated for listed companies and then applied to unlisted companies, along with a discount to adjust for the lesser liquidity of unquoted shares.

International investment position: a statistical document that is a census of residents' outstanding financial claims and liabilities vis-à-vis non-residents, which are classified using the same rules as for financial account flows in the balance of payments and assessed at their market value, in principle.

Retained earnings: retained earnings are the cumulative profits from previous years that were not distributed to shareholders or allocated to

reserves. Regardless of whether the earnings for the year result in a profit or a loss, they are shown under the own funds item on the liabilities side of the balance sheet.

Reserves: reserves include previous years' profits that have been reinvested in the company instead of being distributed to the partners or shareholders.

Book value: this term refers to the own funds shown on the liabilities side of the company's corporate balance sheet or the consolidated balance sheet of a group, which are compiled under different accounting rules and standards. The book value of foreign direct investment stocks so frequently referred to in this article corresponds to the amount of own funds shown on the liabilities side of the direct investment enterprises' balance sheets multiplied by the percentage of the direct investment enterprise's share capital held by foreign direct investors.

Market value: this is the conceptual basis for valuing foreign direct investment transactions and positions. It provides an indication of the current value of equity interests, thus making it possible to compare the value of assets acquired at different times. It also makes consistent comparisons of flows and stocks possible.

References

Banque de France (2009)

2008 Annual Report: France's balance of payments and international investment position, June, downloadable at http://www.banque-france.fr/gb/stat_conjoncture/telechar/bdp/gb_ra_bdp_2008.pdf.

Bonnot de Condillac (É.) (1776)

Le commerce et le gouvernement considérés relativement l'un à l'autre, Amsterdam, downloadable at <http://books.google.com/books?id=GKcGAAAAQAAJ>.

Boonstra (W.) (2008)

National savings and the international investment position: what does the current account tell us?, Zb. rad. Ekon. fak. Rij., vol. 26, sv. 1, p. 9-40, downloadable at <http://hrcak.srce.hr/file/38568>.

Durant (D.) and Massaro (R.) (2004)

"Valorisation des actions non cotées : un test à l'échelle européenne", *Bulletin de la Banque de France*, n° 124, April, downloadable at http://www.banque-france.fr/archipel/publications/bdf_bm/etudes_bdf_bm/bdf_bm_124_etu_2.pdf.

European Central Bank and Eurostat (2004)

Report of the task force on foreign direct investment, March, downloadable at <http://www.imf.org/External/NP/sta/bop/pdf/diteg1a-bp.pdf>.

Eurostat (2003)

Report of the working group on unquoted shares, May. The main recommendations and findings of the report are presented in the *Manual on sources and methods for the compilation of ESA 95 financial accounts*, 2009, p. 55 and following; downloadable at http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-09-010/EN/KS-RA-09-010-EN.PDF.

IMF (1993)

Balance of Payments Manual, 5th edition.

IMF (2008)

Balance of Payments Manual, 6th edition (draft), downloadable at <https://www.imf.org/external/pubs/ft/bop/2007/pdf/BPM6.pdf>.

Kozlow (R.) (2002)

Valuing the direct investment position in US economic accounts, paper prepared for the 15th meeting of the IMF Committee on Balance of Payments Statistics, October, downloadable at <http://bea.gov/papers/pdf/Kozlow-Val.pdf>.

Kumah (E.), Damgaard (J.) and Elkjaer (T.) (2009)

"Valuation of unlisted direct investment equity", IMF, *Working Paper* 09/242, November, downloadable at <http://www.imf.org/external/pubs/cat/longres.cfm?sk=23387.0>.

Nivat (D.) and Terrien (B.) (2009)

"Les flux d'investissements directs de la France en 2008", *Bulletin de la Banque de France*, n° 177, 3rd quarter, downloadable at http://www.banquefrance.fr/fr/publications/telechar/bulletin/etu177_4.pdf.

OECD (2008)

Benchmark Definition of Foreign Direct Investment, 4th edition, April, downloadable at <http://www.oecd.org/dataoecd/42/56/43985557.pdf>.

Picart (C.) (2003)

"L'estimation d'une valeur de marché des actions non cotées", *Économie et Statistiques*, No. 366, December, downloadable at http://www.insee.fr/fr/themes/document.asp?reg_id=0&id=1198.

Ricol, Lasteyrie and associates (2009)

Profil financier du CAC 40, presentation of 23 June 2009.

Simart (E.) (2007)

Market value of foreign direct investment position, Methodology Document, Statistics Canada, May, downloadable at <http://www.statcan.gc.ca/pub/13-605-x/13-605-x2006002-eng.htm>.

Wyatt (M.) (2004)

"L'évaluation selon la méthode des comparables", *Échanges*, feature *Évaluation et négociation d'entreprises*, June, downloadable at http://www.sfev.org/public/Articles/pdf3_Wyatt.pdf.

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Nota bene

In Figure 4, the base of the index has been changed (100 = Q1 1999, as opposed to the average of 1986-2004, and 1987, previously) and the charts begin in January 1993 instead of January 1986.

The data in this section are updated on a monthly basis on the Banque de France's website.

Table I
Industrial activity indicators – Monthly Business Survey – France

(seasonally-adjusted data)

	2009			2010			
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April
Changes in production from the previous month (a)							
Total	7	12	2	14	7	8	6
Intermediate goods	7	13	-8	21	9	15	10
Capital goods	-2	0	0	14	-1	7	11
Automotive industry	15	36	-6	21	17	-5	-32
Consumer goods	13	14	8	11	10	9	12
Agri-food industry	4	5	5	20	3	-6	6
Production forecasts (a)							
Total	4	8	7	4	7	3	4
Intermediate goods	2	7	12	8	11	7	9
Capital goods	-4	1	4	0	3	3	5
Automotive industry	24	24	23	10	12	-12	-16
Consumer goods	16	17	16	14	18	17	19
Agri-food industry	11	11	11	8	10	14	15
Changes in orders from the previous month (a)							
Total	12	14	11	16	8	11	8
Foreign	7	12	9	11	6	10	9
Order books (a)							
Total	-24	-20	-14	-8	-5	-2	0
Intermediate goods	-40	-33	-27	-15	-10	-6	0
Capital goods	-14	-13	-6	-1	1	6	10
Consumer goods	-2	2	4	4	6	7	8
Agri-food industry	-20	-19	-10	-13	-9	-4	-5
Inventories of finished goods (a)							
Total	1	0	-1	-2	0	-2	0
Intermediate goods	-4	-3	-6	-6	-3	-7	-6
Capital goods	4	3	4	-2	0	3	3
Automotive industry	-1	-6	1	-8	-3	0	4
Consumer goods	2	1	0	0	0	-1	2
Agri-food industry	8	8	6	8	9	0	5
Capacity utilisation rate (b)							
Total	72.3	73.0	73.2	74.2	74.7	75.5	75.6
Staff levels (a)							
Changes from the previous month	-2	-2	1	-1	-2	0	0
Forecast for the coming month	-8	-7	-8	-6	-5	-5	-4
Business sentiment indicator (c)							
	96	100	102	104	103	104	102

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

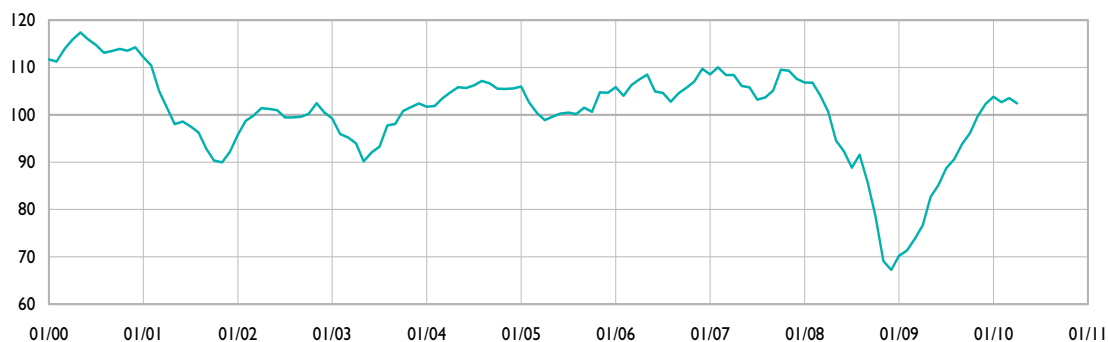
(b) Data given as a percentage.

(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 (seasonally-adjusted data)

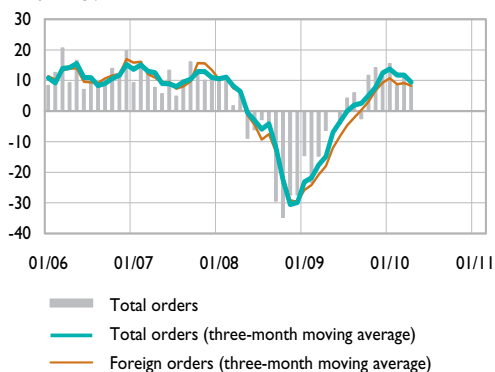
Business sentiment indicator

(100 = 1981-last value)



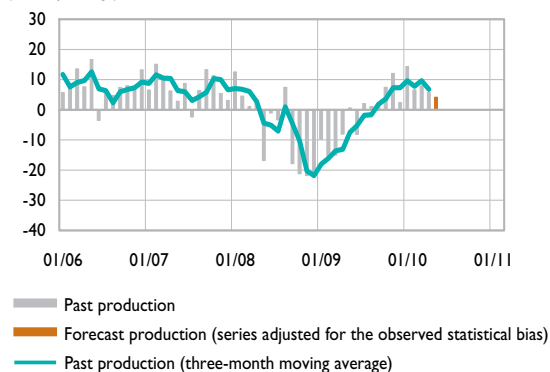
Orders (balance of opinions)

(monthly change)



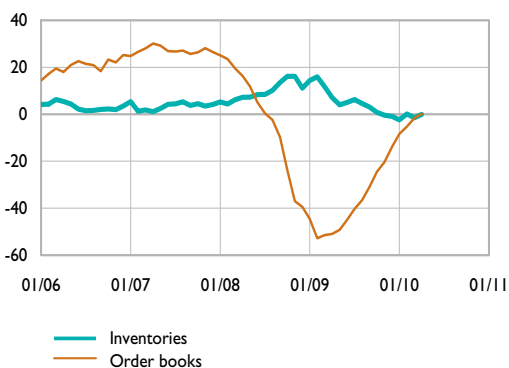
Production (balance of opinions)

(monthly change)



Inventories and order books (balance of opinions)

(compared to levels deemed normal)



Capacity utilisation rate

(%)

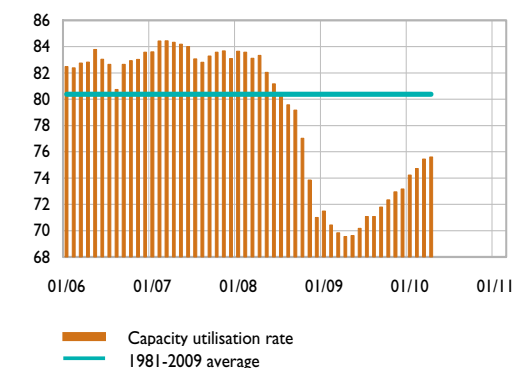


Table 3
Consumer price index

(annual % change)

	2009					2010			
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April
France	-0.2	-0.4	-0.2	0.5	1.0	1.2	1.4	1.7	1.9
Germany	-0.1	-0.5	-0.1	0.3	0.8	0.8	0.5	1.2	1.0
Italy	0.1	0.4	0.3	0.8	1.1	1.3	1.1	1.4	1.6
Euro area	-0.2	-0.3	-0.1	0.5	0.9	1.0	0.9	1.4	1.5
United Kingdom	1.6	1.1	1.5	1.9	2.9	3.5	3.0	3.4	3.7
European Union	0.6	0.3	0.5	1.0	1.5	1.7	1.5	1.9	2.0
United States	-1.5	-1.3	-0.2	1.8	2.7	2.6	2.1	2.3	2.2
Japan	-2.2	-2.2	-2.5	-1.9	-1.7	-1.3	-1.1	-1.1	na

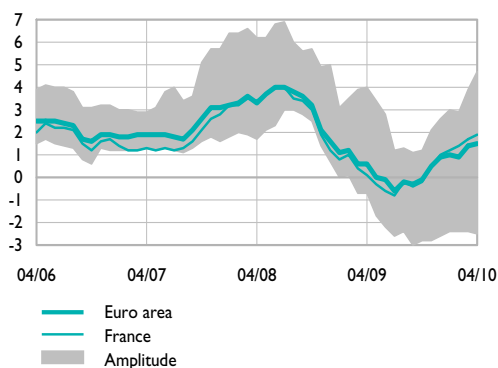
(annual average)

(seasonally-adjusted monthly % change)

	2007	2008	2009	2009		2010			
				Nov.	Dec.	Jan.	Feb.	March	April
France	1.6	3.2	0.1	0.3	0.3	0.1	0.3	0.2	0.1
Germany	2.3	2.8	0.2	0.3	0.3	-0.1	0.1	0.3	-0.1
Italy	2.0	3.5	0.8	0.3	0.2	0.0	0.0	0.4	0.5
Euro area	2.1	3.3	0.3	0.2	0.0	0.2	0.1	0.4	0.2
United Kingdom	2.3	3.6	2.2	0.4	0.3	0.6	0.2	0.4	0.4
European Union	2.4	3.7	1.0	na	na	na	na	na	na
United States	2.9	3.8	-0.4	0.2	0.2	0.2	0.0	0.1	-0.1
Japan	0.1	1.4	-1.4	0.2	-0.1	-0.1	0.4	0.0	na

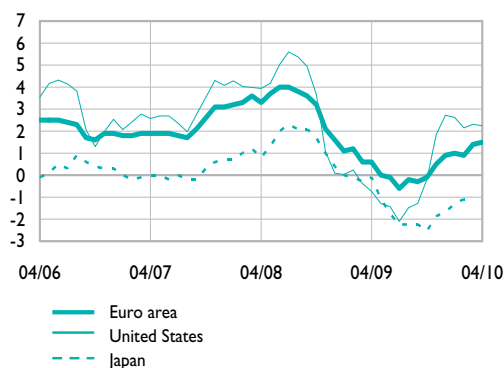
France and the euro area

(annual % change)



International comparisons

(annual % change)



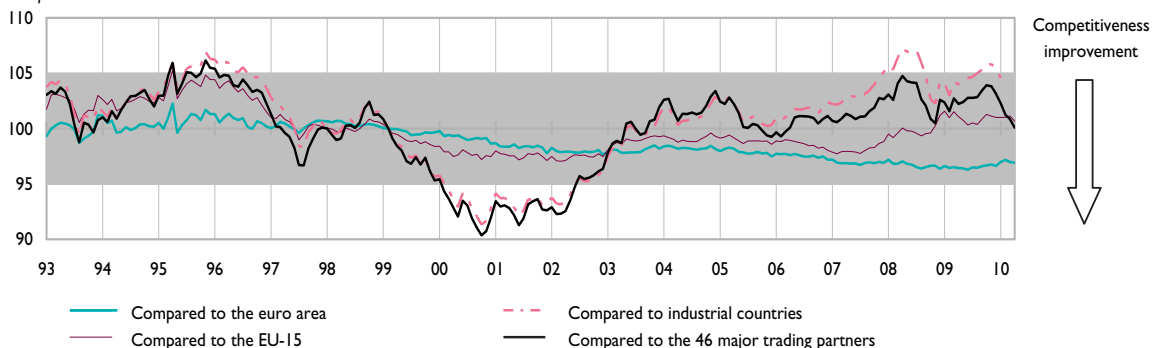
Harmonised indices except for the United States and Japan.

Amplitude = extreme values of the indices of harmonised prices observed in the euro area (changing composition).

Table 4
The competitiveness of France's economy

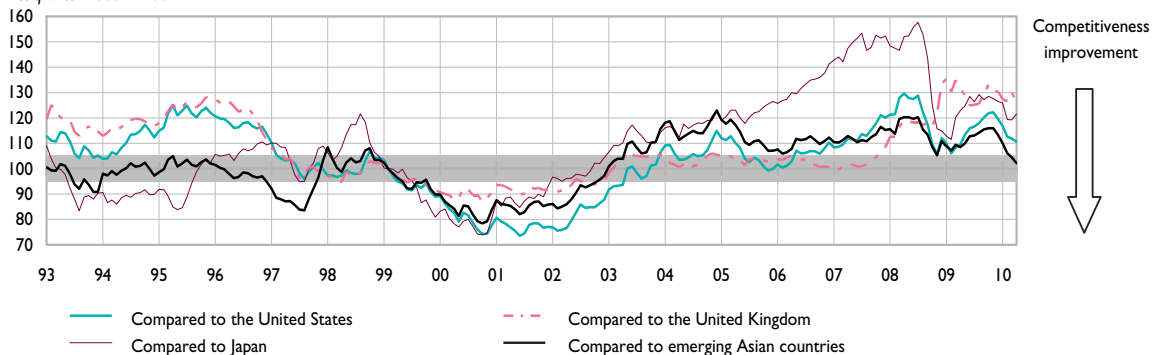
Indicators deflated by consumer prices

1st quarter 1999 = 100



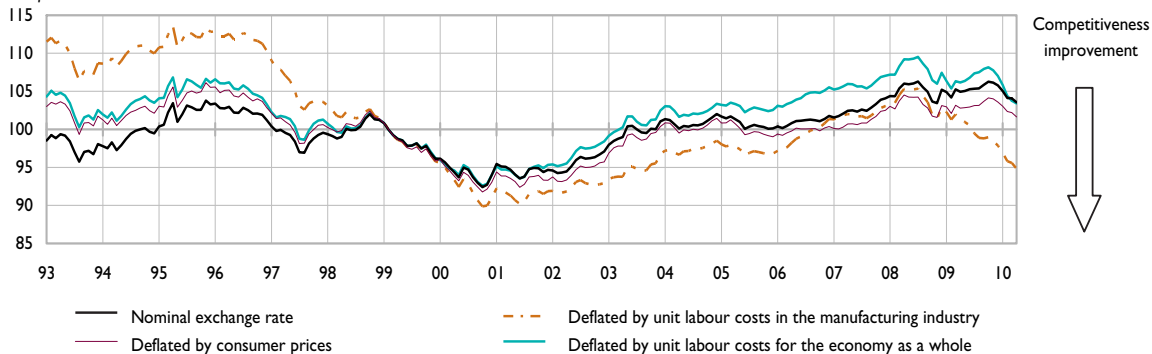
Indicators deflated by consumer prices

1st quarter 1999 = 100



Indicators of competitiveness compared to 24 OECD countries

1st quarter 1999 = 100



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.

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

(unadjusted data, EUR billions)

	2008	2009	2009				2010
	(a)	(a)	Q1 (a)	Q2 (a)	Q3 (a)	Q4 (a)	Q1 (b)
Current account	-44.0	-42.1	-6.5	-14.2	-4.5	-16.8	-5.1
Goods	-59.1	-46.7	-13.7	-10.9	-8.5	-13.5	-12.1
Services	14.5	10.4	0.0	3.4	6.5	0.5	0.8
Income	24.8	18.5	10.8	-0.9	3.7	5.0	9.5
Current transfers	-24.2	-24.3	-3.6	-5.8	-6.2	-8.7	-3.3
Capital account	0.7	0.3	0.0	0.3	0.0	0.0	0.2
Financial account	78.1	26.0	35.2	-7.5	-25.3	23.6	-11.1
Direct investment	-70.4	-73.3	-28.7	-14.8	-13.9	-15.9	-14.5
French direct investment abroad	-136.8	-117.5	-32.8	-37.8	-21.3	-25.7	-27.7
Foreign direct investment in France	66.3	44.2	4.1	22.9	7.4	9.8	13.2
Portfolio investment	89.4	237.8	102.5	82.7	-27.0	79.6	22.8
Assets	-76.6	-65.8	8.9	-30.3	-60.3	16.0	-46.4
Liabilities	166.1	303.6	93.5	113.1	33.3	63.7	69.2
Financial derivatives	-7.0	-1.8	-9.0	2.7	1.8	2.7	8.0
Other investment	57.6	-140.6	-36.8	-76.3	14.6	-42.1	-25.6
Reserve assets	8.5	3.9	7.2	-1.8	-0.7	-0.7	-1.7
Net errors and omissions	-34.8	15.7	-28.7	21.4	29.8	-6.8	16.0

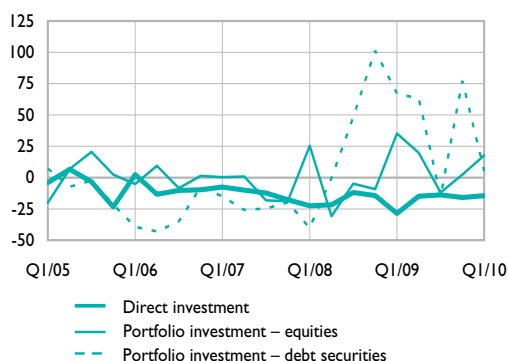
Current account balance

(unadjusted data, EUR billions)



Financial account balance

(unadjusted data, EUR billions)



(a) Semi-final figures.

(b) Provisional figures.

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

(unadjusted data, EUR billions)

	2008	2009	2009				2010
	(a)	(a)	Q1 (a)	Q2 (a)	Q3 (a)	Q4 (a)	Q1 (b)
Current account	-44.0	-42.1	-6.5	-14.2	-4.5	-16.8	-5.1
Goods	-59.1	-46.7	-13.7	-10.9	-8.5	-13.5	-12.1
Exports	410.6	338.8	83.4	83.2	83.2	89.0	93.5
Imports	469.7	385.5	97.1	94.1	91.7	102.5	105.7
General merchandise	-56.5	-45.7	-13.4	-10.5	-8.1	-13.6	-12.0
Goods procured in ports by carriers	-2.7	-1.4	-0.4	-0.3	-0.4	-0.3	-0.3
Goods for processing and repairs on goods	0.1	0.4	0.1	0.0	0.0	0.3	0.2
Services	14.5	10.4	0.0	3.4	6.5	0.5	0.8
Exports	111.7	100.8	22.2	26.0	29.6	23.1	21.9
Imports	97.2	90.4	22.1	22.6	23.1	22.6	21.0
Transportation	-0.9	-0.5	-0.5	-0.1	0.2	0.0	-0.6
Travel	8.5	7.0	0.5	2.3	5.1	-0.8	0.5
Communications services	1.0	0.6	0.2	0.2	0.1	0.1	0.3
Construction services	2.8	2.8	0.7	0.6	0.7	0.8	0.6
Insurance services	-0.8	-0.7	-0.5	-0.1	0.2	-0.3	0.0
Financial services	0.0	0.2	0.0	0.0	0.1	0.1	0.1
Computer and information services	-0.4	-0.4	0.0	-0.1	-0.1	-0.1	-0.1
Royalties and license fees	3.7	3.0	0.8	0.8	0.8	0.6	0.8
Other business services	1.7	-0.6	-0.8	0.1	-0.3	0.4	-0.5
Personal, cultural and recreational services	-1.0	-1.1	-0.3	-0.2	-0.2	-0.3	-0.3
Government services	-0.1	0.1	0.0	0.0	0.1	0.0	0.0
Income	24.8	18.5	10.8	-0.9	3.7	5.0	9.5
Compensation of employees	9.2	9.5	2.4	2.4	2.4	2.4	2.3
Investment income	15.7	9.1	8.4	-3.3	1.3	2.6	7.1
Direct investment	16.5	12.3	6.1	2.5	0.8	2.9	6.4
Portfolio investment	8.6	0.0	3.2	-4.8	1.3	0.2	1.3
Other investment	-9.4	-3.2	-0.9	-1.0	-0.7	-0.5	-0.6
Current transfers	-24.2	-24.3	-3.6	-5.8	-6.2	-8.7	-3.3
General government	-15.3	-15.1	-1.0	-3.4	-4.3	-6.4	-1.6
Other sectors	-8.9	-9.2	-2.6	-2.4	-1.9	-2.3	-1.6
of which workers' remittances	-2.6	-2.1	-0.5	-0.5	-0.6	-0.5	-0.5
Capital account	0.7	0.3	0.0	0.3	0.0	0.0	0.2

(a) Semi-final figures.

(b) Provisional figures.

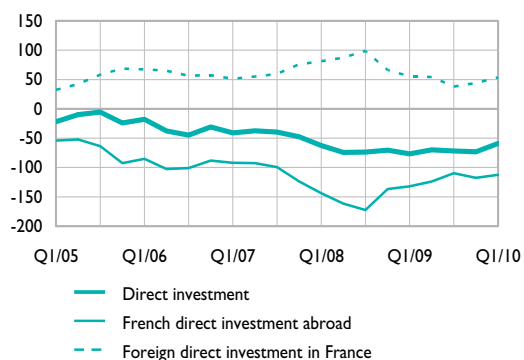
Table 7
Balance of payments – Financial flows (quarterly data) – France

(unadjusted data, EUR billions)

	2008	2009	2009				2010
			Q1 (a)	Q2 (a)	Q3 (a)	Q4 (a)	Q1 (b)
Financial account	78.1	26.0	35.2	-7.5	-25.3	23.6	-11.1
Direct investment	-70.4	-73.3	-28.7	-14.8	-13.9	-15.9	-14.5
French direct investment abroad	-136.8	-117.5	-32.8	-37.8	-21.3	-25.7	-27.7
of which equity capital and reinvested earnings	-65.3	-46.5	-4.7	-22.6	-5.7	-13.4	-12.9
Foreign direct investment in France	66.3	44.2	4.1	22.9	7.4	9.8	13.2
of which equity capital and reinvested earnings	22.4	16.3	2.1	9.5	3.6	1.0	4.1
Portfolio investment	89.4	237.8	102.5	82.7	-27.0	79.6	22.8
Assets	-76.6	-65.8	8.9	-30.3	-60.3	16.0	-46.4
Equity securities	-9.5	-29.2	23.1	-0.7	-39.3	-12.3	-3.1
Bonds and notes	-36.5	-17.4	13.0	-11.6	-19.0	0.2	-36.2
Money market instruments	-30.6	-19.2	-27.2	-18.0	-2.1	28.1	-7.1
Liabilities	166.1	303.6	93.5	113.1	33.3	63.7	69.2
Equity securities	-9.9	74.5	12.1	20.4	27.3	14.7	20.8
Bonds and notes	125.5	154.5	55.9	67.6	-4.8	35.9	51.8
Money market instruments	50.5	74.5	25.6	25.0	10.8	13.1	-3.4
Financial derivatives	-7.0	-1.8	-9.0	2.7	1.8	2.7	8.0
Other investment	57.6	-140.6	-36.8	-76.3	14.6	-42.1	-25.6
of which MFIs excl. Banque de France (net flows)	-101.3	-75.4	0.6	-26.7	-18.4	-30.9	-21.6
Reserve assets	8.5	3.9	7.2	-1.8	-0.7	-0.7	-1.7
Net errors and omissions	-34.8	15.7	-28.7	21.4	29.8	-6.8	16.0

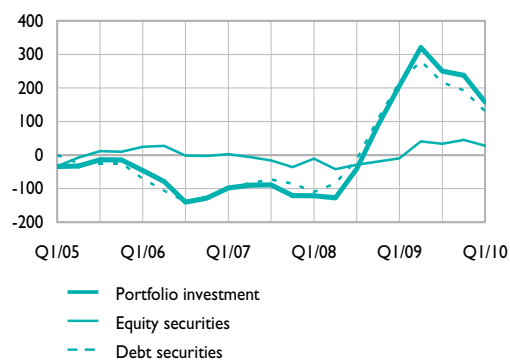
Direct investment account

(cumulated flows over 4 quarters)



Portfolio investment account

(cumulated flows over 4 quarters)



(a) Semi-final figures.

(b) Provisional figures.

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

(unadjusted data, EUR billions)

	4th quarter 2009					
	EMU (a)	EU-27 excl. EMU (b)	USA	Japan	Switzerland	China
Current account	na	na	na	na	na	na
Receipts	69.4	20.9	10.7	2.2	5.6	3.1
Expenditure	na	na	na	na	na	na
Goods	-17.6	0.5	0.3	0.4	-0.1	-2.1
Receipts	42.6	11.4	5.4	1.4	2.5	2.3
Expenditure	60.2	10.9	5.0	1.0	2.6	4.4
Services	-0.7	-0.1	0.7	0.0	0.0	0.1
Receipts	7.0	3.0	2.9	0.3	1.1	0.7
Expenditure	7.7	3.2	2.2	0.3	1.1	0.6
Income	na	na	na	na	na	na
Receipts	19.0	4.6	2.3	0.5	1.6	0.1
Expenditure	na	na	na	na	na	na
Current Transfers	-1.5	-4.7	-0.1	0.0	-0.3	0.0
Financial account	na	na	na	na	na	na
Direct investment	-11.5	4.7	-3.0	-0.1	-2.0	-0.1
French direct investment abroad	-14.2	0.4	-2.5	-0.1	-2.8	-0.2
Foreign direct investment in France	2.7	4.3	-0.5	0.1	0.8	0.0
Portfolio investment (c)	na	na	na	na	na	na
Assets	16.8	11.0	-1.9	1.3	1.7	-1.6
Equity securities	-4.5	-1.5	-0.4	-2.1	0.8	-1.6
Bonds and notes	4.3	3.3	-0.4	4.3	0.6	0.0
Money market instruments	17.0	9.2	-1.1	-0.9	0.3	0.0
Other investment	-51.5	-13.7	8.4	2.5	-0.4	1.1
of which MFIs excluding Banque de France (net flows)	-23.0	-12.8	7.0	5.8	-0.6	-3.4

(a) 16 Member States (including Slovakia as of 1 January 2009).

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

(c) The geographical breakdown is not available for liabilities.

Table 9
Balance of payments (monthly data) – France

(unadjusted data, EUR billions)

	2009	2010			12-month total	
		Jan.	Feb.	March	2009	2010
	March (a)	Jan. (b)	Feb. (b)	March (b)	March (a)	March (b)
Current account	-3.0	0.0	-2.8	-2.2	-45.4	-40.6
Goods	-4.8	-4.2	-3.4	-4.6	-60.3	-45.1
Services	0.0	0.3	0.8	-0.2	12.7	11.2
Income	5.5	2.2	2.8	4.5	27.0	17.2
Current transfers	-3.7	1.6	-3.0	-2.0	-24.9	-24.0
Capital account	0.0	0.1	0.1	0.0	0.4	0.5
Financial account	33.8	-7.7	-35.0	31.6	116.8	-20.2
Direct investment	-6.4	-2.5	-8.3	-3.7	-76.6	-59.1
French direct investment abroad	-9.9	-6.3	-7.4	-13.9	-132.0	-112.4
Equity capital	-0.1	-0.4	-1.5	-6.6	-30.9	-41.7
Reinvested earnings	-1.0	-1.0	-1.7	-1.7	-12.3	-13.0
Other capital	-8.9	-5.0	-4.2	-5.6	-88.8	-57.7
Foreign direct investment in France	3.5	3.8	-0.9	10.3	55.4	53.3
Equity capital	0.5	0.6	0.8	0.6	7.7	12.3
Reinvested earnings	0.4	0.4	0.8	0.8	6.5	5.9
Other capital	2.6	2.7	-2.4	8.8	41.1	35.1
Portfolio investment	49.7	-14.9	1.7	36.0	206.6	158.1
Assets	26.1	-30.5	-16.8	0.8	-29.0	-121.1
Equity securities	12.6	-0.5	-0.7	-2.0	-0.3	-55.4
Bonds and notes	7.6	-21.1	-7.1	-7.9	0.7	-66.6
Money market instruments	5.9	-8.9	-9.0	10.8	-29.4	0.9
Liabilities	23.6	15.5	18.4	35.2	235.6	279.2
Equity securities	16.0	6.2	6.9	7.6	-9.3	83.2
Bonds and notes	6.8	10.1	15.9	25.8	178.3	150.5
Money market instruments	0.8	-0.7	-4.4	1.8	66.6	45.5
Financial derivatives	-8.4	3.6	0.9	3.6	-18.9	15.2
Other investment	-1.1	4.8	-27.2	-3.2	-11.7	-129.5
of which MFIs excl. Banque de France (net flows)	12.1	-15.2	-11.9	5.5	-92.0	-97.6
Reserve assets	0.0	1.5	-2.1	-1.2	17.4	-5.0
Net errors and omissions	-30.9	7.6	37.7	-29.4	-71.8	60.4

(a) Semi-final figures.

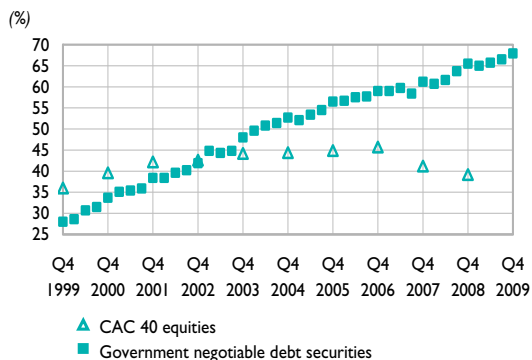
(b) Provisional figures.

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

(EUR billions)

	2005	2006	2007	2008	2009	2009
	Dec.	Dec.	Dec.	Dec.	Dec.	Q4
Assets	3,573.4	4,061.1	4,541.8	4,408.3	4,678.2	4,678.2
French direct investment abroad	736.2	793.0	877.4	1,003.8	1,122.5	1,122.5
Equity capital and reinvested earnings	491.3	548.8	595.7	649.3	697.9	697.9
Other capital	244.8	244.3	281.7	354.5	424.6	424.6
Portfolio investment	1,587.9	1,870.9	2,036.0	1,817.2	1,999.8	1,999.8
(foreign securities held by residents)						
MFIs (resident security-holding sector)	665.9	755.0	743.1	718.5	724.7	724.7
Non-MFIs (resident security-holding sector)	922.0	1,115.9	1,292.9	1,098.8	1,275.1	1,275.1
Financial derivatives	124.5	159.2	229.7	237.8	251.4	251.4
Other investment	1,061.8	1,163.3	1,320.1	1,275.5	1,212.1	1,212.1
MFIs	840.7	945.6	1,094.7	1,058.6	990.3	990.3
Non-MFIs	221.1	217.7	225.4	216.9	221.8	221.8
Reserve assets	63.0	74.6	78.6	74.0	92.4	92.4
Liabilities	-3,641.3	-4,188.3	-4,685.6	-4,685.6	-4,936.6	-4,936.6
Foreign direct investment in France	-532.4	-578.7	-645.6	-712.3	-756.3	-756.3
Equity capital and reinvested earnings	-325.0	-348.7	-378.2	-400.6	-416.8	-416.8
Other capital	-207.3	-230.0	-267.4	-311.8	-339.5	-339.5
Portfolio investment	-1,764.8	-1,963.0	-1,987.9	-1,896.2	-2,292.5	-2,292.5
(French securities held by non-residents)						
MFIs (resident security-issuing sector)	-414.5	-484.4	-505.4	-502.9	-552.0	-552.0
Non-MFIs (resident security-issuing sector)	-1,350.3	-1,478.6	-1,482.5	-1,393.3	-1,740.5	-1,740.5
Financial derivatives	-147.4	-188.9	-304.2	-305.3	-317.1	-317.1
Other investment	-1,196.8	-1,457.7	-1,748.0	-1,771.7	-1,570.7	-1,570.7
MFIs	-1,016.1	-1,245.0	-1,465.6	-1,345.2	-1,197.0	-1,197.0
Non-MFIs	-180.6	-212.7	-282.4	-426.5	-373.7	-373.7
Net position	-67.9	-127.2	-143.8	-277.3	-258.4	-258.4

**Non-resident holdings of CAC 40 equities
and government negotiable debt securities**



France's international investment position

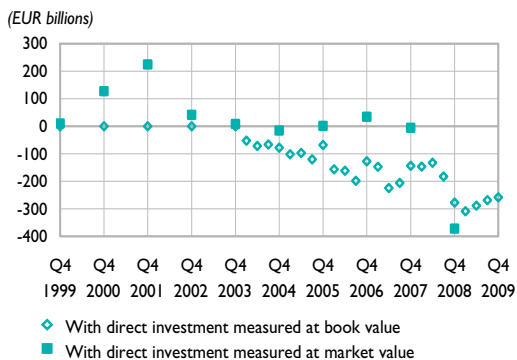


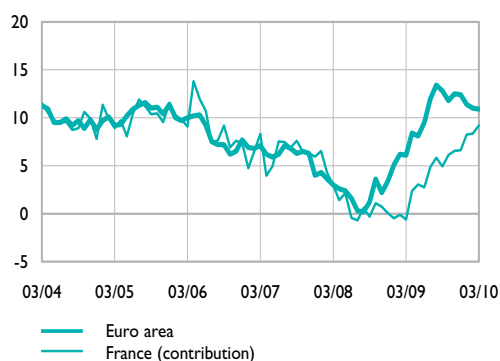
Table 11
Main monetary and financial aggregates – France and the euro area

(annual percentage growth rate)

	2007	2008	2009	2009	2009				2010		
	Dec.	Dec.	Dec.	March	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March
M1											
Euro area (a)	4.0	3.4	12.4	6.1	12.8	11.8	12.5	12.4	11.4	11.0	10.9
France (contribution)	6.0	0.1	6.6	-0.6	4.9	6.1	6.5	6.6	8.3	8.4	9.2
M2											
Euro area (a)	10.2	8.3	1.6	6.3	3.6	2.3	1.8	1.6	1.8	1.6	1.7
France (contribution)	13.9	8.1	0.0	2.7	1.3	0.4	0.2	0.0	3.3	2.9	3.3
M3											
Euro area (a)	11.6	7.6	-0.3	5.2	1.8	0.3	-0.2	-0.3	0.1	-0.3	-0.1
France (contribution)	15.7	5.3	-4.1	2.8	-2.6	-4.8	-4.6	-4.1	-1.8	-3.7	-2.7
Loans to the private sector											
Euro area (a)	11.2	5.7	-0.2	3.1	-0.3	-0.8	-0.7	-0.2	-0.6	-0.4	-0.2
France (b)	14.9	7.0	-0.6	3.0	-0.4	-1.2	-1.6	-0.6	-0.2	0.2	0.4

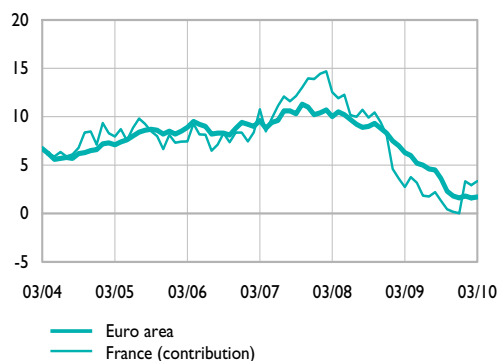
M1

(annual percentage growth rate)



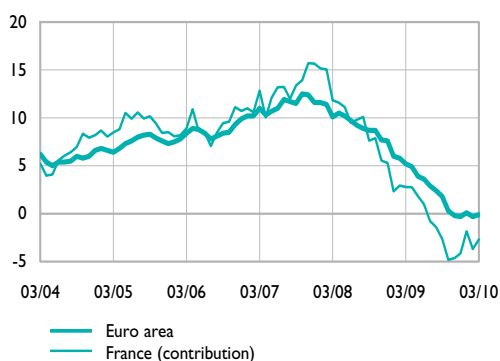
M2

(annual percentage growth rate)



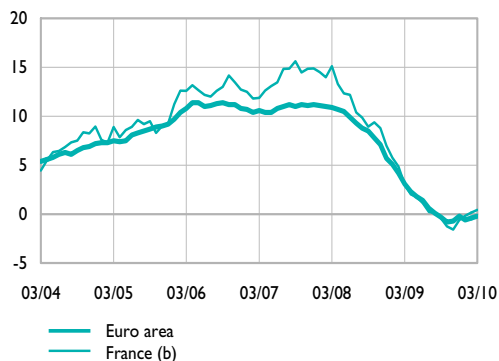
M3

(annual percentage growth rate)



Loans to the private sector

(annual percentage growth rate)



(a) Seasonal and calendar effect adjusted data.

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

Sources: Banque de France, European Central Bank.

Produced 20 May 2010

Table 12
Balance sheet of the Banque de France

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

	2007	2008	2009	2009	2009	2010		
	Dec.	Dec.	Dec.	March	Dec.	Jan.	Feb.	March
Assets								
National territory	101.7	220.3	165.1	125.5	165.1	159.8	159.5	161.4
Loans	83.2	190.7	129.1	95.3	129.1	126.0	124.8	125.9
MFIs	83.0	190.6	129.0	95.2	129.0	125.8	124.6	125.7
Central government	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Private sector	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1
Securities other than shares	18.5	29.6	35.9	30.1	35.9	33.9	34.8	35.5
MFIs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Central government	18.5	29.6	35.9	30.1	35.9	33.9	34.8	35.5
Private sector	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Money market instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shares and other equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other euro area countries	39.1	60.6	77.1	63.9	77.1	76.4	82.7	81.0
Rest of the world	92.9	110.6	97.4	99.2	97.4	93.0	95.2	89.3
Gold	47.6	49.8	60.0	54.4	60.0	60.4	64.4	64.5
Not broken down by geographical area (a)	82.6	115.8	110.6	112.6	110.6	111.4	101.2	113.1
Total	363.8	557.1	510.1	455.6	510.1	501.0	503.0	509.2
Liabilities								
National territory – Deposits	77.9	105.1	85.1	44.5	85.1	68.2	82.5	92.1
MFIs	76.9	94.3	64.9	43.3	64.9	67.0	80.9	83.6
Central government	0.3	10.3	18.0	0.3	18.0	0.3	0.7	7.2
Other sectors (overnight deposits)	0.7	0.5	2.2	0.9	2.2	0.9	1.0	1.3
Other euro area countries – Deposits	11.9	117.7	62.0	81.3	62.0	77.9	63.6	54.2
MFIs	11.9	117.7	62.0	81.3	62.0	77.9	63.6	54.2
Other sectors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest of the world – Deposits	73.5	99.0	112.9	103.8	112.9	110.9	115.2	112.1
Not broken down by geographical area	200.5	235.3	250.1	225.9	250.1	244.0	241.6	250.8
Currency in circulation (b)	131.1	147.3	153.7	142.5	153.7	149.4	149.5	151.9
Debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Money market instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital and reserves	55.2	58.6	70.6	65.2	70.6	71.6	71.9	78.1
Other	14.3	29.4	25.8	18.2	25.8	23.0	20.2	20.7
Total	363.8	557.1	510.1	455.6	510.1	501.0	503.0	509.2

(a) Including adjustments for the new accounting method for banknotes on the liability side of the Banque de France balance sheet since January 2002.

(b) Since January 2002, banknotes in circulation have been treated according to specific euro area accounting conventions. 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.

Table 13
Balance sheet of monetary financial institutions (MFIs) excluding the Banque de France

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

	2007	2008	2009	2009	2009	2010		
	Dec.	Dec.	Dec.	March	Dec.	Jan.	Feb.	March
Assets								
National territory	4,128.8	4,517.7	4,527.2	4,512.6	4,527.2	4,573.0	4,608.8	4,631.6
Loans	3,211.3	3,493.6	3,509.9	3,463.5	3,509.9	3,545.6	3,581.5	3,608.5
MFIs	1,310.6	1,480.2	1,486.5	1,452.7	1,486.5	1,495.5	1,532.1	1,541.5
General government	168.5	173.8	196.1	168.9	196.1	196.8	194.1	202.2
Private sector	1,173.2	1,839.6	1,827.4	1,841.9	1,827.4	1,853.2	1,855.3	1,864.8
Securities other than shares	535.2	636.2	622.6	660.0	622.6	627.4	627.5	630.9
MFIs ≤ 2 years	207.3	242.6	229.8	264.4	229.8	229.7	229.6	235.2
MFIs > 2 years	75.8	121.8	113.4	113.5	113.4	117.7	114.6	113.8
General government	150.0	149.7	159.7	165.0	159.7	156.7	158.8	159.8
Private sector	102.2	122.1	119.8	117.1	119.8	123.5	124.5	122.1
Money market fund shares/units	81.4	90.3	79.1	97.0	79.1	80.9	79.6	71.8
Shares and other equity	300.8	297.7	315.5	292.1	315.5	319.2	320.3	320.5
Other euro area countries	1,011.5	1,006.4	1,034.4	1,016.8	1,034.4	1,055.5	1,057.4	1,060.7
Rest of the world	1,004.3	926.0	848.2	873.2	848.2	921.6	954.9	928.0
Not broken down by geographical area	975.8	1,260.4	1,247.1	1,226.5	1,247.1	1,282.8	1,329.4	1,335.7
Total	7,120.4	7,710.6	7,656.7	7,629.1	7,656.7	7,833.0	7,950.5	7,956.1
Liabilities								
National territory – Deposits	2,649.7	3,043.5	3,099.0	2,981.9	3,099.0	3,126.0	3,159.6	3,165.0
MFIs	1,303.2	1,605.1	1,571.3	1,523.1	1,571.3	1,582.5	1,620.2	1,613.9
Central government	16.3	23.4	28.3	42.9	28.3	33.9	43.7	48.7
Other sectors	1,330.2	1,415.0	1,499.4	1,415.9	1,499.4	1,509.5	1,495.7	1,502.4
Overnight deposits	445.8	434.4	463.1	408.6	463.1	454.4	443.2	451.6
Deposits with agreed maturity ≤ 2 years	127.8	185.3	131.3	139.9	131.3	135.5	133.2	132.4
Deposits with agreed maturity > 2 years	277.2	260.9	362.4	304.1	362.4	366.0	368.9	369.0
Deposits redeemable at notice ≤ 3 months	437.6	486.0	501.1	508.7	501.1	503.3	501.1	500.7
Repos	41.7	48.5	41.5	54.6	41.5	50.3	49.3	48.7
Other euro area countries – Deposits	396.1	377.6	338.3	367.3	338.3	337.5	333.6	333.4
MFIs	296.9	277.6	229.3	268.1	229.3	227.8	220.5	218.9
Other sectors	99.2	100.1	109.0	99.3	109.0	109.7	113.1	114.5
Rest of the world – Deposits	1,088.4	985.3	880.9	958.4	880.9	942.0	965.6	950.6
Not broken down by geographical area	2,986.2	3,304.1	3,338.6	3,321.4	3,338.6	3,427.5	3,491.7	3,507.1
Debt securities issued ≤ 2 years	447.5	458.6	381.4	475.0	381.4	389.2	389.5	417.7
Debt securities issued > 2 years	604.1	689.3	715.2	687.6	715.2	734.4	736.8	734.7
Money market fund shares/units	428.5	483.3	479.2	529.6	479.2	486.2	480.2	458.0
Capital and reserves	392.5	416.1	454.7	416.6	454.7	455.9	456.4	458.1
Other	1,113.5	1,256.8	1,308.1	1,212.5	1,308.1	1,361.9	1,428.7	1,438.5
Total	7,120.4	7,710.6	7,656.7	7,629.1	7,656.7	7,833.0	7,950.5	7,956.1

NB: Since July 2003, financial transactions carried out by La Poste have been accounted for in the balance sheet of monetary financial institutions. This has resulted in an increase in the item "Shares and other equity" in Assets, and in "Overnight deposits" and "Capital and reserves" in Liabilities.

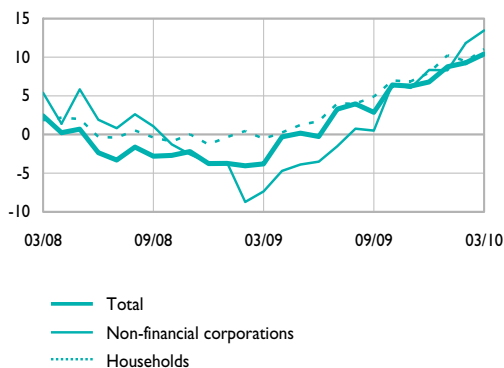
Table I4
Deposits – France

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

	2007	2008	2009	2009	2009	2010		
	Dec.	Dec.	Dec.	March	Dec.	Jan.	Feb.	March
Overnight deposits								
Total non-financial sectors (excluding central government)	463.3	447.8	481.7	413.4	481.7	459.3	450.9	461.0
Households and similar	246.8	243.7	263.0	236.8	263.0	265.6	259.9	262.9
Non-financial corporations	159.7	154.5	167.0	135.7	167.0	149.7	147.1	153.8
General government (excl. central government)	56.8	49.6	51.7	40.9	51.7	44.0	43.9	44.2
Other sectors	37.2	33.6	32.0	33.0	32.0	35.3	32.8	31.9
Total – Outstanding amounts	500.4	481.4	513.7	446.4	513.7	494.6	483.6	492.9
Total – Growth rate	6.0	-3.8	6.8	-3.8	6.8	8.8	9.3	10.4
Passbook savings accounts								
"A" and "Blue" passbooks	140.8	164.4	183.4	186.9	183.4	185.2	185.3	185.7
Housing savings accounts	38.1	36.7	36.6	36.6	36.6	36.7	36.4	36.3
Sustainable development passbook accounts	63.1	70.2	69.1	71.7	69.1	69.8	69.4	69.1
People's savings passbooks	60.6	62.0	58.3	59.7	58.3	57.2	57.1	56.4
Youth passbooks	7.1	7.4	7.2	7.3	7.2	7.1	7.0	7.0
Taxable passbooks	128.0	145.4	146.5	146.5	146.5	147.3	145.8	146.3
Total – Outstanding amounts	437.6	486.0	501.1	508.7	501.1	503.3	501.1	500.7
Total – Growth rate	5.0	11.1	3.1	13.1	3.1	-0.2	-1.2	-1.6

Overnight deposits

(annual growth rate)



Passbook savings accounts

(annual growth rate)

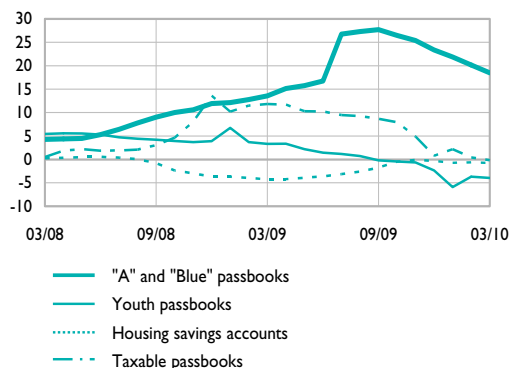


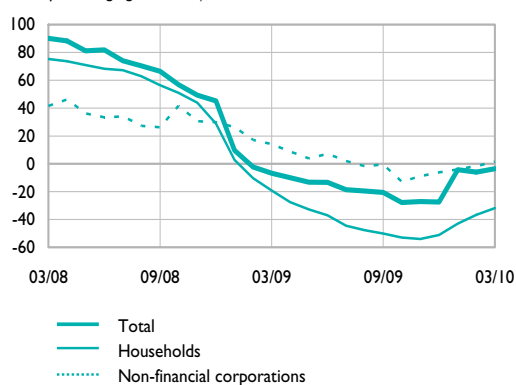
Table 15
Time deposits – France

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

	2007	2008	2009	2009	2009	2010		
	Dec.	Dec.	Dec.	March	Dec.	Jan.	Feb.	March
Deposits with agreed maturity up to two years								
Total non-financial sectors (excl. central government)	94.0	121.9	86.1	100.0	86.1	86.9	85.7	86.4
Households and similar	48.2	62.4	30.4	44.5	30.4	30.5	30.6	30.3
Non-financial corporations	45.1	58.8	55.1	54.5	55.1	55.7	54.4	55.4
General government (excl. central government)	0.6	0.8	0.6	1.0	0.6	0.7	0.7	0.8
Other sectors	33.8	63.4	45.1	39.9	45.1	48.7	47.5	46.0
Total – Outstanding amounts	127.8	185.3	131.3	139.9	131.3	135.5	133.2	132.4
Total – Growth rate	100.4	45.1	-27.4	-6.7	-27.4	-4.2	-6.0	-3.5
Deposits with agreed maturity of over two years								
Total non-financial sectors (excl. central government)	255.0	236.5	264.3	244.9	264.3	265.8	267.4	270.0
Households and similar	245.2	223.2	241.4	228.0	241.4	242.3	243.0	244.2
PEL	190.4	168.7	173.8	167.4	173.8	174.6	175.3	175.8
PEP	32.4	29.3	29.0	29.4	29.0	28.9	28.5	28.1
Other	22.4	25.1	38.6	31.1	38.6	38.7	39.2	40.3
Non-financial corporations	9.8	13.3	22.5	16.8	22.5	23.1	23.9	25.3
General government (excl. central government)	0.0	0.1	0.4	0.1	0.4	0.4	0.4	0.5
Other sectors	22.2	24.4	98.1	59.2	98.1	100.2	101.5	99.0
Total – Outstanding amounts	277.2	260.9	362.4	304.1	362.4	366.0	368.9	369.0
Total – Growth rate	-6.7	-5.9	38.1	11.9	38.1	24.6	23.8	20.1

Deposits up to 2 years

(annual percentage growth rate)



Deposits over 2 years

(annual percentage growth rate)

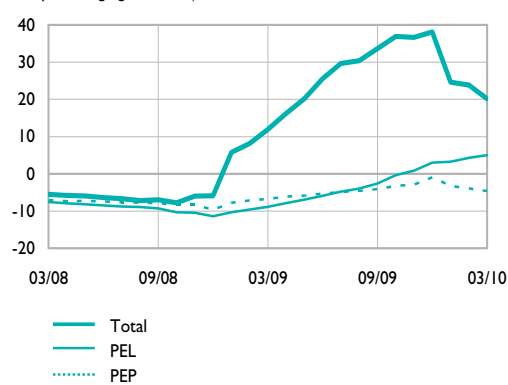


Table 16

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

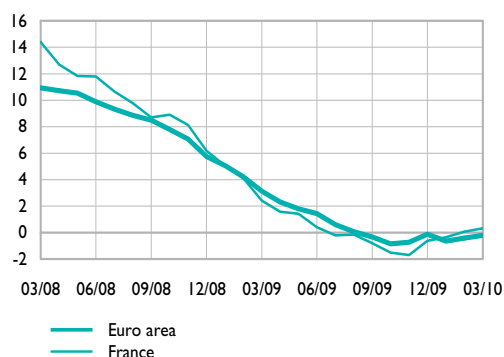
(outstanding amounts at the end of the period in EUR billions – % growth)

	2007	2008	2009	2009	2009		2010		
	Dec.	Dec.	Dec.	March	Nov.	Dec.	Jan.	Feb.	March
Loans from monetary financial institutions									
Private sector	1,732.4	1,839.8	1,827.5	1,842.0	1,824.8	1,827.5	1,853.4	1,855.5	1,865.0
General government	168.5	173.8	196.1	168.9	188.7	196.1	196.8	194.1	202.2
Total – Outstanding amounts	1,900.9	2,013.5	2,023.6	2,010.9	2,013.6	2,023.6	2,050.2	2,049.6	2,067.1
Private sector	14.0	6.2	-0.6	2.4	-1.7	-0.6	-0.4	0.1	0.3
General government	8.2	3.1	12.8	-3.9	-0.1	12.8	9.0	16.2	19.7
Total – Growth rate	13.5	5.9	0.5	1.9	-1.5	0.5	0.5	1.4	2.0
Loans from credit institutions to non-financial corporations									
Fixed investment	279.5	312.6	323.9	317.4	321.7	323.9	323.4	324.9	326.4
Inventories and working capital	199.1	216.2	184.5	208.6	184.5	184.5	183.3	180.1	178.4
Other lending	234.7	252.9	260.9	258.2	257.4	260.9	261.7	262.7	264.6
Total – Outstanding amounts	713.3	781.6	769.3	784.2	763.6	769.3	768.4	767.7	769.4
Total – Growth rate	13.7	9.5	-1.2	6.4	-2.4	-1.2	-2.3	-1.8	-1.7
Loans from credit institutions to households									
Loans for house purchase	652.9	710.0	737.6	710.5	729.6	737.6	739.6	741.6	745.0
Consumer loans	141.2	145.5	152.9	144.1	150.1	152.9	150.3	149.3	150.5
Other lending	83.0	84.7	84.2	85.2	84.4	84.2	84.5	85.4	86.1
Total – Outstanding amounts	877.1	940.1	974.7	939.9	964.1	974.7	974.4	976.3	981.6
Total – Growth rate	11.0	7.3	4.0	5.4	3.5	4.0	4.1	4.5	4.8

Table 17
Loans from credit institutions broken down by counterpart and by financing purpose – France (a) and euro area

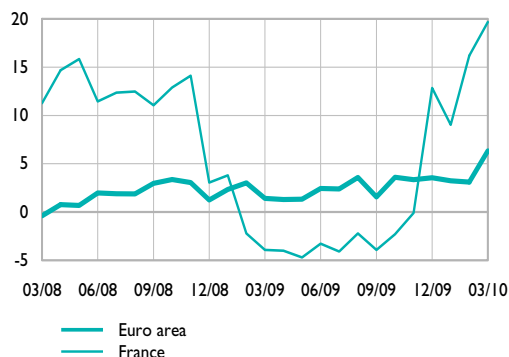
Loans to the private sector

(annual percentage growth rate)



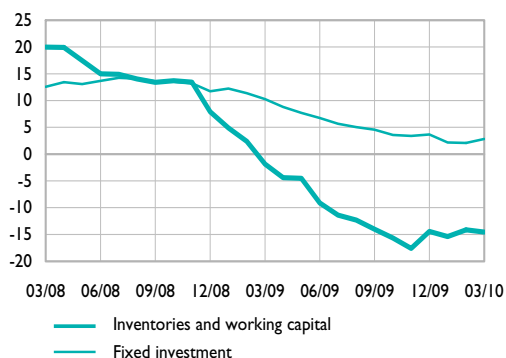
Loans to the public sector

(annual percentage growth rate)



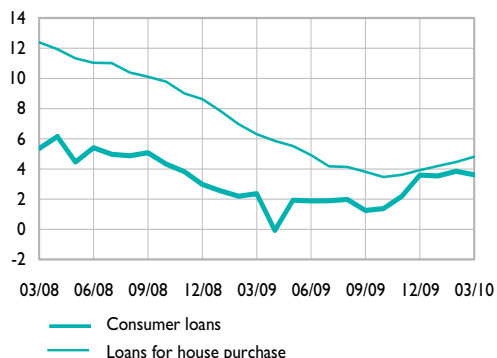
Loans to non-financial corporations – France

(annual percentage growth rate)



Loans to households – France

(annual percentage growth rate)



(a) Loans extended by credit institutions established in France to French residents.

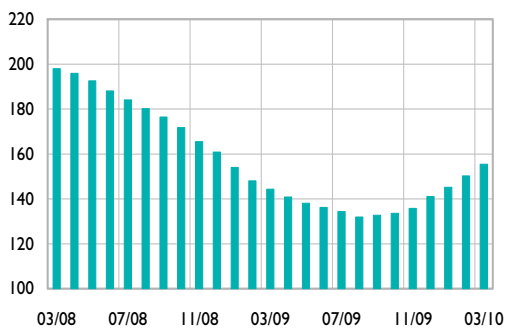
Table 18
New loans to residents – France

(excl. overdrafts, cumulative amounts over 12 months in EUR billions)

	2009			2010		
	Jan.	Feb.	March	Jan.	Feb.	March
Total – new loans	440.3	425.6	414.7	374.1	379.7	384.9
Loans to households	154.1	148.0	144.3	145.1	150.2	155.5
Consumer loans (excl. overdrafts)	52.2	51.6	51.8	52.0	52.2	52.4
Loans for house purchase with an IRFP ≤ 1 year (a)	10.7	9.7	8.9	10.8	11.6	12.5
Loans for house purchase with an IRFP > 1 year (a)	91.2	86.7	83.6	82.4	86.4	90.6
Loans to non-financial corporations	286.3	277.7	270.4	228.9	229.5	229.5
Loans with an IRFP ≤ 1 year (excl. overdrafts) (a)	189.9	186.0	182.4	152.9	152.3	151.1
Loans with an IRFP > 1 year (a)	96.4	91.7	88.0	76.0	77.3	78.3

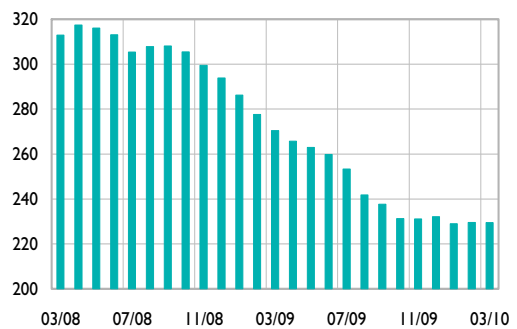
Loans to households

(EUR billions)



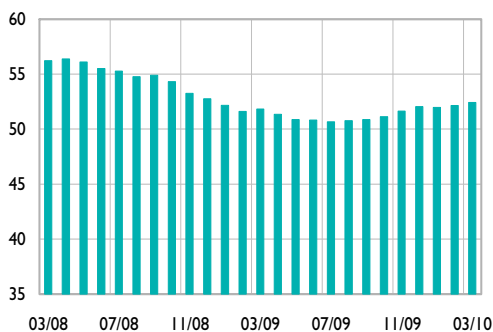
Loans to non-financial corporations

(EUR billions)



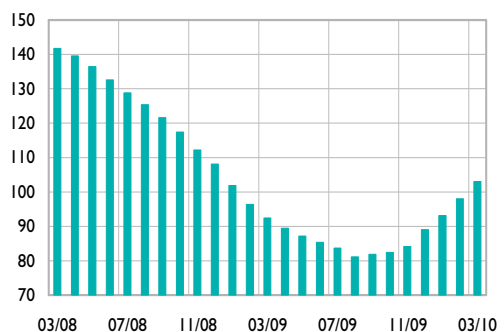
Consumer loans to households (excl. overdrafts)

(EUR billions)



Loans for house purchase

(EUR billions)



Data revised over the entire period.

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

IRFP ≤ 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 19
Investment and financing – Insurance corporations and pension funds – Euro area and France

(EUR billions)

Euro area						
	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2008	2009				2009
	Q4	Q1	Q2	Q3	Q4	Dec.
Financial assets						
Currency and deposits	52.3	26.4	20.9	16.4	-17.9	846.7
of which deposits included in M3 (a)	56.9	18.3	11.7	-0.8	-33.2	193.7
Short-term debt securities	24.6	18.2	17.2	35.3	53.0	388.2
Long-term debt securities	47.8	67.3	21.0	13.1	42.8	2,085.4
Loans	21.8	-2.1	10.3	7.9	5.3	418.5
Shares and other equity	37.9	9.6	66.8	81.3	117.8	2,230.6
of which quoted shares	-15.2	-20.2	-22.7	-96.9	-84.0	416.7
Remaining net assets	19.6	8.3	31.2	30.4	32.6	254.8
Financing						
Debt securities	11.7	13.8	9.9	10.0	0.8	50.2
Loans	24.3	-2.3	12.3	5.9	-28.3	236.3
Shares and other equity	0.1	1.5	2.3	4.4	4.3	488.3
Insurance technical reserves	133.1	117.8	147.8	174.0	258.9	5,536.0
Life insurance	129.5	122.5	151.7	178.4	250.1	4,826.6
Non-life insurance	3.6	-4.6	-3.9	-4.4	8.8	709.4
Net lending/net borrowing (B9B)	34.6	-3.1	-4.9	-10.0	-2.2	

(EUR billions)

France						
	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2008	2009				2009
	Q4	Q1	Q2	Q3	Q4	Dec.
Financial assets						
Currency and deposits	4.5	1.4	-1.0	-0.7	-0.9	23.4
of which deposits included in M3 (a)	2.4	0.1	-1.2	-1.4	-1.5	10.0
Short-term debt securities	21.7	16.7	19.3	40.5	60.8	360.3
Long-term debt securities	23.2	19.3	22.2	19.3	23.1	684.5
Loans	3.3	2.5	3.0	3.1	2.7	41.2
Shares and other equity	31.8	15.8	1.0	-5.7	-12.4	655.7
of which quoted shares	1.3	-5.8	-6.8	-5.0	-0.8	76.7
Remaining net assets	-2.7	-5.3	-4.1	1.5	4.3	27.8
Financing						
Debt securities	7.4	7.1	4.7	3.1	-2.0	31.2
Loans	7.5	4.9	4.1	-1.5	-12.1	61.0
Shares and other equity	2.3	2.3	2.0	2.2	3.8	146.5
Insurance technical reserves	63.9	57.5	67.7	74.7	92.9	1,509.7
Life insurance	63.3	56.5	65.7	71.3	88.4	1,357.7
Non-life insurance	0.7	1.0	2.0	3.3	4.4	152.0
Net lending/net borrowing (B9B)	0.8	-21.5	-38.2	-20.6	-4.9	

(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.

Produced 20 May 2010

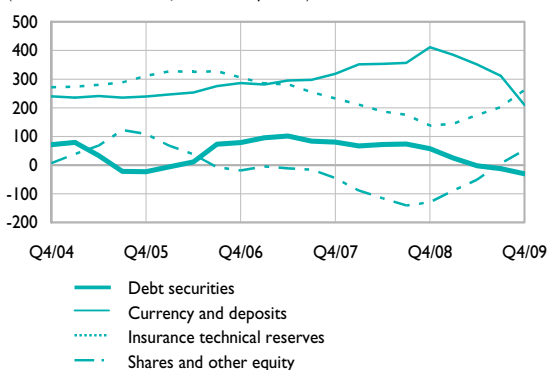
Table 20
Investment and financing – Households – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2008	2009				2009
	Q4	Q1	Q2	Q3	Q4	Dec.
Financial assets						
Currency and deposits	411.6	384.7	351.3	311.4	209.9	6,417.9
of which deposits included in M3 (a)	384.4	344.8	284.4	206.6	94.4	4,920.5
Short-term debt securities	-0.7	-18.1	-24.9	-32.0	-41.5	11.5
Long-term debt securities	58.3	42.3	22.5	19.8	11.2	1,430.1
Shares and other equity	-129.0	-88.4	-50.6	6.1	53.0	4,174.3
Quoted shares	-13.0	11.8	21.4	33.6	16.9	731.3
Unquoted shares and other equity	25.1	13.4	17.6	13.9	25.8	2,054.1
Mutual fund shares	-141.1	-113.6	-89.6	-41.4	10.3	1,388.9
of which money market fund shares	-13.1	1.8	-17.1	-22.0	-43.1	243.6
Insurance technical reserves	138.3	144.6	174.4	202.5	261.6	5,478.6
Remaining net assets	19.6	1.4	14.9	-15.0	-12.5	-122.2
Financing						
Loans	206.1	154.8	126.0	98.5	98.3	5,804.8
of which from euro area MFIs	82.8	20.1	10.3	-15.8	63.1	4,956.0
Revaluation of financial assets						
Shares and other equity	-1,407.7	-1,069.6	-628.3	-61.1	335.5	
Insurance technical reserves	-263.8	-213.5	-109.1	50.3	151.3	
Other flows	-18.0	-47.9	15.1	67.8	37.5	
Change in net financial worth	-1,397.5	-1,019.2	-360.7	451.3	907.6	

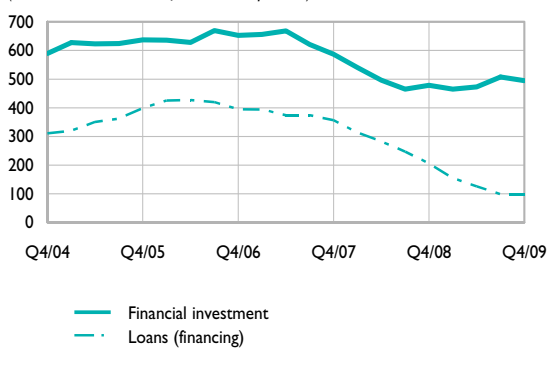
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)



(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.

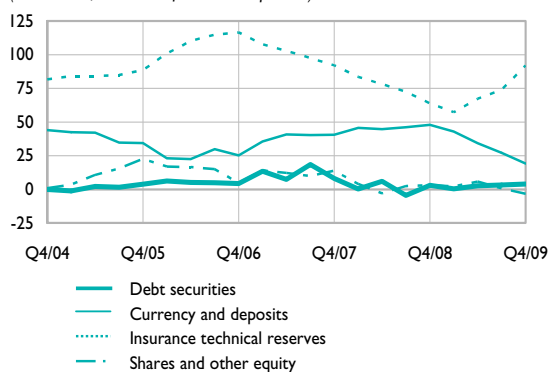
Table 21
Investment and financing – Households – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2008	2009				2009
	Q4	Q1	Q2	Q3	Q4	Dec.
Financial assets						
Currency and deposits	47.9	42.8	34.3	27.2	19.1	1,115.3
of which deposits included in M3 (a)	62.9	49.0	32.1	17.7	2.3	835.8
Short-term debt securities	0.9	1.1	1.0	-0.4	-0.5	13.4
Long-term debt securities	2.1	-0.7	1.6	3.6	4.4	49.5
Shares and other equity	3.1	2.2	5.7	0.7	-3.4	915.0
Quoted shares	-1.7	4.4	5.0	5.6	2.8	127.1
Unquoted shares and other equity	7.3	7.8	10.7	8.2	7.7	490.0
Mutual fund shares	-2.5	-10.0	-9.9	-13.1	-13.9	297.8
of which money market fund shares	9.0	1.9	-3.0	-6.7	-15.5	51.3
Insurance technical reserves	63.8	57.2	67.2	73.9	91.9	1,485.0
Remaining net assets	11.7	23.1	22.3	11.0	14.6	-48.5
Financing						
Loans	63.4	47.5	37.3	29.7	36.3	1,022.7
of which from resident MFIs	51.0	36.1	24.2	16.5	32.1	964.3
Revaluation of financial assets						
Shares and other equity	-277.7	-224.8	-129.4	0.6	109.4	
Insurance technical reserves	-54.1	-39.9	-23.7	4.0	25.3	
Other flows	0.2	13.9	17.0	12.3	-0.9	
Change in net financial worth	-265.5	-172.5	-41.2	103.3	223.7	

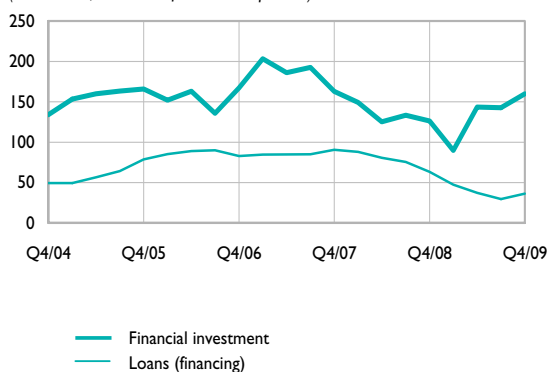
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)



(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.

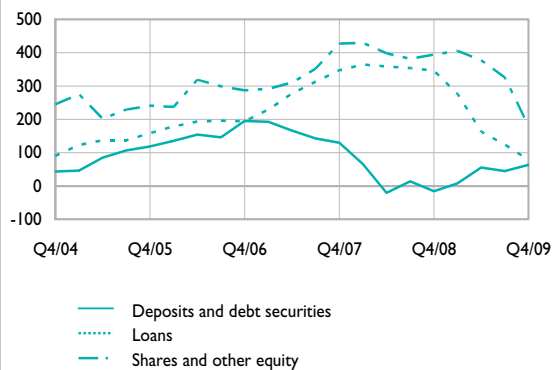
Table 22
Investment and financing – Non-financial corporations – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2008	2009				2009
	Q4	Q1	Q2	Q3	Q4	Dec.
Financial assets						
Currency and deposits	36.3	30.1	49.9	49.6	87.9	1,784.4
of which deposits included in M3 (a)	3.6	-17.9	-0.1	25.8	78.3	1,525.8
Debt securities	-52.2	-22.0	5.7	-5.1	-24.4	344.9
Loans	346.2	275.9	163.6	124.2	78.1	2,941.3
Shares and other equity	394.4	405.2	377.2	325.6	180.1	7,381.3
Insurance technical reserves	3.6	-0.5	1.1	1.8	2.0	144.7
Remaining net assets	-19.8	-143.7	-114.7	-103.2	-40.9	293.8
Financing						
Debt	760.7	575.7	405.7	230.4	82.5	9,466.3
Loans	696.4	506.6	324.9	136.6	3.9	8,312.8
of which from euro area MFIs	419.5	280.0	126.7	-10.2	-105.1	4,692.3
Debt securities	62.6	67.5	79.2	92.2	76.9	821.1
Pension fund reserves	1.7	1.7	1.7	1.7	1.6	332.3
Shares and other equity	311.1	287.6	317.3	297.5	206.2	12,163.0
Quoted shares	2.5	13.2	47.1	57.9	58.6	3,429.7
Unquoted shares and other equity	308.5	274.4	270.2	239.5	147.6	8,733.4
Net lending/net borrowing (B9B)	-363.2	-318.3	-240.3	-135.0	-5.8	

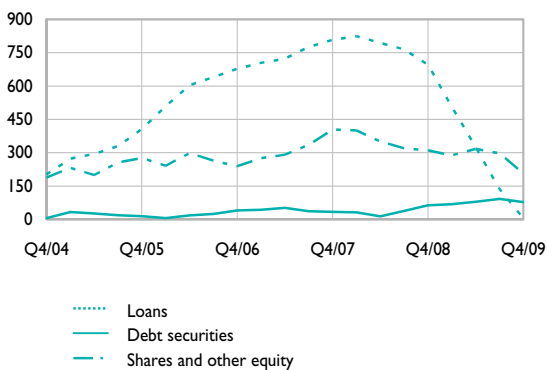
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Financing flows

(EUR billions, cumulated flows over 4 quarters)



(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.

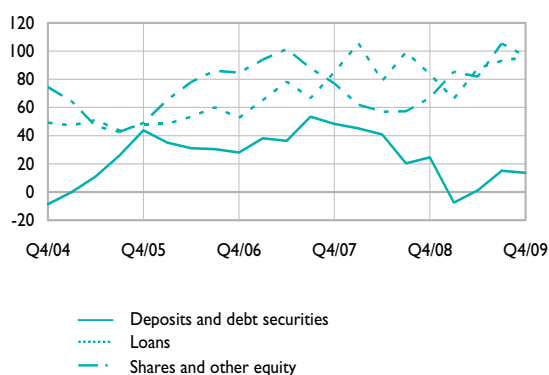
Table 23
Investment and financing – Non-financial corporations – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2008	2009				2009
	Q4	Q1	Q2	Q3	Q4	Dec.
Financial assets						
Currency and deposits	20.2	6.7	15.3	22.8	24.1	314.6
<i>of which deposits included in M3 (a)</i>	10.0	0.1	2.5	5.8	10.3	235.8
Debt securities	4.5	-14.1	-14.0	-7.7	-10.4	99.1
Loans	83.6	66.3	87.7	93.1	95.7	891.8
Shares and other equity	66.9	85.4	81.8	105.4	96.4	2,693.1
Insurance technical reserves	0.1	0.2	0.4	0.6	0.8	19.8
Remaining net assets	-6.2	27.5	-9.9	-14.6	-23.2	96.8
Financing						
Debt	166.8	135.8	106.8	91.5	78.6	2,034.1
Loans	141.6	97.4	63.2	32.4	27.5	1,673.4
<i>of which from resident MFIs</i>	71.7	49.7	19.5	-2.9	-7.8	776.1
Debt securities	25.2	38.4	43.6	59.1	51.0	360.8
Shares and other equity	67.9	81.7	99.3	113.4	105.5	3,935.5
Quoted shares	5.3	5.6	17.7	16.8	19.2	1,072.7
Unquoted shares and other equity	62.6	76.2	81.6	96.6	86.3	2,862.8
Net lending/net borrowing (B9B)	-65.6	-45.6	-44.8	-5.2	-0.8	

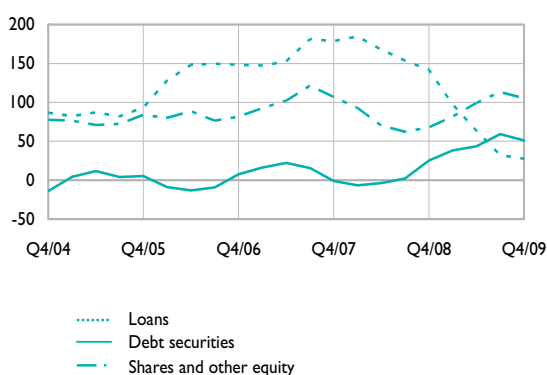
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Financing flows

(EUR billions, cumulated flows over 4 quarters)



(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.

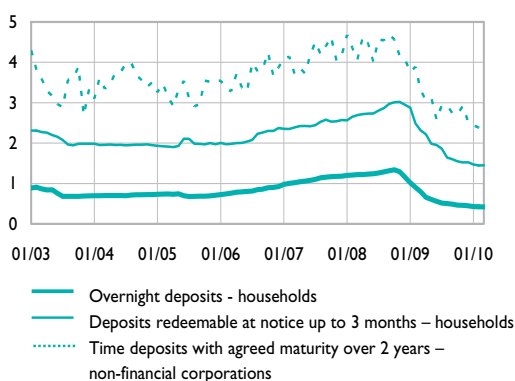
Table 24
Interest rates on deposits – France and the euro area

(average monthly rates – %)

	2008	2009	2009	2009		2010		
	Dec.	Dec.	March	Nov.	Dec.	Jan.	Feb.	March
Euro area								
Overnight deposits – households	1.16	0.45	0.80	0.46	0.45	0.43	0.42	0.42
Deposits redeemable at notice up to 3 months – households	2.95	1.53	2.31	1.52	1.53	1.47	1.45	1.45
Time deposits with agreed maturity over 2 years – non-financial corporations	4.08	2.53	3.30	2.92	2.53	2.44	2.39	2.26
France								
"A" passbooks (end of period)	4.00	1.25	2.50	1.25	1.25	1.25	1.25	1.25
Regulated savings deposits	3.96	1.28	2.51	1.28	1.28	1.28	1.28	1.28
Market rate savings deposits	3.73	1.37	2.69	1.37	1.37	1.29	1.39	1.29
Deposits with agreed maturity up to 2 years	4.44	2.39	3.63	2.45	2.39	2.33	2.37	2.26
Deposits with agreed maturity over 2 years	3.50	3.41	3.50	3.51	3.41	3.31	3.44	3.27

Euro area

(average monthly rates – %)



France

(average monthly rates – %)

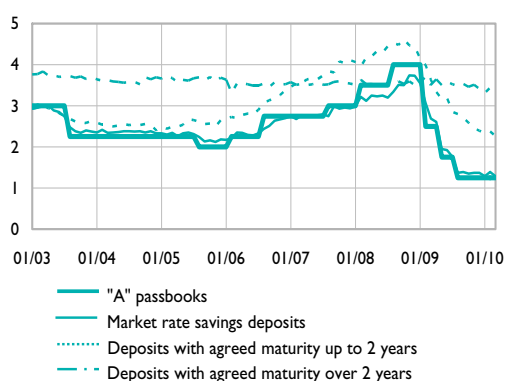
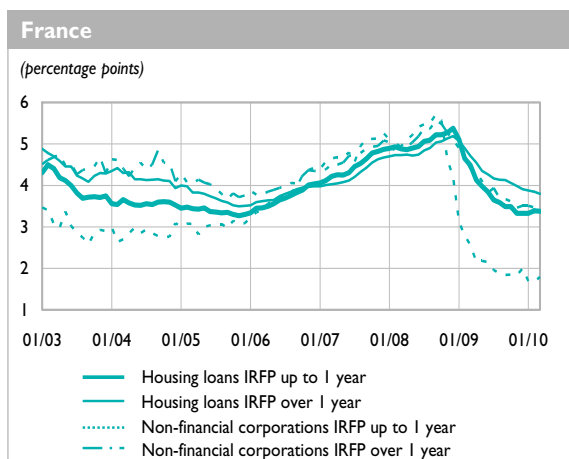
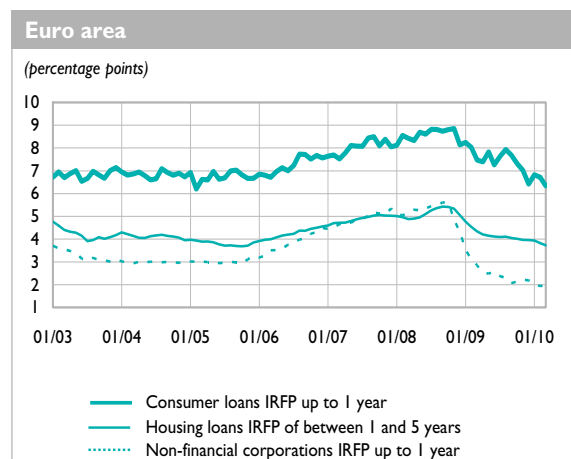


Table 25
Cost of credit – France and the euro area

(average monthly rate – %)

	2009										2010		
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	
Euro area													
Consumer loans													
Floating rate and IRFP of up to 1 year (a)	7.39	7.82	7.26	7.63	7.93	7.69	7.32	7.03	6.42	6.83	6.72	6.34	
Loans for house purchase													
Floating rate and IRFP of between 1 and 5 years	4.21	4.15	4.12	4.10	4.10	4.05	4.02	3.97	3.96	3.94	3.83	3.73	
Non financial corporations of over EUR 1 million													
IRFP of up to 1 year (a)	2.54	2.48	2.57	2.37	2.31	2.06	2.14	2.22	2.19	2.01	1.94	1.98	
France													
Consumer loans	6.96	6.92	6.68	6.77	6.78	6.58	6.46	6.44	6.34	6.52	6.31	6.25	
Loans for house purchase													
IRFP of up to 1 year (a)	4.13	3.98	3.85	3.65	3.59	3.49	3.49	3.33	3.33	3.33	3.39	3.38	
IRFP of over 1 year (a)	4.55	4.35	4.27	4.17	4.14	4.13	4.06	3.99	3.91	3.88	3.85	3.80	
Non-financial corporations													
IRFP of up to 1 year (a)	2.16	2.18	2.15	1.96	1.88	1.84	1.85	1.83	2.00	1.69	1.67	1.79	
IRFP of over 1 year (a)	4.30	4.10	3.82	3.94	3.70	3.67	3.61	3.46	3.51	3.51	3.47	3.36	



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

IRFP ≤ 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 26
Cost of credit – France

(%)

	2009				2010
	Q1	Q2	Q3	Q4	Q1
Households – Average overall effective interest rate					
Consumer loans					
Overdrafts, revolving loans and instalment plans of over EUR 1,524	15.69	15.47	15.15	14.78	14.59
Personal loans over EUR 1,524	7.53	7.07	6.90	6.66	6.64
Loans for house purchase					
Fixed-rate loans	5.87	5.26	5.04	4.93	4.72
Floating-rate loans	5.95	5.27	4.59	4.44	4.29
Usury ceilings in effect from the 1st day of the mentioned period					
	2009			2010	
	April	July	Oct.	Jan.	April
Households – Usury rate					
Consumer loans					
Overdrafts, revolving loans and instalment plans of over EUR 1,524	20.92	20.63	20.20	19.71	19.45
Personal loans over EUR 1,524	10.04	9.43	9.20	8.88	8.85
Loans for house purchase					
Fixed-rate loans	7.83	7.01	6.72	6.57	6.29
Floating-rate loans	7.93	7.03	6.12	5.92	5.72
	2009				2010
	Q1	Q2	Q3	Q4	Q1
Business credit, loans to enterprises					
Discount					
up to EUR 15,245	4.12	3.10	1.75	1.52	1.74
EUR 15,245 to EUR 45,735	5.64	4.47	2.90	2.37	2.84
EUR 45,735 to EUR 76,225	4.67	3.81	2.79	2.34	2.57
EUR 76,225 to EUR 304,898	4.26	3.37	2.81	2.28	2.49
EUR 304,898 to EUR 1,524,490	3.36	2.45	2.12	1.81	1.95
over EUR 1,524,490	3.06	1.98	1.48	1.19	1.22
Overdrafts					
up to EUR 15,245	10.52	9.74	9.77	9.82	9.76
EUR 15,245 to EUR 45,735	8.02	6.93	7.21	6.85	6.85
EUR 45,735 to EUR 76,225	5.98	4.92	4.42	4.19	4.37
EUR 76,225 to EUR 304,898	4.88	3.55	3.06	2.76	3.03
EUR 304,898 to EUR 1,524,490	4.03	2.78	2.15	1.81	1.93
over EUR 1,524,490	3.45	2.46	1.82	1.56	1.27
Other short-term loans					
up to EUR 15,245	5.69	4.52	4.03	3.84	3.60
EUR 15,245 to EUR 45,735	5.50	3.72	3.91	3.46	3.39
EUR 45,735 to EUR 76,225	5.02	3.63	3.50	3.17	3.12
EUR 76,225 to EUR 304,898	4.24	3.26	2.75	2.59	2.52
EUR 304,898 to EUR 1,524,490	3.54	2.50	2.02	1.80	1.85
over EUR 1,524,490	3.11	2.09	1.67	1.43	1.46
Medium and long-term loans					
up to EUR 15,245	5.29	4.48	4.06	3.95	3.37
EUR 15,245 to EUR 45,735	5.20	4.38	4.11	3.81	3.27
EUR 45,735 to EUR 76,225	5.10	4.39	4.12	3.82	3.56
EUR 76,225 to EUR 304,898	5.03	4.41	4.04	3.86	3.64
EUR 304,898 to EUR 1,524,490	4.63	3.88	3.70	3.40	3.36
over EUR 1,524,490	3.74	2.83	2.81	2.64	2.58

Source: Banque de France.

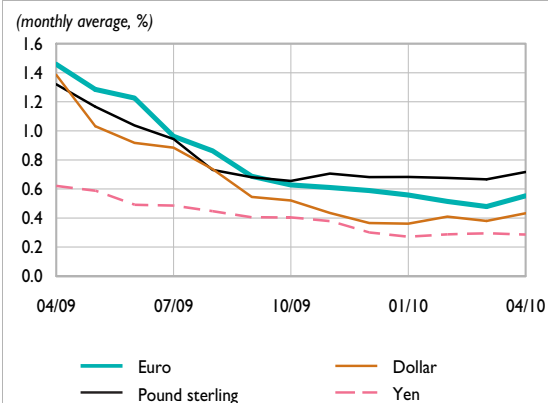
Produced 20 May 2010

Table 27
Interest rates

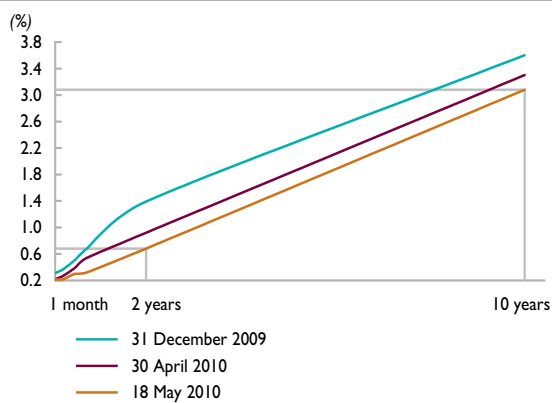
(%)

	Monthly average (a)										Key interest rates at 18/05/10
	2009						2010				
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	
Short-term interbank interest rates											
Euro											1.00
Overnight	0.30	0.31	0.34	0.34	0.37	0.35	0.35	0.34	0.31	0.33	
3-month	0.96	0.86	0.69	0.63	0.61	0.59	0.56	0.51	0.48	0.55	
1-year	1.41	1.35	1.19	1.18	1.16	1.16	1.18	1.14	1.10	1.11	
Pound sterling											0.50
Overnight	0.50	0.48	0.47	0.50	0.50	0.49	0.48	0.48	0.51	0.50	
3-month	0.94	0.73	0.68	0.65	0.71	0.68	0.68	0.68	0.67	0.72	
1-year	1.63	1.45	1.34	1.38	1.38	1.44	1.32	1.15	1.15	1.23	
Dollar											0.25
Overnight	0.24	0.22	0.20	0.20	0.18	0.19	0.18	0.19	0.21	0.24	
3-month	0.88	0.74	0.55	0.52	0.43	0.37	0.36	0.41	0.38	0.43	
1-year	1.48	1.40	1.27	1.08	1.01	0.98	0.97	0.93	0.91	1.11	
Yen											0.10
Overnight	0.34	0.32	0.31	0.23	0.20	0.26	0.20	0.22	0.18	0.15	
3-month	0.49	0.45	0.41	0.40	0.38	0.30	0.27	0.29	0.30	0.29	
1-year	0.77	0.73	0.71	0.69	0.64	0.61	0.54	0.56	0.57	0.57	
10-year benchmark government bond yields											
France	3.73	3.59	3.59	3.56	3.56	3.48	3.52	3.50	3.44	3.40	
Germany	3.37	3.34	3.29	3.23	3.28	3.22	3.28	3.19	3.13	3.09	
Euro area	4.09	3.89	3.86	3.80	3.83	3.88	4.10	4.11	3.98	4.17	
United Kingdom	3.81	3.69	3.66	3.54	3.71	3.83	3.97	4.03	4.02	4.00	
United States	3.58	3.62	3.43	3.39	3.43	3.60	3.74	3.71	3.75	3.86	
Japan	1.35	1.38	1.32	1.33	1.36	1.27	1.34	1.34	1.35	1.35	

3-month interbank market rates



Yield curve for French government bonds



(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.
Benchmark bonds: rates posted by Reuters at 4.30pm.

Table 28
Banking system liquidity and refinancing operations – Euro area

(EUR billions, daily average for the reserve maintenance period from 10 March to 13 April 2010)

	Liquidity providing	Liquidity absorbing	Net contribution
Contribution to banking system liquidity			
(a) Eurosystem monetary policy operations	772.2	209.1	563.2
Main refinancing operations	77.7		77.7
Longer-term refinancing operations	650.5		650.5
Standing facilities	0.4	200.7	-200.3
Other	43.6	8.4	35.3
(b) Other factors affecting banking system liquidity	555.8	906.5	-350.6
Banknotes in circulation		792.9	-792.9
Government deposits with the Eurosystem		113.6	-113.6
Net foreign assets (including gold)	439.8		439.8
Other factors (net)	116.1		116.1
(c) Reserves maintained by credit institutions (a) + (b)			212.5
including reserve requirements			211.4

Net contribution to banking system liquidity

(EUR billions, daily average for the reserve maintenance period from 10 March to 13 April 2010)

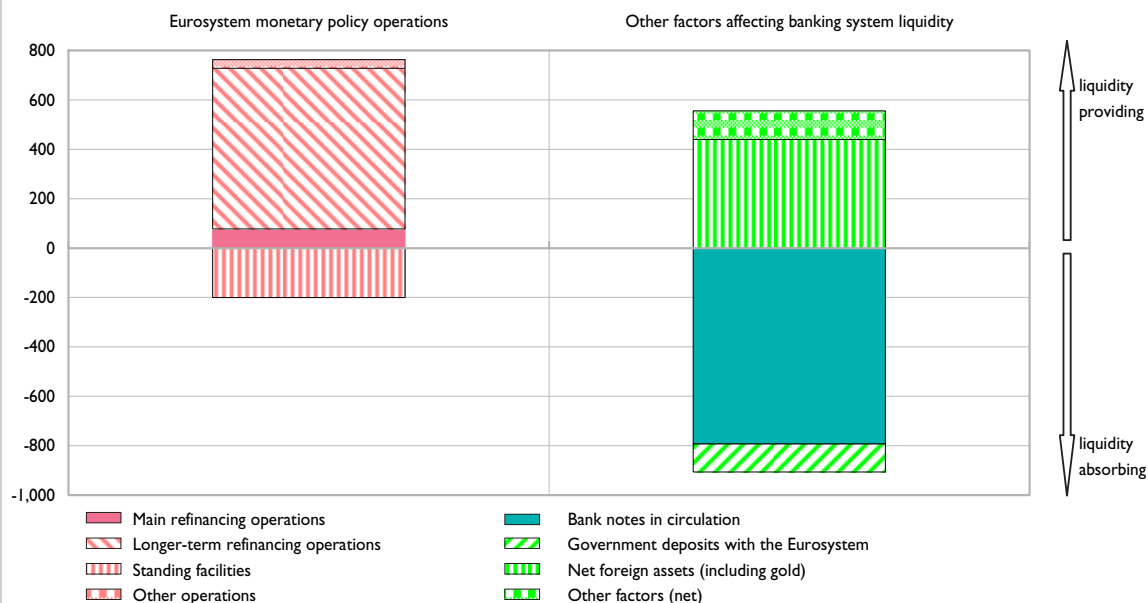


Table 29
Eurosystem key rates; minimum reserves

(%)

Key rates for the Eurosystem (latest changes)						
Main refinancing operations			Standing facilities			
Date of		Fixed rate	Date of		Deposit	Marginal lending
decision	settlement		decision	settlement		
05/03/2009	11/03/2009	1.50	05/03/2009	11/03/2009	0.50	2.50
02/04/2009	08/04/2009	1.25	02/04/2009	08/04/2009	0.25	2.25
07/05/2009	13/05/2009	1.00	07/05/2009	13/05/2009	0.25	1.75

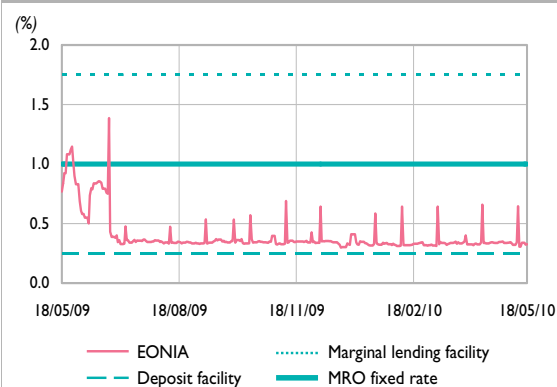
(%)

Main refinancing operations				Longer-term refinancing operations		
		Marginal rate	Weighted average rate			Marginal rate
2010	7 April (a)	1.00	1.00	2010	10 March	1.00
	14 April	1.00	1.00		1 April	1.00
	21 April	1.00	1.00		14 April	1.00
	28 April	1.00	1.00		29 April	1.00
	5 May	1.00	1.00		12 May	1.00
	12 May	1.00	1.00		13 May	1.00

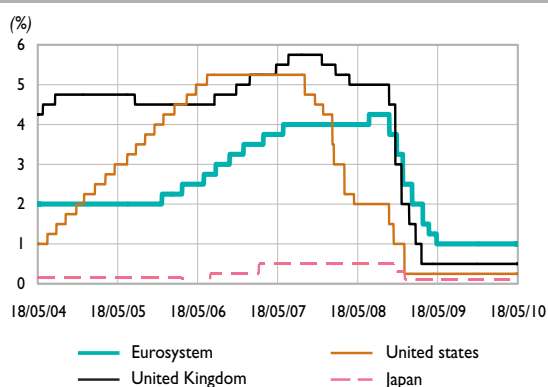
(EUR billions – rates as a %)

Minimum reserves (daily averages)								
Reserve maintenance period ending on		Required reserves		Current accounts		Excess reserves		Interest rate on minimum reserves
		Euro area	France	Euro area	France	Euro area	France	
2009	10 November	211.82	38.20	212.77	38.32	0.95	0.12	1.00
	7 December	210.23	37.56	211.44	37.69	1.21	0.13	1.00
2010	19 January	210.08	38.07	211.25	38.21	1.17	0.14	1.00
	9 February	209.47	38.15	210.91	38.30	1.44	0.15	1.00
	9 March	210.85	38.77	211.84	38.89	0.99	0.11	1.00
	13 April	211.38	39.11	212.53	39.27	1.15	0.16	1.00

Eurosystem key rates and EONIA



Central bank key rates



(a) Fixed rate tender procedure.

Sources: European Central Bank, ESCB.

Produced 20 May 2010

Table 30
Negotiable debt securities – France

Certificates of deposit			
	EUR billions (a)		Number of issuers
	Issues	Stocks	
13/02/10 to 19/02/10	95.81	335.92	192
20/02/10 to 26/02/10	94.78	337.43	194
27/02/10 to 05/03/10	95.99	336.13	193
06/03/10 to 12/03/10	89.84	338.06	192
13/03/10 to 19/03/10	102.35	343.34	195
20/03/10 to 26/03/10	85.45	338.92	196
27/03/10 to 02/04/10	80.15	344.31	196
03/04/10 to 09/04/10	94.15	347.06	195
10/04/10 to 16/04/10	126.42	348.04	195
17/04/10 to 23/04/10	118.31	349.16	196
24/04/10 to 30/04/10	120.34	347.92	197
01/05/10 to 07/05/10	128.60	348.58	196
08/05/10 to 14/05/10	94.80	349.95	196

Commercial paper			
	EUR billions (a)		Number of issuers
	Issues	Stocks	
13/02/10 to 19/02/10	11.04	47.42	78
20/02/10 to 26/02/10	10.98	49.98	79
27/02/10 to 05/03/10	8.70	51.25	77
06/03/10 to 12/03/10	12.06	52.56	79
13/03/10 to 19/03/10	11.55	51.23	78
20/03/10 to 26/03/10	7.99	51.71	78
27/03/10 to 02/04/10	6.49	52.13	78
03/04/10 to 09/04/10	8.87	52.35	80
10/04/10 to 16/04/10	13.21	54.00	79
17/04/10 to 23/04/10	9.89	51.95	80
24/04/10 to 30/04/10	9.59	53.96	81
01/05/10 to 07/05/10	7.77	51.88	82
08/05/10 to 14/05/10	13.43	56.74	83

Negotiable medium-term notes			
	EUR billions (a)		Number of issuers
	Issues	Stocks	
13/02/10 to 19/02/10	0.36	66.82	131
20/02/10 to 26/02/10	0.35	66.93	131
27/02/10 to 05/03/10	0.22	66.72	131
06/03/10 to 12/03/10	0.22	66.86	131
13/03/10 to 19/03/10	0.24	66.85	131
20/03/10 to 26/03/10	0.42	67.07	132
27/03/10 to 02/04/10	0.23	67.21	133
03/04/10 to 09/04/10	0.08	67.06	133
10/04/10 to 16/04/10	0.25	67.05	132
17/04/10 to 23/04/10	0.29	67.25	132
24/04/10 to 30/04/10	0.13	67.13	132
01/05/10 to 07/05/10	0.12	67.22	132
08/05/10 to 14/05/10	0.08	67.14	132

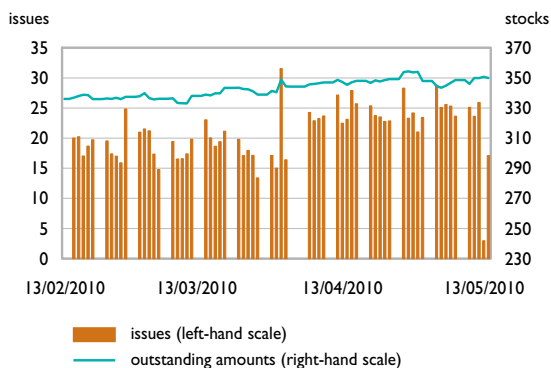
(a) Issues in euro are cumulative over the reference period. Outstanding amounts are calculated from the cut-off date (the last day of the period under review).

Source: Banque de France.

Produced 20 May 2010

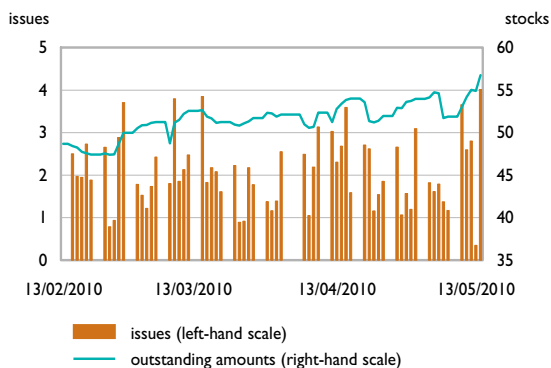
Certificates of deposit

(unadjusted data, EUR billions)



Commercial paper

(unadjusted data, EUR billions)



Negotiable medium-term notes

(unadjusted data, EUR billions)

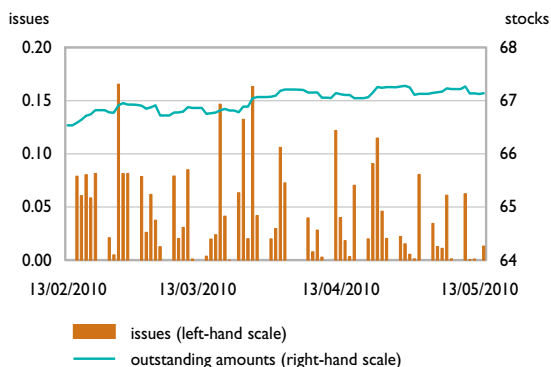
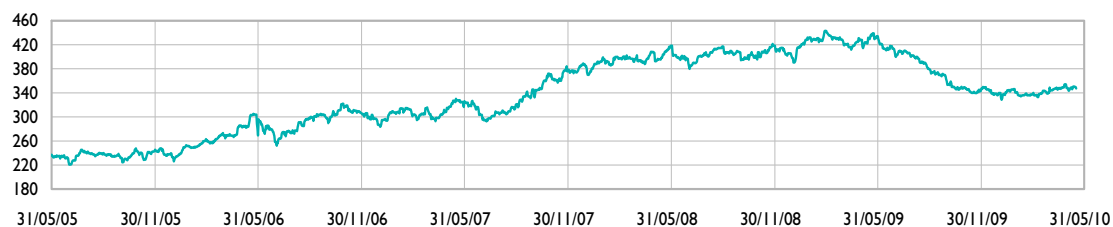


Table 3 I
Negotiable debt securities – France

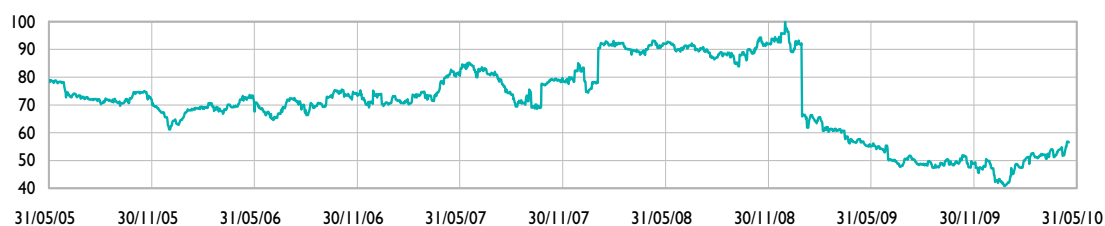
Certificates of deposit

(daily outstanding amounts in EUR billions)



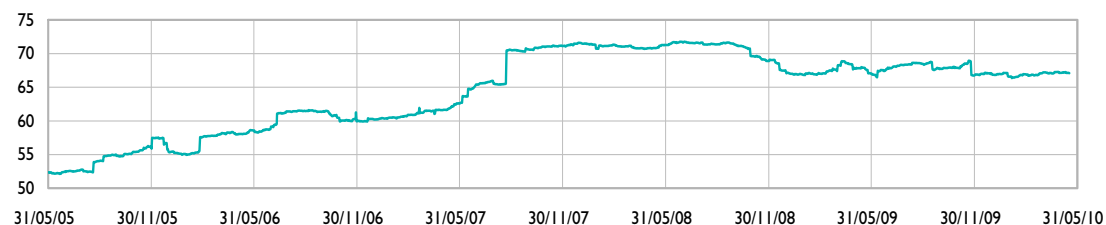
Commercial paper

(daily outstanding amounts in EUR billions)



Negotiable medium-term notes

(daily outstanding amounts in EUR billions)



Negotiable debt securities, cumulated outstandings

(daily outstanding amounts in EUR billions)

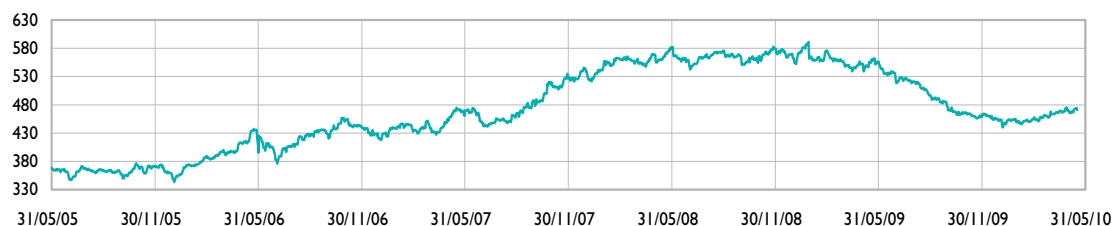


Table 32
Mutual fund shares/units – France

(EUR billions)

	2009			2010
	June	Sept.	Dec.	March
Net assets of mutual fund shares/units by category				
Money-market funds	524.11	510.80	479.23	458.05
Bond mutual funds	163.79	174.73	178.22	
Equity mutual funds	203.41	241.74	255.30	
Mixed funds	226.93	251.64	260.59	
Funds of alternative funds	16.78	16.40	16.35	
Guaranteed-performance mutual funds	0.01	0.01	0.01	
Structured funds ("fonds à formule")	68.51	68.43	66.31	

Net assets of money-market funds

(EUR billions)

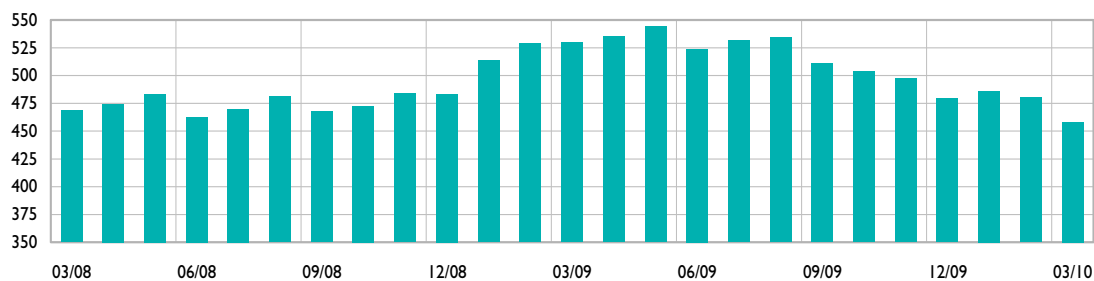


Table 33
Debt securities and quoted shares issued by French residents

(EUR billions)

	Outstanding amounts (a)		Net issues (b)			
	2009	2010	12-month total	2010		
	March (c)	March		Jan. (c)	Feb. (c)	March
Debt securities issued by French residents						
Total	2,764.4	2,982.1	210.4	9.8	6.0	44.8
Non-financial corporations	308.5	361.7	51.2	0.1	3.8	7.8
Short-term (≤ 1 year)	29.4	23.5	-5.8	1.0	2.9	-0.3
Long-term (> 1 year)	279.1	338.2	57.1	-0.9	0.9	8.1
General government	1,162.8	1,292.8	129.3	-0.3	1.1	14.8
Short-term (≤ 1 year)	197.5	229.8	32.1	-10.1	-3.6	-2.4
Long-term (> 1 year)	965.3	1,063.0	97.2	9.8	4.6	17.2
Monetary financial institutions	1,133.4	1,123.9	-13.3	10.1	1.1	23.1
Short-term (≤ 1 year)	390.9	311.6	-79.3	-5.3	-4.0	11.3
Long-term (> 1 year)	742.5	812.3	66.0	15.4	5.1	11.9
Non-monetary financial institutions (d)	159.7	203.7	43.1	0.0	0.1	-1.0

(EUR billions)

	Outstanding amounts		Net issues			Gross issues	Repurchases
	(e)		(b)			(f)	(f)
	2009	2010	12-month	2010		12-month	12-month
	March	March	total	Feb.	March	total	total
French quoted shares							
Total	882.5	1,321.4	42.3	1.4	0.8	43.9	1.7
Non-financial corporations	774.9	1,111.1	20.7	1.3	0.4	22.3	1.6
Monetary financial institutions	75.5	153.7	19.1	0.1	0.4	19.1	0.0
Non-monetary financial institutions	32.1	56.6	2.5	0.0	0.0	2.5	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) Including units issued by SPVs.

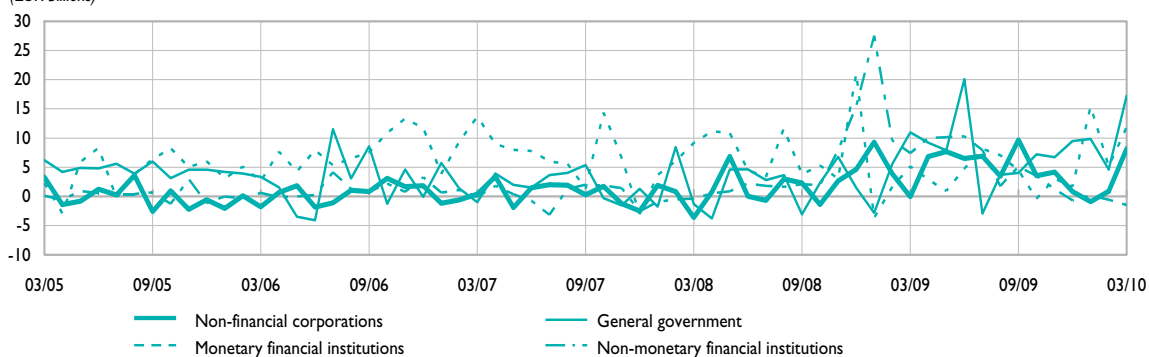
(e) Market values for outstanding amounts of quoted shares.

(f) Non-seasonally adjusted data.

Table 34
Debt securities and quoted shares issued by French residents, by sector

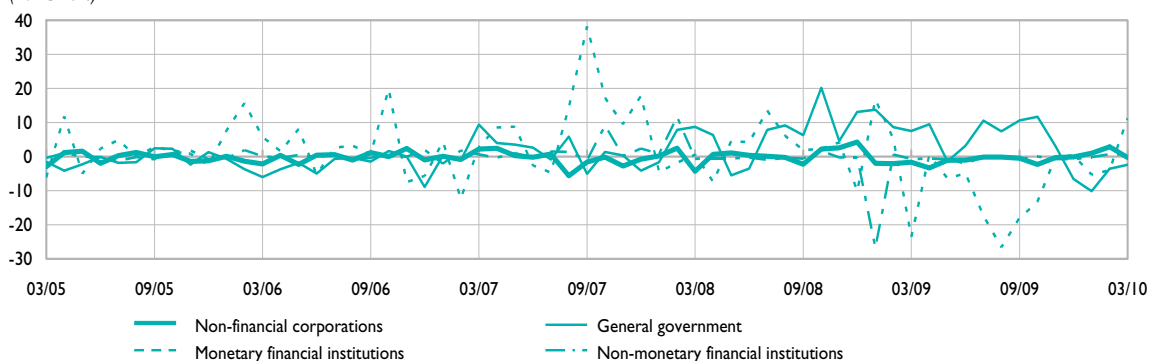
Net issues of long-term debt securities by French residents (seasonally adjusted)

(EUR billions)



Net issues of short-term debt securities by French residents (seasonally adjusted)

(EUR billions)



Net issues of quoted shares by French residents (seasonally adjusted)

(EUR billions)

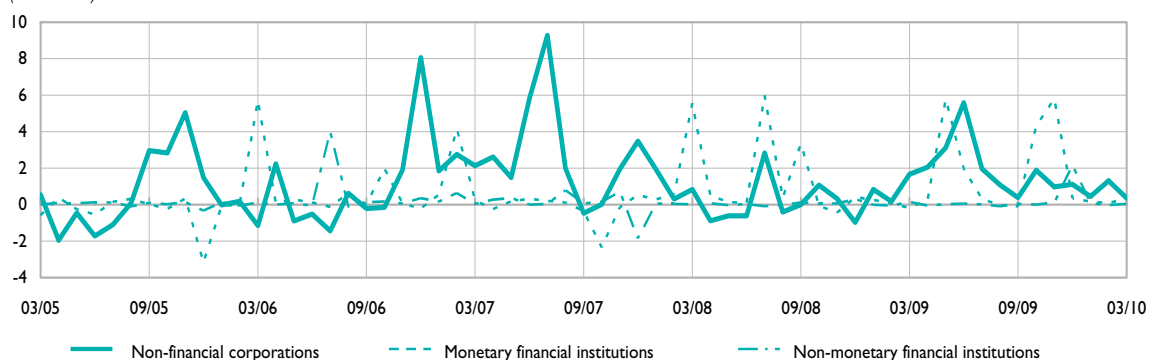


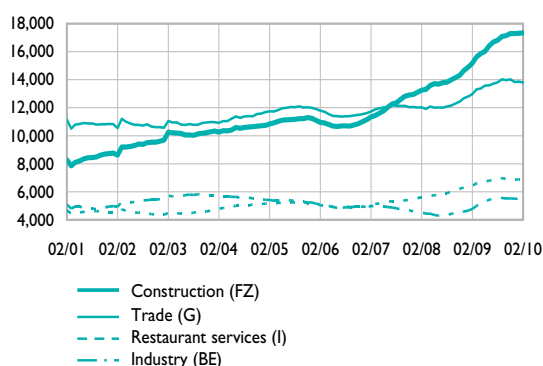
Table 35
Company failures by economic sector – France

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

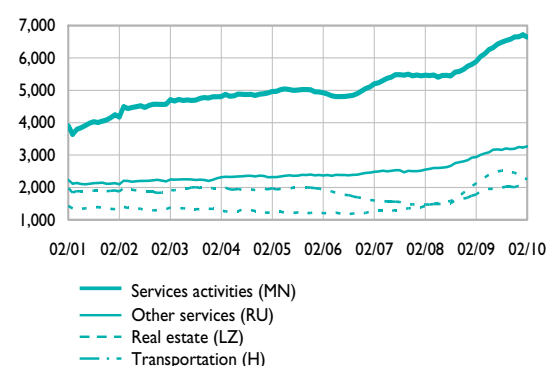
	2009											2010	
	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.
Agriculture, Forestry and Fishing (AZ)	1,270	1,321	1,323	1,329	1,326	1,323	1,342	1,363	1,371	1,355	1,341	1,356	1,372
Industry (BE)	4,769	4,992	5,146	5,273	5,425	5,481	5,528	5,561	5,512	5,525	5,510	5,494	5,459
Construction (FZ)	15,171	15,616	15,858	16,027	16,426	16,688	16,816	17,078	17,141	17,288	17,287	17,306	17,334
Trade and automotive repair (G)	12,965	13,312	13,376	13,572	13,581	13,717	13,806	14,023	13,962	14,025	13,828	13,850	13,799
Transportation and storage (H)	1,780	1,873	1,923	1,956	1,962	1,971	1,995	2,027	2,025	2,011	2,048	2,055	2,052
Accommodation and restaurant services (I)	6,433	6,611	6,689	6,732	6,790	6,812	6,878	6,977	6,903	6,879	6,865	6,889	6,894
Information and communication sector (JZ)	1,473	1,506	1,542	1,543	1,549	1,592	1,611	1,634	1,632	1,655	1,684	1,683	1,717
Financial and insurance activities (KZ)	941	981	1,012	1,052	1,081	1,108	1,116	1,110	1,122	1,129	1,131	1,137	1,112
Real estate activities (LZ)	2,126	2,250	2,310	2,395	2,465	2,497	2,518	2,512	2,478	2,459	2,381	2,309	2,249
Services activities (MN)	5,887	6,041	6,129	6,260	6,319	6,427	6,489	6,535	6,574	6,648	6,653	6,711	6,641
Education, health and social work (OQ)	1,370	1,366	1,321	1,350	1,376	1,356	1,364	1,370	1,327	1,287	1,285	1,282	1,299
Other services activities (RU)	2,934	3,007	3,052	3,087	3,165	3,176	3,159	3,205	3,183	3,196	3,247	3,234	3,267
Sector unknown	136	138	137	129	128	125	128	127	124	124	114	108	114
Total - sectors	57,255	59,014	59,818	60,705	61,593	62,273	62,750	63,522	63,354	63,581	63,374	63,414	63,309

Company failures – 12-month total

(number of companies – unadjusted data)



(number of companies – unadjusted data)



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

Source: Banque de France.

Produced 20 May 2010

Table 36
Retail payment systems – France

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

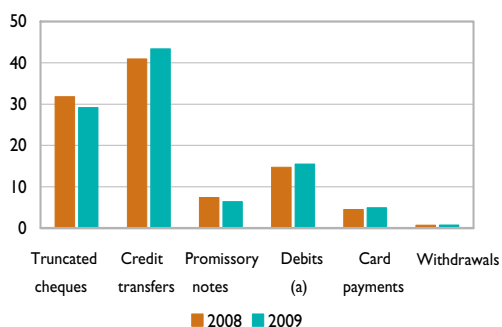
	2006	2007	2008	2009	2010			2010
					Jan.	Feb.	March	Share
Cheques	7,132	6,974	6,533	5,700	5,832	5,484	5,231	27.8
Credit transfers	7,342	7,904	8,413	8,473	8,515	8,435	8,557	45.4
of which SEPA credit transfers	–	–	29	95	129	133	141	0.7
Promissory notes	1,593	1,555	1,523	1,250	1,132	1,108	1,112	5.9
Direct debits	1,705	1,739	1,814	1,801	1,829	1,943	1,917	10.2
Interbank payment orders	155	150	147	143	99	163	81	0.4
Electronic payment orders	842	975	1,061	1,082	1,269	1,056	886	4.7
Card payments	819	864	921	957	986	928	933	4.9
ATM withdrawals	139	140	142	143	123	129	132	0.7
Total	19,727	20,300	20,554	19,550	19,786	19,245	18,849	100.0

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

	2006	2007	2008	2009	2010			2010
					Jan.	Feb.	March	Share
Cheques	12,159	11,561	10,996	10,287	10,028	9,528	9,323	19.1
Credit transfers	7,239	7,344	7,425	7,527	7,469	7,379	7,462	15.3
of which SEPA credit transfers	–	–	13	38	64	67	67	0.1
Promissory notes	390	370	355	334	312	308	306	0.6
Direct debits	7,628	7,863	7,864	8,163	8,063	8,597	9,016	18.5
Interbank payment orders	491	458	425	394	358	365	311	0.6
Electronic payment orders	27	38	47	56	66	72	33	0.1
Card payments	17,339	18,146	19,219	20,542	20,826	20,039	20,016	41.0
ATM withdrawals	2,497	2,467	2,462	2,454	2,130	2,236	2,318	4.8
Total	47,771	48,248	48,794	49,757	49,252	48,523	48,785	100.0

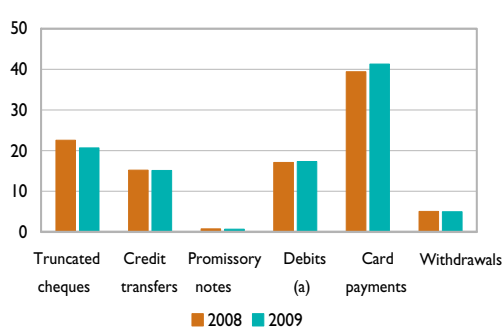
Market share developments
for main non-cash means of payment

(% of amounts exchanged)



Market share developments
for main non-cash means of payment

(% of volumes exchanged)



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

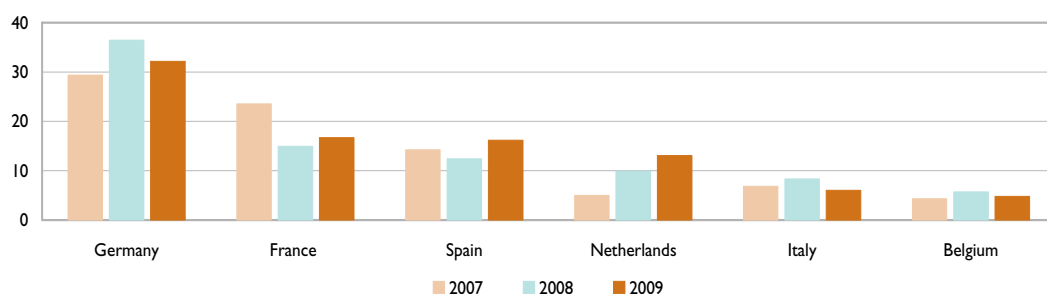
Table 37
Large-value payment systems – EU

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

	2006	2007	2008	2009	2010			2010
					Jan.	Feb.	March	Share
France	530	569	398	367	346	325	335	15.5
Germany	591	711	972	707	812	759	766	35.5
Austria	31	35	59	28	28	31	26	1.2
Belgium	76	104	152	106	103	90	96	4.5
Cyprus	–	–	1	2	3	2	1	0.1
Spain	296	344	331	356	358	302	316	14.6
Finland	15	24	33	28	32	31	33	1.5
Greece	27	33	30	29	24	28	31	1.4
Ireland	26	29	32	30	30	28	30	1.4
Italy	148	165	221	133	125	118	123	5.7
Luxembourg	31	39	60	40	43	37	38	1.8
Malta	–	–	0	0	0	0	0	0.0
Netherlands (a)	100	121	264	287	339	297	284	13.1
Portugal	13	13	16	17	22	19	18	0.8
Slovakia	–	–	–	3	3	3	2	0.1
Slovenia	–	2	2	2	4	3	2	0.1
EPM-ECB	20	27	43	47	39	35	38	1.7
Total TARGET2 euro area (b)	1,904	2,217	2,614	2,182	2,308	2,108	2,140	99.2
Non-euro area	188	202	53	16	20	17	18	0.8
Total TARGET2 EU (b)	2,092	2,419	2,667	2,198	2,328	2,125	2,158	100.0
Euro1 (c)	189	228	287	255	249	240	240	

Market share of each financial centre in the TARGET2 system

(% of turnover)



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.

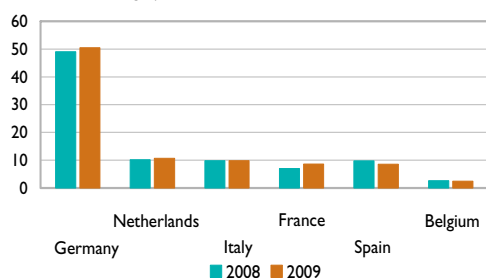
Table 38
Large-value payment systems – EU

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

	2006	2007	2008	2009	2010			2010
					Jan.	Feb.	March	Share
France	17,953	19,192	25,992	29,773	29,545	30,664	31,682	8.9
Germany	148,613	164,187	181,625	174,695	173,091	170,232	176,603	49.8
Austria	13,073	15,222	14,199	6,539	5,097	5,143	5,195	1.5
Belgium	6,802	7,993	9,884	8,517	9,415	8,751	8,600	2.4
Cyprus	–	–	392	389	368	404	423	0.1
Spain	37,439	41,792	36,167	29,580	28,342	29,254	30,315	8.6
Finland	1,223	1,392	1,587	1,652	1,607	1,648	1,665	0.5
Greece	5,951	6,334	5,117	5,692	5,380	5,519	5,755	1.6
Ireland	4,775	5,334	5,139	4,824	4,854	5,065	5,282	1.5
Italy	42,934	45,111	36,491	33,943	27,920	32,281	38,275	10.8
Luxembourg	2,631	3,399	3,037	2,847	2,830	2,869	2,990	0.8
Malta	–	–	50	59	62	67	65	0.0
Netherlands (a)	17,849	27,685	37,745	36,930	39,667	36,355	36,528	10.3
Portugal	4,190	4,774	5,072	4,191	4,122	4,111	4,042	1.1
Slovakia	–	–	–	606	550	594	605	0.2
Slovenia	–	3,152	3,018	3,073	2,931	2,850	2,947	0.8
EPM-ECB	156	169	176	312	329	319	316	0.1
Total TARGET2 euro area (b)	303,589	345,738	365,690	343,621	336,109	336,124	351,285	99.1
Non-euro area	22,607	20,442	4,277	2,364	2,431	2,824	3,082	0.9
Total TARGET2 EU (b)	326,196	366,179	369,967	345,985	338,540	338,948	354,367	100.0
Euro1 (c)	187,163	211,217	250,766	227,674	218,422	224,407	232,324	

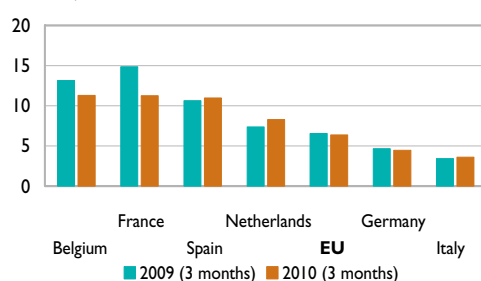
**Market share of each financial centre
in the TARGET2 system**

(% of volumes exchanged)



**Average transaction amount
in the TARGET2 system**

(EUR millions)



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.

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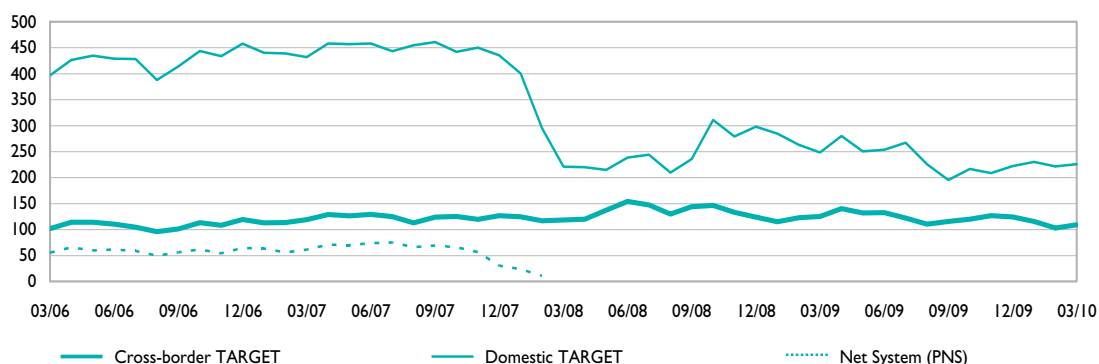
Table 39
Large-value payment systems – France

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

	2006	2007	2008	2009	2010			2010
					Jan.	Feb.	March	Share
Collateral used in domestic TARGET (b)								
French negotiable securities	14.2	11.5	51.2	114.6	111.3	111.1	110.9	32.0
Private claims	7.4	18.6	79.9	129.0	135.6	144.5	143.9	41.5
Securities collateralised through CCBM	7.2	7.2	62.8	79.9	86.0	88.6	85.1	24.5
Other securities (c)	8.4	8.8	8.2	7.9	7.5	7.6	6.8	2.0
Total	37.2	46.1	202.1	331.3	340.4	351.8	346.7	100.0

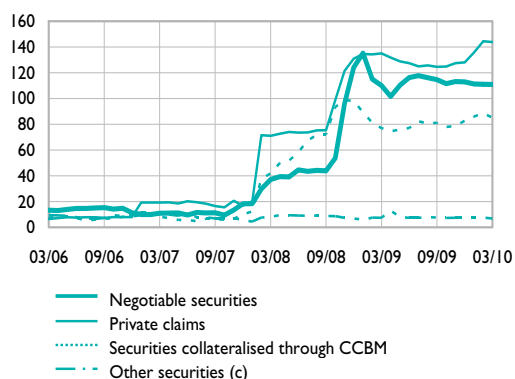
Monthly change in amounts exchanged in French payment systems (a)

(EUR billions, daily average)

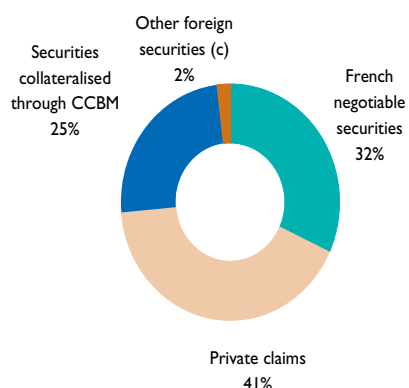


Monthly change in collateral (b)

(EUR billions, daily average)



Collateral used in March 2010 (b)



(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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