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Profits of CAC 40 companies: what contribution does foreign direct investment income make?
An assessment of the period 2005-2011

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In studying the competitiveness of major French groups, it is important to take into account the earnings they derive from overseas activities. Indeed, their competitiveness cannot be measured purely in terms of their outward exports, it also needs to be assessed in light of the performances of their foreign subsidiaries. These performances can be evaluated on the basis of the profits generated by the subsidiaries and accruing to the French groups. From a French perspective, earnings from foreign subsidiaries are recognised as income in France's national accounts, and make a positive contribution to the current account in the balance of payments, partially offsetting the trade deficit.

By analysing the foreign direct investment (FDI) income in France's balance of payments accounts, it is possible to estimate the net income generated by CAC 40 companies on their foreign investments for the period 2005-2011, and thus the share of profits derived from their overseas activities. Four conclusions can be drawn from this analysis.

• The FDI stocks and income of resident CAC 40 companies accounted for over three quarters of France's total foreign direct investment stocks and income, and can thus be considered representative.

• The share of net operating profit these CAC 40 companies generate abroad rose by nearly 10 points over the entire period, from around 52% between 2005 and 2007, to 60% in the period 2008-2011.

• French groups significantly increased their international presence in the space of just a few years: in 2011, 56% of the groups examined derived more than half of their net operating profit from abroad, up from just 40% in 2005.

• In terms of sectors, for the period under analysis, companies in the oil and gas, basic materials, consumer goods and financial sectors made the biggest contribution to net income from French outward foreign direct investment.

NB: At the time of drafting, total direct investment income figures for 2012 were estimates, as the results of French companies' foreign subsidiaries for 2012 were not yet available.

The following article is divided into two sections. The first section evaluates the share of CAC 40 resident companies in total foreign direct investment stocks and income, and attempts to estimate the total net income generated on France's outward foreign direct investments since 2005 – that is income after deduction of payments made by French subsidiaries to foreign entities that are themselves subsidiaries of French groups. The second section looks at the evolution over the seven-year period of the ratio of net FDI income to consolidated operating profit for CAC 40 companies, and breaks it down according to international presence and sector of activity.

1| Groups in the "extended" CAC 40 account for the bulk of France's foreign direct investment

Groups listed in the "extended" CAC 40[1] account for 75% of France's total outward FDI stocks and 82% of its total FDI income.

CAC 40 companies' total foreign direct equity investments amounted to EUR 622 billion in book value at end-2011, a figure which was stable on the previous year, but followed a period of steady rises from 2005 to 2010. The share of these investments in France's total outward equity investment position also remained high over the period, and was more or less steady at between 75% and 78% depending on the year (cf. Table 1).

Slight fall in income from foreign direct investments in 2011, after a spectacular rebound in 2010

In 2011, the FDI income[2] of CAC 40 companies totalled EUR 44 billion, down EUR 4 billion from the record level seen in 2010.

After temporarily peaking at EUR 42 billion in 2006, the FDI income receipts of CAC 40 companies fell in each of the three subsequent years. Although the decline was initially limited, it accelerated in 2008 due to the sharp drop in income in the financial sector; 2009 then saw another decline as the improvement in profits at foreign subsidiaries of financial companies failed to offset the sharp contraction in other sectors which were in turn hit by the global economic crisis. In total, income receipts sank by 20% in the three years before the 2010 rebound (+45%), when profits in nearly all sectors returned to or even exceeded their 2006 levels.

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1 The definition and list of groups that make up the "extended" CAC 40 are provided in Appendix 1. For simplicity, the "extended" CAC 40 is referred to as the CAC 40 throughout the rest of this document.
2 Until 2011, FDI income included only dividends and reinvested earnings. Interest payments on intercompany loans were only taken into account as of 2012.

Table 1   Foreign direct investment stocks of CAC 40 companies
(excluding real estate investments and intercompany loans)

(book value in EUR billions; share as a %)

	2005 a)	2006 b)	2007	2008	2009	2010	2011
Stock of French equity invested overseas (excluding real estate) (1)	478	533	579	639	712	812	828
Stock of equity of CAC 40 companies invested overseas (excluding real estate) (2)	373	417	437	478	543	622	622
Share of CAC 40 companies in stock of French equity invested overseas (excluding real estate) (2)/(1)	78	78	75	75	76	77	75

a) *Excluding Legrand, Natixis and Unibail-Rodamco.*
b) *Excluding Natixis and Unibail-Rodamco.*
Source: Banque de France, Business Surveys and Sectoral Statistics Directorate.

Despite these fluctuations, the share of CAC 40 companies in total FDI income remained at around 80%, which is higher than their share of France's total FDI equity position. The foreign direct investments of CAC 40 companies therefore appear to be more profitable than those of other French companies, by 1 to 3 points depending on the year. This could indicate that CAC 40 companies are better than other French groups at identifying profitable foreign investment opportunities, entering far-off markets and diversifying their risk exposure, and even, to an extent, at imposing their prices on customers and competitors.[3]

Table 2   Direct investment income receipts of CAC 40 companies

(in EUR billions, share as a %)

	2005 a)	2006 a)	2007	2008	2009	2010	2011
FDI income – total receipts (1)	43.5	51.8	50.4	43.1	41.5	58.4	53.6
FDI income receipts of CAC 40 companies (2)	34.4	41.7	41.2	38.5	33.2	47.9	43.8
Receipts of CAC 40 companies as a share of total receipts (2)/(1)	79	80	82	89	80	82	82

a) *Excluding Legrand, Natixis and Unibail-Rodamco in 2005; excluding Natixis and Unibail-Rodamco in 2006.*
Note: Total direct investment income receipts and direct investment income receipts of CAC 40 companies in 2005 and 2006 have been revised and may thus differ slightly from figures already published for those years.
Source: Banque de France, Business Surveys and Sectoral Statistics Directorate.

3   *2008 was an exception as CAC 40 companies accounted for 89% of total FDI income that year, and 75% of FDI stocks. This was in part due to heavy losses reported by a company that was not listed in the CAC 40. Excluding this company, total FDI income increases and the share attributable to CAC 40 companies falls to 85%, which is still significant and higher than in previous years.*

Table 3 Conversion of gross FDI income receipts to net FDI income receipts							
(in EUR billions)							
	2005 [a)]	**2006** [a)]	**2007**	**2008**	**2009**	**2010**	**2011**
Gross receipts of CAC 40 groups	34.4	41.7	41.2	38.5	33.2	47.9	43.8
Dividends paid to foreign subsidiaries	0.1	0.1	0.3	0.7	1.0	0.5	0.5
Net receipts of CAC 40 groups	**34.3**	**41.6**	**40.9**	**37.8**	**32.2**	**47.4**	**43.3**

a) *Excluding Legrand, Natixis and Unibail-Rodamco in 2005; excluding Natixis and Unibail-Rodamco in 2006.*
Source: Banque de France, Business Surveys and Sectoral Statistics Directorate.

As well as outward foreign direct investments, a number of French CAC 40 groups also make inward foreign direct investments in France via their non-resident subsidiaries. These FDI loops within international groups simultaneously boost direct investment income receipts and payments. The impact of these movements can be neutralised by deducting from gross income receipts the dividends paid by resident subsidiaries of CAC 40 companies to their foreign parent, in order to calculate a net income receipt figure.[4] The discrepancy between CAC 40 companies' gross and net receipts rose from around EUR 100 million in 2005 and 2006 to EUR 1 billion in 2009, reflecting the increasing financial interaction between CAC 40 companies' domestic base and their international network (cf. Table 3).

Strong contribution from oil and gas, basic materials, consumer goods and financial sectors to France's total 2011 net FDI income

In 2011, the biggest contributions to CAC 40 net FDI income came from the oil and gas and basic materials sectors: i.e. more than EUR 10 billion from just three groups. The next biggest contributors were the consumer goods sector (EUR 8.2 billion from seven companies), and the financial sector (EUR 7.4 billion from six companies).[5] By contrast, the twelve industrial and technology companies listed in the CAC 40 together contributed a total of EUR 5.2 billion to 2011 net FDI income, while the nine consumer services and telecommunications groups accounted for just EUR 4.3 billion (cf. Chart 1).

4   *Cf. Appendix 2, point 3, for details on the method of calculation.*
5   *The sectors presented here are those defined in the ICB (Industry Classification Benchmark) used by Euronext.*

Chart 1   Breakdown of CAC 40 companies' net FDI income by sector
According to the ICB classification used by Euronext

(in EUR billions)
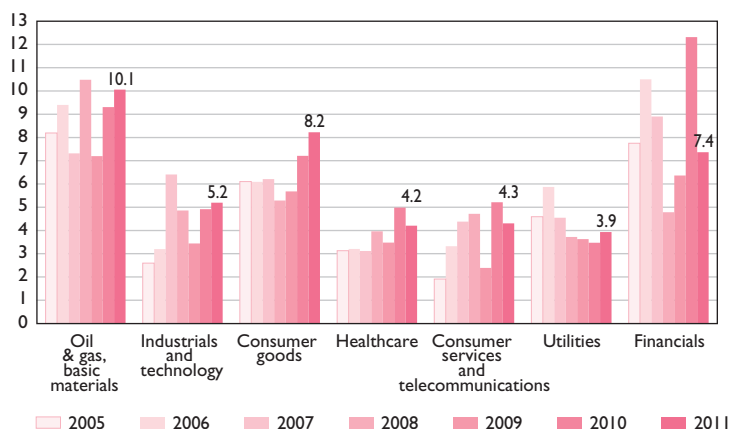
Note: ICB = Industry Classification Benchmark.
Source: Banque de France, Business Surveys and Sectoral Statistics Directorate.

In the consumer goods sector, foreign profits increased steadily to unprecedented levels in the three years leading up to the end of 2011 (cf. Chart 1). In the financial sector, meanwhile, foreign profits remained significant but were nonetheless down 40% in 2011 from the record high seen in 2010. Indeed, FDI income in the financial sector was particularly volatile over the last five years of the period due to its high exposure to international market instability. In addition to consumer goods, three other sectors saw a rise in foreign profits in 2011: the oil and basic materials sector, industrials and technology and utilities. In the latter case, the rise in profits followed a period of steady declines since 2006.

2| Net earnings of CAC 40 companies: 60% generated outside France

Consolidated accounts: from published profit to net operating profit

To assess the contribution of FDI income to group consolidated profit, the two indicators need to be as comparable as possible. However, consolidated net profit published in accordance with IFRS standards includes so-called "non-recurrent" or exceptional items such as capital gains and goodwill impairments, whereas, under the balance of payments methodology, FDI income excludes most non-operating items.

Chart 2 Attributable net profit of companies in the extended CAC 40

(EUR billions)

— Net operating profit
···· Published figures

Sources: Group registration documents published on the AMF's website and Business Surveys and Sectoral Statistics Directorate.

Consequently, in order to compare FDI income to consolidated profit, the latter needs to be "restated" to strip out certain items.[6]

This gives a "consolidated net operating profit" figure which is used as the basis for comparison with direct investment income. Consolidated net profit, stripped of one-off items, is not the same as the earnings figure published by the group and in the financial press, and does not therefore evolve in the same manner.

In particular, non-operating items are generally procyclical which increases the sensitivity of the group's aggregated profit to the economic environment and therefore makes it more volatile (cf. Chart 2). This is illustrated by the change in CAC 40 group profits between 2009 and 2010: over the period, the combined attributable net profit published by CAC 40 groups jumped from EUR 45 billion to EUR 80 billion, or by close to 80%, a trend that was widely picked up in the press. But adjusted for one-off items, operating profit increased from EUR 54 billion to EUR 76 billion or by 40%, a rise which was still significant, but half the size of the rise in net profit (cf. Table 4).

Sharp rise in the proportion of net profit CAC 40 companies generate outside France

On average, net FDI income accounted for 60% of the consolidated net operating profit of CAC 40 companies in the period 2008 to 2011, up from just over 50% between 2005 and 2007 (cf. Table 4). This rise is attributable to a number of factors. Part of it results from the consistent efforts by major French groups to boost their overseas investments over the period.

6 *Cf. Appendix 2, point 1, for details of the restatements carried out.*

Table 4 Contribution of net FDI income to CAC 40 companies' consolidated net operating profit

(in EUR billions, contribution as a % of profits)

	2005 [a]	2006 [a]	2007	2008	2009	2010	2011
Consolidated net profit (1)	74	86	90	51	45	80	72
Consolidated net operating profit (2)	66	77	79	64	54	76	74
Net FDI income (3)	34.3	41.6	40.9	37.8	32.2	47.4	43.3
Contribution of net FDI income to the consolidated net operating profit of CAC 40 groups (3)/(2)	**52**	**54**	**51**	**59**	**60**	**63**	**58**

a) *Excluding Legrand, Natixis and Unibail-Rodamco in 2005; excluding Natixis and Unibail-Rodamco in 2006.*
Sources: Group financial reports published on the AMF's website and Business Surveys and Sectoral Statistics Directorate.

It could also be down to the increasing divergence in competitiveness and in the economic climate between France and the rest of the world. Lastly, some groups may have chosen to book a larger portion of their profits in lower tax countries in order to optimise their tax liabilities.

More and more CAC 40 companies derive the bulk of their profits from outside France

The breakdown of companies according to the share of profit they generate abroad changed considerably over the period under review, with the number of "global" groups generating more than 75% of their earnings abroad rising from 10 to 12, and the number of groups "with a strong international presence", i.e. deriving more than half of their profits from abroad, rising significantly from 6 to 11. From 2010 to 2011, however, the breakdown remained relatively stable. The biggest changes occurred between 2009 and 2010, with 17 groups moving into a category with a higher share of profits from abroad, 11 into a category with a lower share of foreign profits, and 15 remaining stable (cf. Table 5).

Marked divergences between sectors: energy, commodities and finance are the sectors with the biggest international exposure

The share of profits generated abroad also varies widely between sectors. For companies in the oil and gas and basic materials sector, the specific nature of their activities means they generate between 50% and 80% of their profits outside France, depending on the year. Financial companies on the whole appear to have derived 45% to 75% of their profits from abroad in each of the years from 2005 to 2011, including in 2008 and 2011. For consumer goods companies, which generated 60% to 82% of their profits outside France in the years 2005 to 2008, 2009 was an exception in that foreign earnings exceeded consolidated net operating profit, pushing the ratio up to over 100%. This apparently surprising trend was notably

Table 5   Breakdown of CAC 40 groups by share of consolidated net profit derived from net FDI income

	2005	2006	2007	2008	2009	2010	2011
Special cases: groups *posting a consolidated net operating loss and/or negative net FDI income*	6	1	3	4	6	5	4
"French groups with a small international presence": *net FDI income accounting for 0% to 25% of consolidated net operating profit*	7	11	8	6	4	5	4
"French groups with a moderate international presence": *net FDI income accounting for 25% to 50% of consolidated net operating profit*	11	9	12	12	14	8	12
"French groups with a strong international presence": *net FDI income accounts for 50% to 75% of consolidated net operating profit*	6	13	12	13	8	13	11
"International groups": *net FDI income accounting for over 75% of consolidated net operating profit*	10	7	8	8	11	12	12
Total (number of groups)	**40**	**41**	**43**	**43**	**43**	**43**	**43**

Source: Banque de France and Business Surveys and Sectoral Statistics Directorate.

due to the results of France's two automobile manufacturers, Peugeot and Renault, whose foreign subsidiaries posted large profits in 2009, compared with an overall consolidated net loss for the groups.

For the whole of the 2005-2011 period, consumer services and telecommunications companies generated the majority of their operating profit in their home country, but if we exclude the decline in 2009, the overall trend for the period is a rise in the share of profit from abroad. Industrial and technology groups, meanwhile, derived roughly the same proportion of profits from domestic and foreign activities over the five years to end-2011. Finally, for utilities, despite the fact that the sector largely comprises "major global champions" with a strong international presence, the share of profits generated outside France declined significantly from 2005 to 2010, although with a strong rebound in 2011 (cf. Chart 3).

Although the basis for comparison between FDI income and consolidated results is fragile, even when the latter are restated to exclude exceptional items, and the share of foreign profits has most probably been underestimated (cf. Box), it seems clear that the majority of large French groups are now more exposed to the international market than to their home market, and register their best performances and the largest share of their profits outside France. The extension of their international presence over the seven-year period under review has also made them less dependent on the French economic environment. Thus, the majority of French groups are managing to withstand the trend decline in growth and the deterioration in the competitiveness of the French economy.

Chart 3 Contribution of net FDI income to consolidated net operating profit for companies in the extended CAC 40
Breakdown by sector, according to the ICB sector classification used by Euronext
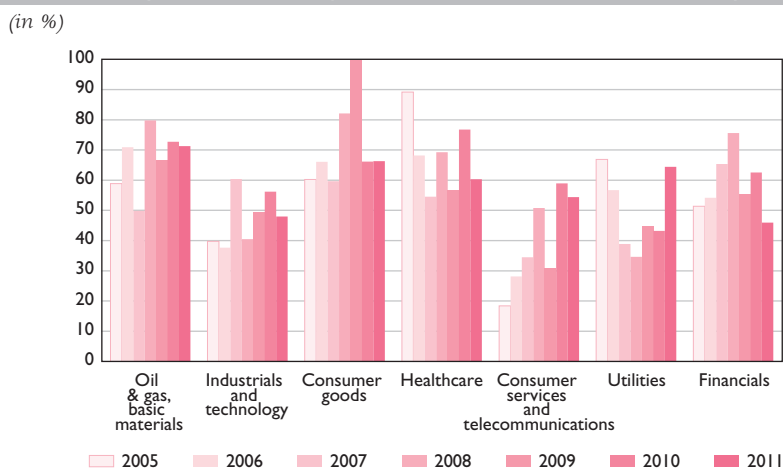
(in %)

Note: ICB = Industry Classification Benchmark.
Source: Banque de France and Business Surveys and Sectoral Statistics Directorate.

Measured in terms of FDI income alone, their increasing international exposure also makes a significant contribution to the French current account balance: EUR 43 billion in 2011, or 2.2% of GDP, which partially offset the trade deficit (3.8% of GDP).

Box

Net income from foreign direct investments: are profits generated abroad underestimated?

Although the ratio of net FDI income to consolidated net operating profit for CAC 40 companies has risen since 2005, it is still well below the 75%-80% level that several economists or analysts consider a reasonable estimate of the share of profits generated by CAC 40 companies abroad.[1] What are the reasons behind the probable underestimation of foreign profits?

The role of cross-shareholdings

Firstly, the denominator for the ratio – the total sum of consolidated net operating profit reported by CAC 40 companies – is a biased indicator that overestimates real profits because the cross-shareholdings between CAC 40 companies lead to double-counting. By way of example, L'Oréal and Total's stakes in Sanofi-Aventis' capital (9% and 7.3% respectively at end-2009), GDF-Suez's stake in Suez Environnement

[1] Artus (in 2011) or Touati (in 2006) give an approximate size, but it seems to be based more on "expert opinion" or on the extrapolation of data supplied by just a few groups (Total, L'Oréal, Saint-Gobain) on their foreign earnings, rather than on in-depth studies.

(35% at end-2009), Bouygues' stake in Alstom (30% at end-2009), EDF's in Veolia Environnement (4% at end-2009) and the cross-shareholdings between BNP Paribas and Axa (more than 5%) added an extra EUR 2.5 billion to the total amount of profits in 2009. After "consolidating" the profits of the 43 groups in the extended CAC 40, the share of income generated abroad rises by two points in 2008 and 2009, and then by slightly less in 2010 and 2011 due to reductions in cross-shareholdings and a number of capital increases.

Activities that are not included in FDI income but booked under trade in services

The second explanation is that some of the activities carried out by French groups abroad or with foreign entities and which contribute to their profits do not count as FDI income. These activities can be found in the balance of payments under trade in services: international merchanting, construction services, telecommunications services, royalties and license fees, and "other business services". According to balance of payments data, reporting companies belonging to CAC 40 groups generated a total services surplus of EUR 10 billion in 2008, and of EUR 9 billion in 2009.

It is difficult to measure the impact of these surpluses on profits as some of the services traded (construction services, telecommunications, "other business services") are comparable to a turnover, from which input costs, wages, payroll and financial charges and capital write-downs should be deducted in order to calculate the associated profit, whereas the surplus from other services (international merchanting, royalties and license fees) corresponds to a net margin and is thus more similar to pre-tax profit. However, it seems reasonable to assume that in the case of groups whose FDI income appears "abnormally" low given their widespread presence and their international reach (Air Liquide, L'Oréal, Michelin, Renault, Sanofi, Total), at least some of their services surplus should be taken into account to give a more accurate reflection of the profits derived from their foreign activities.

Interest on intercompany loans is in the process of being measured

Thirdly, until 2011, income from French outward FDI did not take into account interest on intercompany loans. To assess the contribution of these revenues to the net profit of CAC 40 companies, it would have been necessary to consolidate all debts and liabilities owed by resident companies controlled by a CAC 40 group to non-resident entities, and calculate the resulting net balance of interest. This should be easier as of 2012, with the results of a new survey for that year which provides data on intercompany loans and interest payments to countries outside France.

Even if the net profit from trade in services and the interest on intercompany loans are reincorporated into FDI income, the share of profits generated abroad is still liable to be underestimated due to the different methods of calculation used for consolidated net profit and FDI income — the former includes profits from all companies in the consolidation scope, while the latter only takes into account profits from primary foreign subsidiaries[2] (that is, subsidiaries that are directly controlled by French companies or in which French companies have a direct equity stake). There is no way of measuring by how much the figure has been underestimated as the accounts of non-resident companies included in French companies' consolidation scope are not all accessible in France.

2   *For an explanation of the differences in method see Appendix 2.*

Appendix 1

Composition of the "extended" CAC 40

The "extended" CAC 40 used as a reference in this article corresponds to the 35 resident groups which made up the CAC 40 stock index at 31 December 2012, along with the eight resident groups which have been dropped from the index, but were listed at some point after 1 January 2005 (marked as [a]).

List of the 44 groups making up the "extended" CAC 40 index		
ACCOR	LAFARGE	SOCIÉTÉ GÉNÉRALE
AIR FRANCE – KLM [a]	LAGARDÈRE [a]	SUEZ ENVIRONNEMENT [a]
AIR LIQUIDE	LEGRAND	TECHNIP
ALCATEL-LUCENT [a]	L'ORÉAL	THALÈS [a]
ALSTOM	LVMH	TECHNICOLOR [a]
AXA	MICHELIN	TOTAL
BNP PARIBAS	NATIXIS [a]	UNIBAIL-RODAMCO
BOUYGUES	PERNOD RICARD	VALLOUREC
CAP GEMINI	PEUGEOT SA [a]	VEOLIA ENVIRONNEMENT
CARREFOUR	PPR	VINCI
CRÉDIT AGRICOLE SA	PUBLICIS	VIVENDI
DANONE	RENAULT	
EDF	SAFRAN	
ESSILOR INTERNATIONAL	SAINT-GOBAIN	
FRANCE TELECOM	SANOFI	
GDF SUEZ	SCHNEIDER ELECTRIC	

a) Resident groups which were listed at some point in the index after 1 January 2005.
Note: ArcelorMittal, EADS, Gemalto, Solvay and ST Microelectronics, whose headquarters are located abroad, are not included.
Source: Euronext.

Appendix 2

Sources and methods

Differences between the net profit figures in the consolidated financial statements and the FDI income figures taken from company financial statements

1| A group's consolidated financial statements incorporate the financial results of all companies, French or foreign, which it controls or over which it has significant influence (at 31 December 2009, for example, the group Téléperformance comprised 125 subsidiaries and shareholdings, of which 115 were foreign, located in 48 different countries). Companies that it controls are fully consolidated, and those over which it has an influence but does not control are consolidated using the equity method or the proportional consolidation method. This gives the overall consolidated net profit, before minority interests, which is the figure published in the financial statements.

This consolidated net profit figure is the starting point for the analysis in this article. However, in order to compare it to the income from foreign direct investments recorded in the balance of payments, it has to be adjusted to eliminate non-operating items which, under the balance of payments methodology, must be deducted from income and treated as a financial item. The eliminated non-operating items include, for example, capital gains on the sale of tangible or intangible fixed assets, write-downs of tangible or intangible fixed assets, provisions for commercial or tax claims and litigation, write-downs of non-consolidated shares and financial assets and capital gains from their sale. Goodwill can have a positive or negative impact on operating profit. For example, in the case of LVMH in 2010, a net gain of some EUR 1 billion on the settlement of equity-linked swaps related to the acquisition of Hermès shares was deducted from the EUR 3 billion profits reported by the group (LVMH's 2010 Reference Document, page 167).

On the other hand, restructuring charges, provision charges or reversals for pensions and other benefits paid to staff or retired employees, which are not excluded from FDI income under the international balance of payments methodology, are retained in consolidated operating profit.

2| To determine the income derived from France's outward foreign direct investments, the rule in the majority of cases is to use only the financial statements of foreign branches or subsidiaries that are more than 10% owned or directly controlled by a French company.

This restricts the analysis to a much smaller number of companies than are included in the consolidation scope. Téléperformance, for example, had just 18 direct subsidiaries and shareholdings at 31 December 2009, of which 16 were foreign, compared with the 115 foreign subsidiaries in its consolidated accounts. The FDI income of a resident company comprises the operating profit of all its direct foreign subsidiaries and shareholdings, that is both the dividends received and the profits reinvested in its primary subsidiaries.

3| Method for calculating a group's net FDI income

The gross FDI income receipts of CAC 40 companies, shown in Table 2, are calculated by aggregating the FDI income receipts of all resident companies controlled by a CAC 40 group, using the full consolidation method.[1] The net FDI income receipts are then calculated by deducting from gross receipts the dividends paid to non-resident companies that are themselves directly controlled by a CAC 40 group, to avoid booking income accrued in France as French FDI income (cf. Table 3). However, in cases where non-resident companies own minority interests in CAC 40 companies, including as direct investments (such as the Swiss company Nestlé's stake in L'Oréal), the dividends from these holdings are not deducted from gross receipts.

4| Why is there sometimes a discrepancy, for a given group, between the consolidated net operating profit it generates abroad, and its total FDI income as calculated from the financial statements of its foreign branches, subsidiaries and shareholdings?

Aside from differences stemming from the regulatory, legal and fiscal environment, there are two main reasons for this:

a) the internal organisation of the group (cf. diagram),
b) differences in the time of recording.

Diagram: calculation of FDI income and consolidated net profit generated abroad

In the example, French company A owns all the capital of a company B located in Luxembourg, which in turn owns 100% of a Slovakian company D. Company D makes an operating profit of EUR 100, half of which it pays to its single shareholder B, and half of which it reinvests. Company B in turn makes an operating profit of EUR 150 (which includes the EUR 50

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1   *That is, when a company is controlled by a group, all its direct investment income is attributed to the group and not just a share proportionate to the size of the controlling interest.*

Calculation of FDI income and consolidated net profit generated abroad

A
(France)

100 %

Dividend payment
= 100

B
(Luxembourg)

$OP_B = 150$

100 %

Dividend payment
= 50

D
(Slovakia)

$OP_D = 100$

- - - -   Size of parent company stake
————   Payment transaction, payment of dividend
         by a subsidiary to parent company
OP   Operating profit
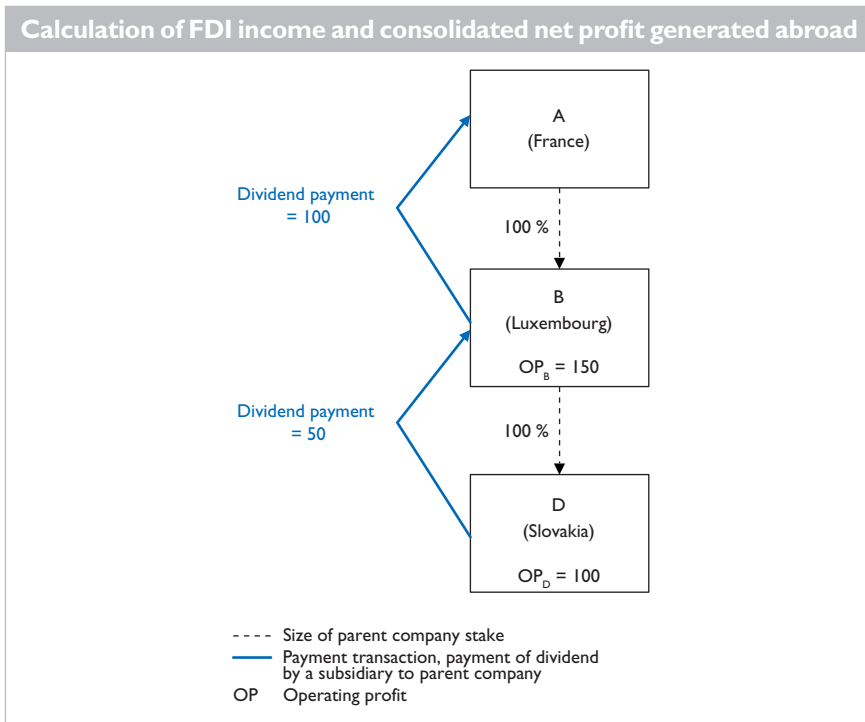
received from D in the form of financial income from shareholdings) and pays two thirds of this to its French parent company.

The direct investment income (DII) of company A, as calculated in this article, is the net operating profit (OP) of its direct subsidiary (or primary subsidiary) B, that is the sum of the dividend received from B and the earnings reinvested (RIE) by B:

$$DII_A = OP_B = Div_B + RIE_B = 150$$

The consolidated net operating profit (COP) generated abroad by the group comprised of three companies, A, B and D, is the sum of the profits made by subsidiaries B and D, minus the dividends paid by D to B, to avoid double-accounting.

$$COP_A = OP_D + OP_B - Div_D = 200$$

As the diagram shows, the discrepancies are mainly due to the results of indirect subsidiaries which accrue neither to the parent company nor to the directly controlled foreign company. If a group finances its own investments and development using the profit made by its own business units, and this profit does not accrue to controlling holdings,

its FDI income will be lower than its consolidated operating profit. In extreme cases, the amount of FDI income can be zero even if a profit has been made. However, this can only apply to unlisted groups which do not pay dividends to their shareholders, which is not the case of groups in the CAC 40.

Except in the case of a loss, the differences in method mean a group's FDI income is less than or equal to the consolidated net operating profit it generates abroad. If, in a given year, a primary subsidiary posts much higher profits than in prior years due, for example, to the positive returns on profit previously reinvested in indirect subsidiaries, the sharp rise will be deemed to stem from exceptional circumstances and will be partly reclassified as non-operating profit due to a lack of information on its causes and the need for time consistency.

Differences in time of recording between direct investment income and group consolidated net operating profit generated abroad stem from the fact that dividends paid in a given year generally relate to the previous year's earnings. Thus, when the indirectly controlled operating subsidiaries in a group post high earnings, these only accrue to the controlling holding company and are added to its profits in the following year. As a result, the earnings are only taken into account in the statistics for that year, which can lead to apparently surprising divergences with the group's consolidated net operating profit in the year under review, particularly if the economic climate changes abruptly from one year to the next.

Although they can create difficulties for statisticians, these differences in time of recording are not particularly problematic for the groups themselves: operating subsidiaries remit the undistributed earnings to the parent company or to the group's treasury department in the form of current account advances or loans so that they can use the funds, even though, legally, the funds still belong to the subsidiaries until they have been distributed to shareholders as dividends.

Access to credit of SMEs and MTEs: decline in supply or lower demand?

Lessons learned from a new quarterly business survey

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For the past year, the Banque de France has conducted a survey of manufacturing and service companies' demand for bank loans. Based on a sample of 3,000 small and medium-sized enterprises (SMEs) and 400 mid-tier enterprises (MTEs), this quarterly survey provides an insight into the perception of business leaders regarding their demand for financing, the responses obtained and credit standards.

Since the second quarter of 2012, when the survey was launched, overall demand for credit has decreased slightly for both SMEs and MTEs. For the most part, this demand was satisfied: eight out of ten companies were fully or largely successful in their loan requests.

Over the past four quarters (from Q2 2012 to Q1 2013), SMEs' demand for and access to investment credit were greater than their counterparts for cash loans. MTEs' demand for investment credit declined more than their demand for cash loans and the success rate was high.

It would therefore appear that there was a drop in firms' demand for credit rather than a decrease in supply. In this respect, according to the ECB's SAFE survey on eleven European countries, the percentage of SMEs whose application was granted in full or to a very large extent over the March 2012 to 2013 period stood at 72%, as opposed to 77% in France for the same period.

Key words: SME, MTE, demand and supply of credit, cash loans, investment credit, survey

JEL codes: E51, E22, G30, G32, L25, C80

Firms' funding needs for the operating cycle and investment reflect economic and business conditions. Demand and availability of credit is therefore a key issue. This is particularly important for SMEs' and MTEs' access to bank loans as they make little use of market financing.[1]

1| Why a new survey?

Is access to credit determined by supply or demand issues?

Is the recent decline in loan outstandings due to a slowdown in bank lending or lower demand from firms? In other words, are credit developments influenced by the behaviour of banks or firms? Demand for credit can be dampened by economic uncertainty that prompts firms to scale back activity or postpone their investment plans. Moreover, banks can reduce their loan supply by being more selective in order to avoid a deterioration in the quality of their loan portfolio.

One of the roles of the Banque de France is to ensure that the economy is properly financed

The Banque de France collects a broad range of information on credit from corporate balance sheets and credit institutions. Since the start of the economic crisis, there has been an increasing need for information on firms' access to bank financing. In Europe, this need was partly met through ad hoc surveys or studies using corporate balance sheet data (Insee, 2011; Banca d'Italia, 2012; IMF, 2013; Garicano and Steinwender, 2013; Hainz and Nabokin, 2013). For instance, in France, independent SMEs do not appear to have been affected by credit rationing between 2004 and 2010 (Kremp and Sevestre, 2012).

In order to provide smooth and timely information, the Banque de France put in place, in Q2 2012, a new survey among French SMEs and MTEs that measures the intensity of the demand for credit and the corresponding supply (see Box 1).

The OECD and the ECB promote regular surveys among firms on credit supply and demand

In February 2007, the OECD published a summary of the studies on Financing SMEs and Entrepreneurs, which led in 2009 to the setting-up of a working group comprising 21 countries, including France, to create an annual scoreboard (OCDE, 2011 and 2012). In 2011, in the light of these studies, recommendations were issued, encouraging countries to construct quantitative indicators using surveys among companies and separating the

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1 *In 2011, bank loans accounted for 64.1% of SMEs' borrowings, while loans from the group and related entities and other debts stood at 34.1%. Bond issuance, for its part, only accounted for 1.4% of borrowings (Cayssials and Servant, 2012).*

Box 1

Methodology of the quarterly survey of the access to bank financing of SMEs and MTEs in France

The new survey, launched in Q2 2012, is conducted in two sectors of the economy: manufacturing (53%) and services (47%).

Its scope reflects the companies surveyed each month for the Bank's Monthly Business Survey. These companies are asked whether they make independent financial decisions. The results presented here concern SMEs (less than 250 employees) and MTEs (between 250 and 5,000 employees). Based on a sample of over 3,000 SMEs and 400 MTEs, this survey shows how business leaders perceive their access to bank loans.

After surveying firms about their demand for credit lines and the corresponding success rate over the past 12 months, the questionnaire focuses on the quarter under review: use of credit lines, cash loans and investment credit requested and the corresponding success rate. These requests for cash loans or investment credit are taken as meaning new requests on top of any requests for credit lines over the past twelve months.

The sample is large and broadly unchanged from one quarter to the next, which enhances the statistical relevance of the changes observed regarding loan requests, the responses obtained and the credit standards.

This study presents the results of the four available quarters (Q2, Q3, Q4 2012 and Q1 2013); they are expressed as a percentage of the companies surveyed. Firms that report that they have requested a loan then say whether they were successful in obtaining it or not.

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demand for credit from the supply; the OECD observed the difficulty in interpreting the results of surveys on the supply and demand for credit based on balances of opinion.

End-2011, during a seminar on SMEs' access to financing, the ECB stressed the usefulness of qualitative and quantitative surveys on changes in the demand for credit and loan availability for firms (ECB, 2011; Insee, 2011). Its half-yearly "SAFE" Survey on the access to finance of SMEs in the euro area gives the results on the number of SMEs reporting that they have requested external financing and on the responses they obtained, over the past six months. In the four largest European economies, 1,000 companies including 900 SMEs were surveyed – 500 companies in the seven other countries taking part in the survey – (see Box 2). When conducting these studies, it was stressed that it would be very useful to combine the survey results with other surveys or data sources as well as to have, like

Box 2

Access to credit of SMEs in France: comparison between the new Banque de France quarterly survey and the ECB's SAFE survey

The ECB publishes the results of its SAFE survey on the access to finance of SMEs in the euro area and in particular in France.

*• **Frequency:** the Banque de France's questions cover the past three months and those of the SAFE survey cover the past six months (the results presented below are recalculated for comparable periods).*

*• **Sectoral scope:** the Banque de France survey covers firms in the manufacturing and market services sectors from its monthly business survey whereas the SAFE survey also includes the construction and trade sectors.*

*• **Sample size:** the Banque de France survey comprises over 3,000 SMEs (stating that they make independent financial decisions) whereas the SAFE survey comprises 900 SMEs in France.*

*• **Questions:** the Banque de France survey differentiates between cash loans and investment credit. The SAFE survey questionnaire is longer. For example, it asks questions about the company's general economic situation. The questions on credit lines are also more detailed.*

New loan requests (cash loans credits and Investment credit)
Comparison SAFE for France/Banque de France survey on the access to credit of SMEs in France

(%)

a) Demand
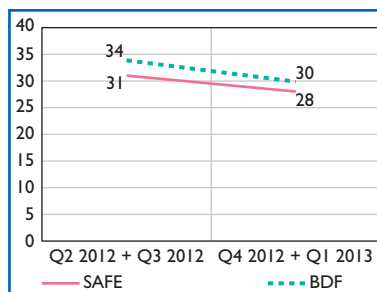
b) Fully successful or obtained over 75% of the amount
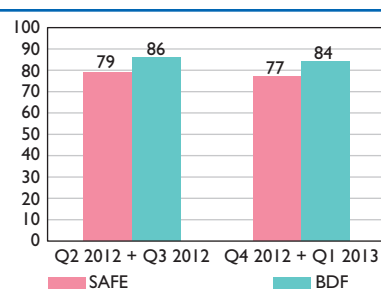
Sources: Banque de France and ECB calculations (2013).

.../...

> • **Length of existence:** *the Banque de France survey started in Q2 2012. The SAFE survey started in early 2009.*
>
> **Recalculated on a half-yearly basis, on the common period, from April 2012 to March 2013, the results of the Banque de France survey in terms of SMEs' demand for credit and access to credit and their changes are comparable to those of the SAFE survey.**
>
> **International comparability:** *the SAFE survey is carried out in an identical manner in eleven countries. At the aggregate level, 72% of SMEs were fully or largely successful in their loan request during the last six months under review by the SAFE survey. **French SMEs fared better than average in Europe:** 77% of them were fully successful or obtained over 75% of the amount. This rate was the highest in Germany (88%) and Finland (81%), and the lowest in Greece (47%) and Ireland (45%).*

in France, a single identification number by company in order to make these consolidations.[2]

Therefore, drawing on the findings of international studies carried out under the aegis of the OECD and the ECB and on other recent studies conducted in France (Insee, OSEO, KPMG), the Banque de France launched a new survey based on a short and simple questionnaire, at a quarterly frequency, with the results published ten days after the end of the quarter. Its aim is to identify, each quarter, the firms that have requested a loan from their traditional banking partners and ascertain how many of these firms were successful in obtaining financing.

2| Sluggish overall demand for credit

Since the start of the survey, only around one-quarter of SMEs and MTEs have requested new bank loans (see Charts 1a and 1b). Indeed, firms do not request loans every quarter. One-quarter of SMEs do not have bank loans in their balance sheets.[3]

However, SMEs' overall loan demand is more stable than that of MTEs: over the past twelve months, SMEs' demand has fallen slightly while that of MTEs has declined more significantly.

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2 *Hainz and Nabokin (2013), in the light of a survey among almost 10,000 firms in 27 countries in Europe and Central Asia, stress the importance of differentiating between access to credit and the usage of credit and being able to compare the information from surveys with balance sheet data in order to conduct research on firms' access to credit.*
3 *In France, almost one-quarter of SMEs have little or no bank debt (less than 2% of liabilities) (Companies Observatory, 2012).*

Charts 1   New loans – demand (cash loans and Investment credit)

(%)

a) SMEs

b) MTEs
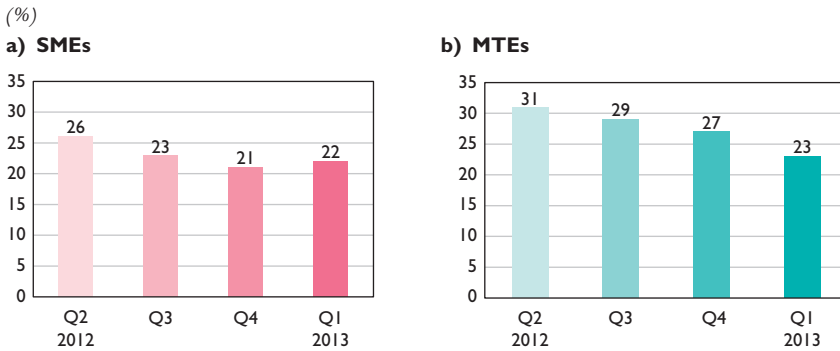
Source: Banque de France.

Both SMEs and MTEs were largely successful in obtaining loans

The success rate of bank loan applications (fully or over 75%) remained fairly stable at high levels for both SMEs and MTEs: over eight firms out of ten were fully or largely successful in their loan request (See Charts 2a and 2b).

It is easier for SMEs to access investment credit than cash loans

A small proportion of SMEs apply for cash loans (except credit facility drawdowns): 8% in Q2 2012 and 6% in the three following quarters (see Chart 3a). Access to this type of credit is more limited than for the other loan types (see Chart 4a). SMEs' demand for investment credit is, proportionately, stronger than that for cash loans (Chart 3b) and its success rate is high (Chart 4b).

Charts 2   New loans – success rate (cash loans and Investment credit)
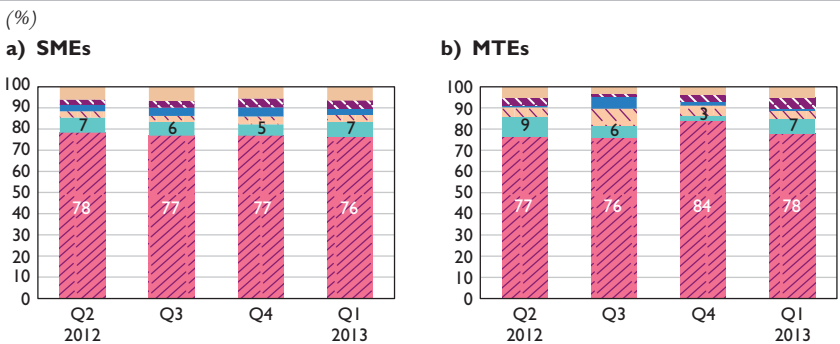
(%)

a) SMEs

b) MTEs

Success in obtaining a new loan (fully or over 75%):
- Fully successful
- Largely successful (> 75%)
- Partly successful (< 75%)
- Refused by the bank
- Refused by the firm (cost/collateral too high)
- No response

Source: Banque de France.

Charts 3   SMEs' new loans – demand

(%)

a) Cash loans

b) Investment credit
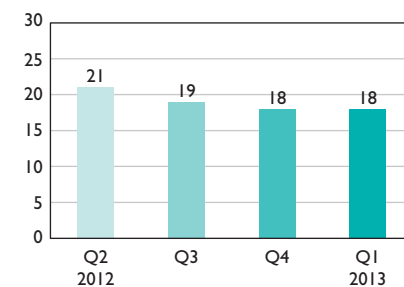
Source: Banque de France.

Charts 4   SMEs' new loans – success rate
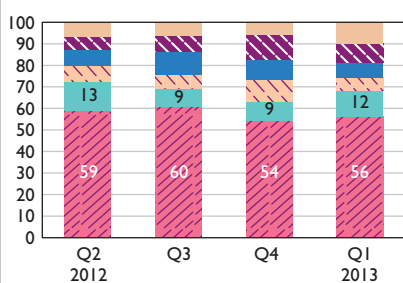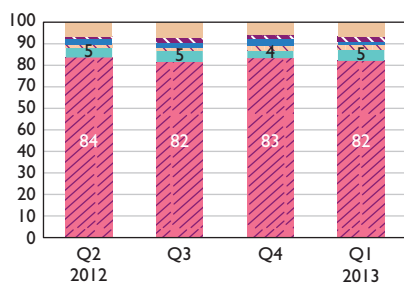
(%)

a) Cash loans

b) Investment credit

Success in obtaining a new loan (fully or over 75%)
- Fully successful
- Largely successful (> 75%)
- Partly successful (< 75%)
- Refused by the bank
- Refused by the firm (cost/collateral too high)
- No response

Source: Banque de France.

Charts 5   MTEs' new loans – demand

(%)
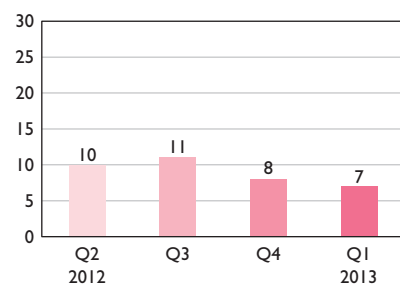
a) Cash loans

b) Investment credit
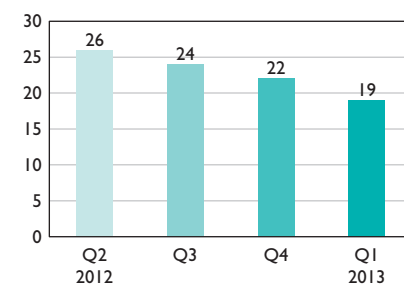
Source: Banque de France.

Charts 6   MTEs' new loans – success rate

(%)

a) Cash loans

b) Investment credit

Success in obtaining a new loan (fully or over 75%) {
- Fully successful
- Largely successful (> 75%)
- Partly successful (< 75%)
- Refused by the bank
- Refused by the firm (cost/collateral too high)
- No response

Source: Banque de France.
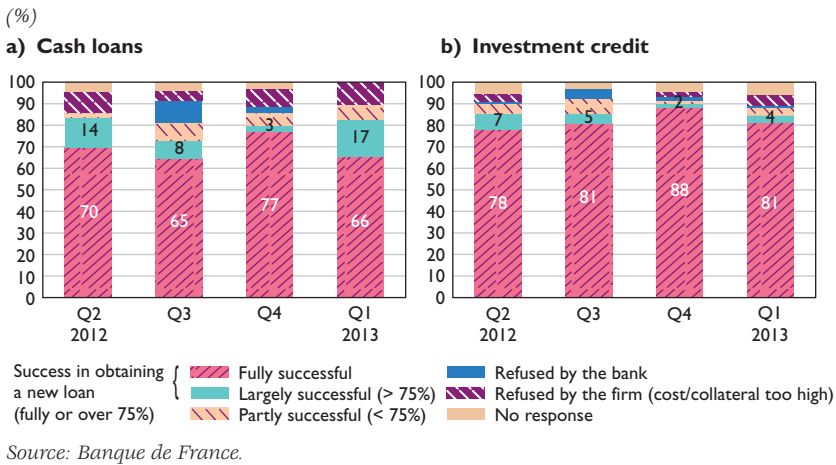
MTEs have reduced their demand but have not reported financing obstacles

Slightly more MTEs than SMEs request cash loans (see Chart 5a). MTEs were largely successful in obtaining cash loans over the whole period even though the rate fell significantly in Q3 2012 (see Chart 6a). MTEs' demand for investment credit declined further than that for cash loans (see Chart 5b). Their success rate for obtaining investment credit remained high (see Chart 6b).

Only a small proportion of firms were subject to credit rationing

Only a small proportion of firms were partly successful in their applications for investment credit or cash loans (less than 75% of the amount requested) or met with a refusal, either from the bank, or the firm (due to unacceptable conditions). In Q1 2013, 3% of SMEs were refused a loan by the bank and 4% of SMEs obtained less than three-quarters of the loans requested.

SMEs requested fewer credit lines than MTEs…

To meet their operational requirements, firms can ask their banks for credit lines that give them drawing rights during the year, and/or to obtain specific cash loans during the year.

SMEs request fewer credit lines than MTEs: one-third of SMEs compared to half of MTEs (see Charts 7). Demand decreased in the period under review; nevertheless, this observation should be qualified given the cycle of demand for credit lines: loan negotiations with banks most often take place once a year, usually in the second quarter, in relation to the publication of the firm's annual accounts.

Charts 7 Credit lines – demand over the past 12 months

(%)

a) SMEs

Q2 2012	Q3	Q4	Q1 2013
39	37	34	33

b) MTEs

Q2 2012	Q3	Q4	Q1 2013
54	51	52	46
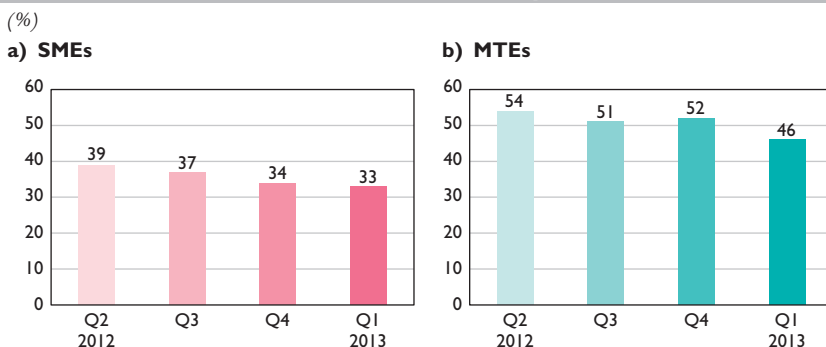
Source: Banque de France.

Charts 8 Credit lines – success rate

(%)

a) SMEs

Q2 2012	Q3	Q4	Q1 2013
10	9	10	10
80	81	79	78

b) MTEs

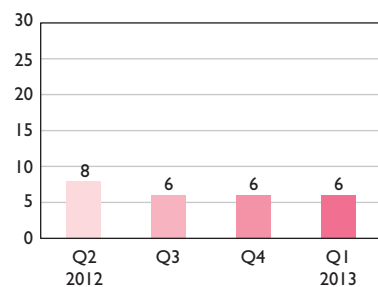| Q2 2012	Q3	Q4	Q1 2013
8	11	9	11
81	79	80	80

Success in obtaining a new loan (fully or over 75%)
- Fully successful
- largely successfull (> 75 %)
- Partly successfull (< 75 %)
- Refused by the bank
- Refused by the firm (cost/collateral too high)
- No response
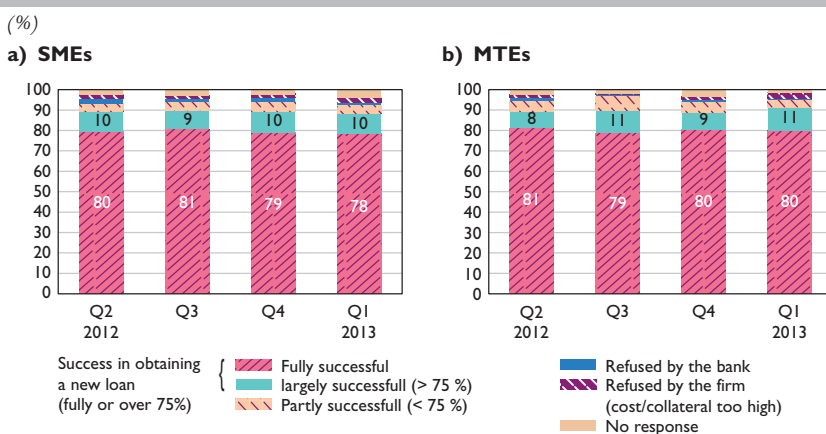
Source: Banque de France.

Access to credit lines was easy and stable for both SMEs and MTEs. Irrespective of firm category, restrictions on the availability of credit lines were limited, with more applications being partly met than refused (see Charts 8).

However, around 10% of SMEs and MTEs that had already obtained drawdown rights saw their credit lines reduced by banks (see Charts 9).

...and use them less

The use of credit lines, i.e. the actual loan drawdown, was fairly stable for both categories of firm. SMES made less use of credit lines than MTEs.

Charts 9   Credit lines reduced by banks over the past 3 months

(%)

a) SMEs

b) MTEs

Source: Banque de France.
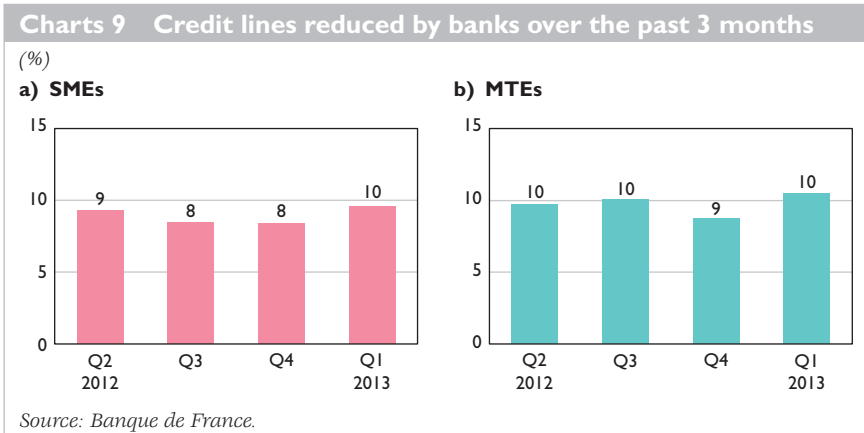
The overall cost of financing was perceived to be stable or lower by most firms

Most SMEs and MTEs did not perceive a rise in the overall cost of bank financing (see Charts 10).

In Q1 2013, credit standards in terms of cost seemed less tight for SMEs than for MTEs: proportionately fewer of the former reported an increase in the overall cost of financing and a greater number reported a decline.

Banks requested additional collateral from one out of ten firms to obtain a loan (see Charts 11). Such collateral requirements concerned both SMEs and MTEs to the same extent and were relatively stable over the period.

Charts 10   Perception of the overall cost of financing

(%)

a) SMEs

b) MTEs

Source: Banque de France.
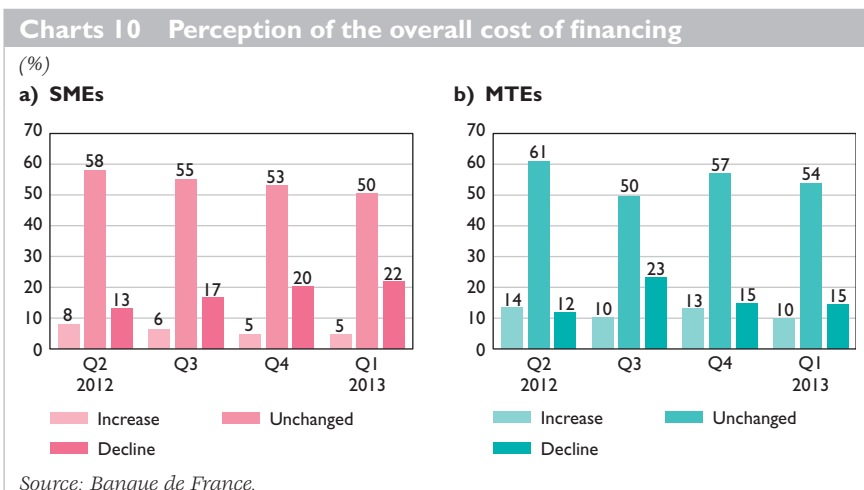
Charts 11   Requests by banks for additional collateral

(%)

a) SMEs

b) MTEs
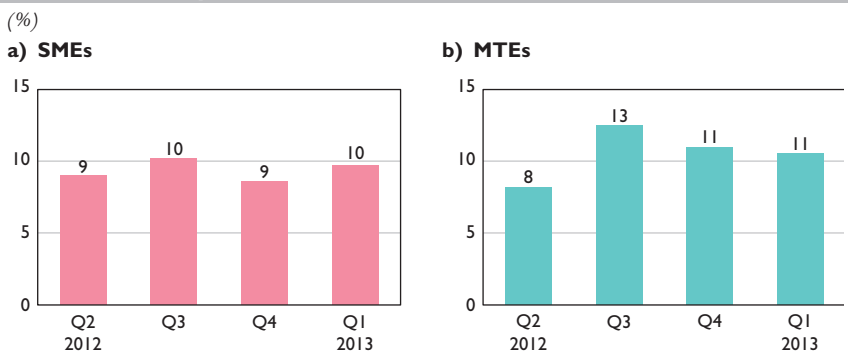
Source: Banque de France.

In conclusion, this new simple and rapid survey provides a regular insight into the credit demand of SMEs and MTEs. It would appear that there was a drop in firms' demand for credit rather than a decrease in supply. A comparison with the ECB's SAFE survey shows that SMEs in France have slightly easier access to credit than their euro area counterparts.

References

Banca d'Italia (2012)
Financial Stability Report, No. 4, November.
http://www.bancaditalia.it/pubblicazioni/stabilita-finanziaria/rapporto-stabilita-finanziaria/2012/rsf_2012_4/en_stabfin_4_2012/Financial-Stability-Report-4.pdf

Banque de France (2013)
Quarterly survey of the access to bank financing of SMEs and MTEs in France.
http://www.banque-france.fr/en/economics-statistics/stats-info/detail/quarterly-survey-on-the-access-to-bank-financing-of-smes-and-mtes-in-france.html

Cayssials (J.-L.) and Servant (F.) (2012)
« Les PME en France en 2011 », *Banque de France Bulletin*, pp. 11-34, 3rd quarter.

Companies Observatory (2012)
« Les PME en Europe : les disparités entre pays et secteurs sont plus fortes en 2010 qu'avant la crise », *Banque de France Bulletin*, No. 188, pp. 22, 2nd quarter.
http://www.banque-france.fr/economie-et-statistiques/entreprises/comptes-dentreprises-en-europe.html

European Central Bank (2011)
"Access to finance: what can we learn from survey data", Seminar, December.
http://www.ecb.int/events/conferences/html/ws_sme_surveydata.en.html

European Central Bank (2013)
"Survey on the access to finance of small and medium sized enterprises in the euro area, October 2012 to March 2013", April.
http://www.ecb.int/pub/pdf/other/accessofinancesmallmediumsizedenterprises201304en.pdf?6b64b46f2d2a65175a4bd52d114a48e3

Garicano (L.) and Steinwender (C.) (2013)
"Survive another day: does uncertain financing affect the composition of investment?", *CEP Discussion paper* No. 1188, February.

Hainz (C.) and Nabokin (T.) (2013)
"Measurement and determinants of access to loans", *CESifo Working papers*, April.

Insee (2011a)
« *Enquête sur l'accès au financement des PME employant au moins 10 personnes* », *Insee Résultats,* No. 53, Économie, August.
http://www.insee.fr/fr/themes/document.asp?ref_id=atf2010

Insee (2011b)
« *En 2010, la moitié des PME d'au moins dix personnes ont recherché un financement* », *Insee Première,* No. 1379, November.
http://www.insee.fr/fr/themes/document.asp?reg_id=0&ref_id=ip1379

International Monetary Fund (2013)
"Acute risk reduced: actions need to entrench financial stability", *Global Financial Stability Report,* Old Risks, New Challenges, Chapter 1, April.
http://www.imf.org/External/Pubs/FT/GFSR/2013/01/index.htm

KPMG – CGPME (2012)
« *Baromètre sur le financement et l'accès au crédit des PME* », December.
http://www.lejournaldesentreprises.com/complements/2013/01/14/175604_baro-kpmg-cgpme-financement-acces-credit.pdf

Kremp (E.) and Sevestre (P.) (2012)
"Did the crisis induce credit rationing for French SMEs?", *Journal of Banking & Finance*, 37, 3757-3772, 15 June 2013.
www.elsevier.com/locate/jbf

OECD (2011 and 2012)
"Financing SMEs and Entrepreneurs 2012. An OECD scoreboard".
http://www.oecd.org/cfe/smes/financingsmesandentrepreneurs2012anoecdscoreboard.htm

OSEO (2013)
56ᵉ enquête semestrielle, la conjoncture des PME, January.
http://www.oseo.fr/a_la_une/actualites/56e_enquete_de_conjoncture_des_pme

Firm competitiveness:
summary report on the CompNet conference
Banque de France
20 and 21 September 2012

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The Banque de France and the European Central Bank jointly organised a workshop on 20 and 21 September 2012 for CompNet, the international network for research into competitiveness. The workshop provided a forum for innovative research into firm level competitiveness. The papers presented dealt with different aspects of business internationalisation and productivity dynamics across sectors. Particular attention was paid to the role played by firm selection and sector reallocation of market share as growth factors for aggregate productivity. More generally, the research gave a clearer picture of how microeconomic dynamics influence the aggregate fluctuations of competitiveness factors.

With the euro area crisis, competitiveness has returned to the forefront of political debate and economic analysis. The definition of this concept varies from one author to another. Sometimes it relates to an economy's export performance, hence the term "external competitiveness". A broader interpretation links competitiveness with the ability of an economy to raise per capita income in the long run. This definition brings competitiveness closer to productivity. It is used by the World Economic Forum, organiser of the annual meeting in Davos, Switzerland, which defines competitiveness as "the set of institutions, policies, and factors that determine the level of productivity of a country".

International comparisons of competitiveness are predicated on one or other of these definitions, depending on the indicators. In economic policy practice, unit labour cost indicators, which divide the figure for real hourly productivity by hourly costs, are used regularly to explain differences in current account dynamics (implicitly assuming a causal link between the two concepts). But recent research, particularly Gabrisch and Staehr (2012), has shown that current account imbalances in the euro area are not necessarily explained by unit labour cost differentials.[1] Other papers, notably Rodriguez *et al.* (2012), show that countries such as Spain managed to maintain their share of the world export market during the pre-crisis decade even though their unit labour costs deteriorated. This research highlights the so-called "Spanish paradox", which arises when analysing competitiveness.[2]

Given the limitations of conventional indicators, the European Central Bank (ECB) has established an international network, CompNet (Competitiveness Network), to study these issues. Made up of European researchers, including members of national central banks, academics and members of international organisations, CompNet has two main objectives:

• use detailed statistical data available at macroeconomic and microeconomic levels to establish new indicators for measuring competitiveness (using a broad-based definition not confined solely to external competitiveness);

• identify mechanisms for increasing per capita income in the long run.

The projects undertaken by the three CompNet working groups (macroeconomic analysis, microeconomic analysis, research into global value chains) are intended to meet both these objectives.

The second CompNet workshop was held on 20 and 21 September 2012 at the Banque de France. It comprised four sessions, each aimed at

1 *The article shows that there is no causal link from unit labour costs to current account imbalances.*
2 *Gaulier and Vicard (2012) show that unit labour costs are correlated mainly with imports, not exports.*

better understanding certain aspects of economic functioning relating to international openness. In consequence, the sessions mainly addressed CompNet's second objective of identifying mechanisms for increasing per capita income in the long run. Each session focused in particular on the microeconomic aspects of competitiveness, echoing the latest theories of international trade (particularly Melitz, 2003). These theories have shown the importance of reallocation among firms within each sector, linked to international trade openness, which contributes to aggregate productivity growth. This work forms the basis for numerous studies showing the importance of intra-sector dynamics and links between firms, thus explaining movements in macroeconomic indicators.

The first session of the workshop looked in particular at the process of aggregating microeconomic shocks at firm level and the resulting impact on macroeconomic fluctuations. The second session examined the role played by firms' international expansion strategies, notably as regards foreign direct investment (FDI). At the third session, researchers presented their work on firm-level export dynamics. The fourth session dealt with trade in services.

Between the sessions, Prof. John Haltiwanger (University of Maryland) and Prof. Eric Bartelsman (Vrije Universiteit Amsterdam) gave keynote lectures. Both reviewed the academic literature on productivity dynamics and the contribution to the process of reallocation and selection among firms in different business sectors. This material provided the basis for identifying relevant competitiveness indicators. As a result, the CompNet researchers decided to embark on a large-scale project to draw up international comparisons.

During the second day, members discussed progress on ongoing projects. The three working groups met in parallel sessions in order to discuss the papers presented at the workshop, launch collaborative projects, and itemise the data available at national central banks that could be used in future work. Participants also discussed methodologies for analysing the data and prepared objectives for working group outcomes.

This article summarises and discusses the work presented at the academic session on the first day. The first section reviews the presentations by Profs Haltiwanger and Bartelsman on the influence of microeconomic dynamics on aggregate sector productivity. The second section deals with how microeconomic shocks affect aggregate fluctuations, highlighting the concept of "granularity" and the role played by links between firms. The third section discusses firms' strategies for expanding internationally through FDI and mergers and acquisitions. The fourth section examines firm export dynamics. And the conclusion looks at future avenues of research for CompNet.

1| Firm selection, reallocation, and productivity dynamics

Throughout the workshop, and particularly during the keynote speech by John Haltiwanger, the key focus was the impact of firm dynamics on aggregate fluctuations. Prof. Haltiwanger began by stating that productivity differences between countries were partly determined by the process of reallocation among firms in each sector, as well as by productivity dynamics at firm level. Work by Hsieh and Klenow (2009) documents that differences in per capita income across countries – the United States, India and China in the case of this study – are partly due to market share distribution between firms having different levels of productivity, with unproductive firms holding substantial market shares as a result of entry barriers and other distortions in various markets. According to the authors, if market share is reallocated to the most productive companies in each sector, resources would be allocated more efficiently and the income gaps between rich countries and emerging or developing economies would narrow.

By and large, the results of work based on productivity estimates (total factor productivity or apparent labour productivity) depend heavily on the input data. A standard practice is to use a sector-level price index to deflate nominal values, thereby overlooking price heterogeneity among firms. Yet at firm level, prices are usually impacted by demand factors. Foster *et al.* (2012), for example, show that the youngest firms on a market tend to charge lower prices. This can be explained as a strategic decision to garner more market share in the firm's early years. Accordingly, the absence of price measures at firm level skews the calculation of indicators, e.g. unit labour costs, based on productivity levels.

Prof. Haltiwanger's presentation also highlighted the importance of the firm selection process in each sector – aside from merely reallocating market share among surviving firms – in terms of aggregate productivity patterns. The entry/exit process for firms or establishments in the United States accounts for a significant share of gross job flows. Since firms that go out of business are generally less productive than those that survive from year to year, their demise tends to substantially increase aggregate productivity in their sector.

Based on that observation, recent works (particularly by Bartelsman *et al.*, 2013) have used indicators of productivity dispersion among firms in the same sector, rather than just the mean or median, to explain differences in productivity levels across countries (in the same vein as Hsieh and Klenow, 2009, but taking account of entries/exits in each sector). The findings show the significance of distortions in metrics such as

entry costs and regulations, which tend to reduce the covariance between firm size and productivity, and ultimately the aggregate productivity of an economy.

Prof. Eric Bartelsman presented the results of a study, carried out with Eurostat and national statistical offices, which resulted in the creation of sector indices for each country, based on microeconomic data. The indicators will be used to further develop international comparisons. They also reflect the heterogeneity of firms in each sector, and can ultimately be compared with indicators for the economic and institutional environment. The data collected for the study cover the manufacturing and services sectors in 15 countries during the period 2000-2009.[3]

2| Idiosyncrasy and aggregation of shocks at macroeconomic level

One of the papers presented during the first session (Di Giovanni *et al.*, 2012) concerned the aggregation of microeconomic shocks. Presented by Isabelle Méjean, it emphasised the role of firm size distribution (cf. the presentations by Profs Bartelsman and Haltiwanger), and in particular the influence of some large firms, in terms of aggregate fluctuations. The sharp disparity between firm size in each sector is characterised by very large firms holding dominant positions (this is also referred to as "granularity" or "granular economy"). Granularity means that idiosyncratic shocks affecting very large firms (or "coarse grains") make a sizable contribution to aggregate volatility. Apart from firm size, relationships between companies play a crucial role. This is because idiosyncratic shocks spread through inter-firm linkages and influence the economic cycle. The results of this study, based on data for French firms, can be used to quantify the role played by granularity and inter-firm relations as regards fluctuations at aggregate level. The findings show that the contribution made by companies' "network" effect is almost twice as large as the effect created by the very heterogeneous distribution of firms within a sector.

The paper presented by Julien Martin (Kleinert *et al.*, 2012) emphasised the role of multinational firms in propagating shocks between countries. Very large firms contribute significantly to the "granularity" discussed in the previous presentation. Their size certainly counts, but their relations with foreign subsidiaries are an additional transmission channel. In a multinational firm, idiosyncratic shocks often spread symmetrically among different subsidiaries. Based on French firm data, the paper shows that

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3 *A similar project to collate indicators computed from microeconomic data is currently underway. Involving some 20 European countries belonging to CompNet, it is coordinated by the network's microeconomic working group. On this point, the keynote speech by Eric Bartelsman provided valuable information that CompNet members can use to implement the project.*

shocks occurring in the home countries of groups with French subsidiaries contribute significantly to aggregate volatility in the regions of France where they are located.

3| Foreign direct investment and mergers & acquisitions

The second session of the workshop addressed firms' internationalisation strategies, with reference to FDI. Paola Conconi (Conconi *et al.*, 2013) underlined the impact of uncertainty on firms' international growth decisions. The presentation used export and FDI data for Belgian firms for the period 1998-2008. The results show that they seek to explore markets beforehand through exports rather than FDI, since the latter strategy would involve a higher fixed cost. Uncertainty, as measured by the exit rate of firms from a foreign market, tends to favour the strategy with lower fixed costs, i.e. exporting, rather than FDI. By contrast, as the firms in the study gained more experience in a market, they grew more willing to invest in it.

The purpose of the study presented by Farid Toubal (Blonigen *et al.*, 2012) was to explain M&A decisions for French companies targeted by foreign investors. The theoretical model shows that domestic companies that might be taken over are those with a high ex ante level of productivity but are also subject to a negative idiosyncratic shock. Foreign companies in particular are attracted by the export networks of bought-out firms, before the negative productivity shock is observed. The authors present an empirical model derived from theory, which can be used to test these predictions. Tests based on French data across 1999-2006 validate the predictions of the theoretical model: French companies that have a broader export base and that have experienced a negative productivity shock are more likely to be acquired by a foreign company.

4| Firm export dynamics

The third session, on export dynamics, highlighted how factors such as a company's age, size and experience on export markets are important for trade performance. Luca David Opromolla (Impullitti *et al.*, 2013) presented a theoretical model for identifying more accurately the determinants of firm export dynamics. Using firm-level heterogeneity, idiosyncratic shocks and fixed costs of entry to export markets, the model replicates a number of stylised facts. In particular it reproduces the persistent nature of firms' exporting status and the dynamics of entry and exit from the export market depending on productivity levels.

These theoretical findings were corroborated by the presentation from Antoine Berthou (Berthou and Vicard, 2013). Based on export data for French companies for the period 1994-2008, the authors demonstrate in particular that survival rates on export markets increase in line with the firm's experience on foreign markets and the size of its exports. Conditional on survival, firms' export growth rate tends to decline with export experience whereas no clear trend is observable for the relationship between the average size of exports and their growth rate. The study also shows that export volatility, defined as the extent to which dynamics (entry and exit) on different markets contributes to export growth, decreases with a firm's size and, to a lesser extent, its experience on foreign markets.

5| Conclusion and future avenues of research for CompNet

The three sessions illustrate the complexity and multiple facets of internationalisation processes, which can now be explored in greater depth due to the microeconomic analysis conducted through CompNet.

Recent research has revealed the importance of taking service export performance into account, in addition to merchandise exports, especially when looking at developed economies. CompNet has naturally taken an interest in the determinants of international trade in services, and one session on the workshop's second day was given over to this issue. The presentations by Martin Schmitz (ECB) and William Powers (United States International Trade Commission, USITC), were based on an analysis of macroeconomic data. Mr Schmitz's paper gave details of a study showing the importance of trade in services when computing equilibrium exchange rates. The presentation by Mr Powers analysed recent trends in US trade in services. And a paper presented by Elena Biewen (Deutsche Bundesbank) using data on German firms for 2001-2011 typologised the characteristics of firms engaging in international trade in services.

By and large, these papers contributed to a review of the literature on several aspects of competitiveness, and they also laid out future avenues of research for CompNet members. In particular, a collaborative project involving Deutsche Bundesbank, Banco de España, and the Banque de France will use firm-level data to draw up the first international comparison of individual performances in trade in services.

Other collaborative projects, already mentioned, benefited from the discussions and presentations that took place at the CompNet conference organised by the Banque de France. The largest ongoing project, involving 20 or so European central banks, seeks to create a database

of cross-country comparable indicators that break down information, by sector and year, on the distribution of intra-sector productivity rates and the correlation with firm size. Now in the final phase, this data collection exercise will be a public asset for CompNet researchers and will be used to conduct research that will be used to facilitate international comparisons of competitiveness.

References

Bartelsman (E.), Haltiwanger (J.) and Scarpetta (S.) (2013)
"*Cross-country differences in productivity: the role of allocation and selection*", *American Economic Review*, 103(1): 305-34.

Berthou (A.) and Vicard (V.) (2013)
"*Firms' export dynamics: experience vs. size*", *ECB Working Papers* (forthcoming).

Blonigen (B.), Fontagné (L.), Sly (N.) and Toubal (F.) (2012)
"*Cherries for sale: export networks and the incidence of cross-border M&A*", *NBER Working Papers*, 18414.

Conconi (P.), Sapir (A.) and Zanardi (M.) (2013)
"*The internationalization process of firms: from exports to FDI*", *CEPR Discussion Paper* 9332.

Crespo Rodríguez (A.), Pérez-Quirós (G.) and Segura Cayuela (R.) (2012)
"*Competitiveness indicators: the importance of an efficient allocation of resources*", Banco de España, *Economic Bulletin*, January.

Di Giovanni (J.), Levchenko (A.) and Méjean (I.) (2012)
"*Firms, destinations, and aggregate fluctuations*", RSIE *Discussion papers*, 630.

Foster (L.), Haltiwanger (J.) and Syverson (C.) (2012)
"*The slow growth of new plants: learning about demand?*", *NBER Working Papers*, 17853.

Gabrisch (H.) and Staehr (K.) (2012)
"*The euro plus pact: competitiveness and external capital flows in the EU countries*", *Bank of Estonia Working Papers*, 2012-5.

Gaulier (G.) and Vicard (V.) (2012)
"*Current account imbalances in the euro area: competitiveness or demand shocks?*", Banque de France, *Quarterly Selection of Articles* No. 27.

Hsieh (C.) and Klenow (P.) (2009)
"*Misallocation and manufacturing TFP in China and India*", *Quarterly Journal of Economics*, 124(4), pp. 1403-1448.

Impullitti (G.), Irarrazabal (A.) and Opromolla (L.) (2013)
"*A theory of entry into and exit from export markets*", *Journal of International Economics*, 90(1), pp. 75-90.

Kleinert (J.), Martin (J.) and Toubal (F.) (2012)

"*The few leading the many: foreign affiliates and business cycle comovement*", CEPR DP9129, September.

Melitz (M.) (2003)

"*The impact of trade on aggregate industry productivity and intra-industry reallocations*", Econometrica, 71(6), pp. 1695-1725.

French investment funds during the crisis (2008-2012)

Alain-Nicolas Bouloux and Gisèle Fourel
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Net assets held by French investment funds stood at EUR 1,254 billion at the end of 2012, up EUR 65 billion (5%) year-on-year, slightly higher than at end-2008 (EUR 1,233 billion). France remained in second place for investment funds in the euro area, coming in behind Luxembourg but ahead of Ireland. French money market funds improved their position within the euro area during 2012, increasing their share of the European market to 40% (2011: 35%). However non-money market fund growth in France, at 6%, lagged behind foreign competitors, with Luxembourg, Germany and Ireland accounting for 80% of the increase in total outstanding amounts in the euro area during 2012.

With short-term rates very low, net subscriptions for money market funds returned to positive figures in France at EUR 13 billion after three years of decline in outstanding amounts. Money market fund management companies have had to comply with stricter European rules on portfolio composition since July 2011. Money market funds continued to reduce long-term debt security holdings, which now make up just 13% of portfolios. The emphasis has shifted to shorter-term instruments: short-term debt securities and money market fund shares/units. As a result, the average residual term of debt instruments fell from 18 months in 2008 to 5 months in 2012.

Net non-money market fund assets advanced EUR 138 billion between 2008 and 2012 (18%), boosted by valuation gains totalling EUR 178 billion, which outweighed the EUR 40 billion of net redemptions. In 2012 alone, outstanding amounts rose by EUR 50 billion, whilst net redemptions came in at EUR 25 billion. The bulk of redemption requests related to equity funds (EUR 23 billion). In contrast, bond funds posted net subscriptions totalling EUR 6 billion. The overall portfolio structure has not changed much against end-2011. Portfolios comprised 39% equities, on a par with debt securities at 36% (33% long-term debt and 3% short-term debt), while fund shares/units made up the remaining 25%.

French investment funds are a key source of financing for the national economy. As at end-2012, investment funds held EUR 444 billion in securities issued by residents, credit institutions, non-financial corporations and general government.

T his article gives an overview of money market and non-money market fund performance in France[1] from 2008 to 2012. In accordance with their management objectives, money market funds mainly invest in short-term products linked to money market rates. The portfolio composition of non-money market funds varies according to the fund type: equity, bond, mixed or other investment funds.[2]

French money market and non-money market funds held net assets totalling EUR 1,254 billion at the end of 2012, which equated to just over 17% of total assets in the euro area (EUR 7,200 billion). The euro area makes up one-third of the global market.

1| French money market funds within the euro area

1|1 France is a leader within the European money market fund market

Net assets[3] held by money market funds in the euro area declined in 2012 for the fourth year in a row. The trend was mainly driven by the sharp drop in short-term interest rates following the financial crisis in 2008 and new European legislation on money market funds,[4] which entered into force in July 2011. Against the backdrop of widespread contractions, net assets actually added 4% in 2012 both in France (+ EUR 15 billion) and in Ireland (+ EUR 11 billion).

Within the euro area, new legislation introduced additional portfolio composition requirements for money market funds in 2012. Low market rates also affected asset allocation. Net assets in European money market funds decreased by 27% between 2008 and 2012, falling 8% in 2012, while the number of funds dropped to 987 (end-2008: 1,721; end-2011: 1,275).

France retained the top position for money market fund issues, accounting for 40% of outstanding amounts within the European market. Ireland regained the title of second-largest European issuer, outstripping Luxembourg, whose

1 This presentation of the activities of French investment funds draws on the monthly statistical submissions collated by the Banque de France (Directorate of General Statistics) for Eurosystem. The Autorité des marchés financiers (AMF – French Financial Markets Authority) is the supervisory body for French investment funds. The AMF assists with data collection by providing all information required by the Banque de France.

2 Employee savings schemes, formula funds, venture capital funds, innovation investment funds, managed futures funds, and local investment funds. See Appendix 2 for more details.

3 Total net fund assets valued at market value and after deducting liabilities; the book value of securities (shares or units) issued by the fund.

4 As of 1 July 2011, money market funds are required to comply with the new classification rules arising from the implementation of the European Securities and Markets Authority (formerly the Committee of European Securities Regulators – CESR) guidelines, which recommended a "harmonised definition of money market funds". The new, harmonised European definitions are generally stricter than the previous national definitions. Money market funds are required to comply with rules on maturities and portfolio exposure to interest rate, liquidity, credit and credit rating risk. Many funds do not meet the new criteria and are now classified as non-money market funds.

Chart 1   Euro area money market funds: outstanding amounts

(in EUR billion)
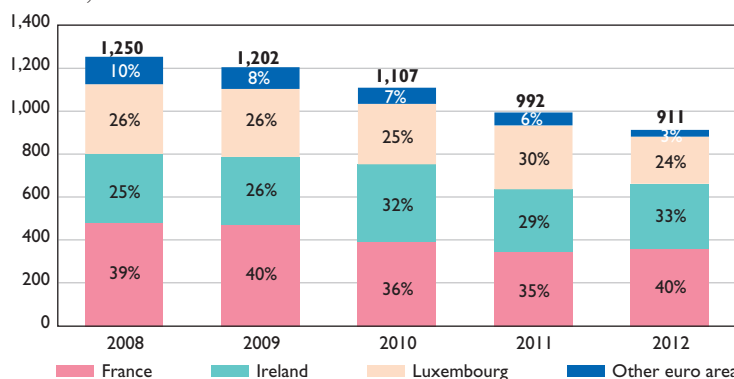
Source: European Central Bank.

share of the euro area market slipped to 24% (end-2011: 30%; end-2008: 26%). The volume of outstanding amounts in other euro area countries was halved, accounting for just 3% of total outstanding amounts in the euro area at end-2012. The number of money market funds fell by 25% in the euro area in 2012. The consolidation trend begun in 2011 –primarily in Ireland, where the total number of funds halved from 206 at end-2010 to 109 at the end of 2011– continued in France in 2012, where fund numbers fell by 17%. However, at EUR 0.9 billion, the average French fund volume remained significantly lower than in Ireland (EUR 3 billion) at the end of 2012.

Other countries, which reported lower average fund volumes, saw outstanding amounts fall significantly in 2012, dropping 31% in Luxembourg and 25% in other euro area countries.

Chart 2   Money market fund shares/units by region

(in EUR billion)
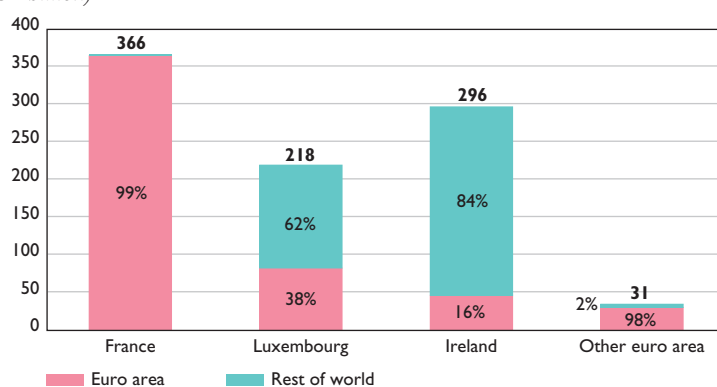
Source: Banque de France.

In contrast to Ireland and Luxembourg, French money market funds shares/units tend to be held by investors in France (95%) or the euro area as a whole (99%).

Only 38% of money market funds shares/units in Luxembourg and 16% in Ireland were in the hands of euro area investors.

1|2 Return to net inflow for French money market funds

After three years of net redemptions between 2008 and 2011, which resulted in a 27% reduction in net assets, net subscriptions in French money market funds returned to positive figures in 2012.

1|2|1 Net subscriptions pick up in 2012

At the end of 2012, French money market funds reported outstanding amounts totalling EUR 366 billion, spread between 402 funds. The restructuring of money market funds continued apace in 2012: 84 funds disappeared during the year as a result of mergers and reclassifications. The consolidation of money market funds was largely driven by:

• Very low money market rates, making money market funds extremely sensitive to changes in management costs. Combining funds is one way of managing costs. It has become harder to achieve positive returns. In fact, some funds posted exceptional losses.

Chart 3   French money market funds: change in net assets

(in EUR billion)
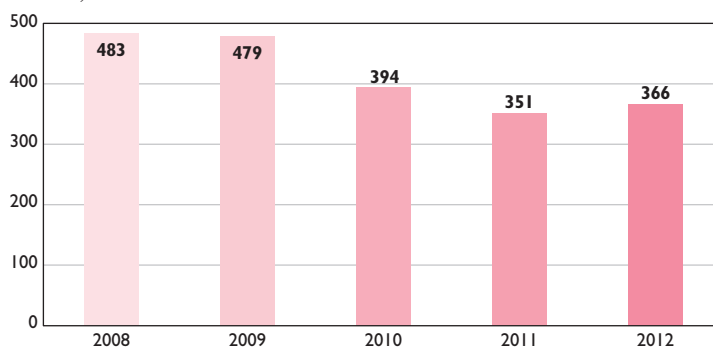
Source: Banque de France.

Chart 4   French money market funds: net subscriptions and valuation gains

(in EUR billion)

Net subscriptions
Valuation
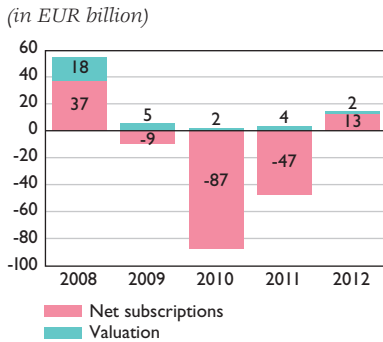
Note: fund classification changes have been reported as subscription flows since 2010. We have therefore adjusted the figures published before this date in order to provide comparable data.
Source: Banque de France.

Chart 5   French money market funds: net subscriptions and money market rates

(rates in %; net subscriptions in EUR billion)

EONIA (left-hand scale)
3-month EURIBOR (left-hand scale)
Net subscriptions to money market funds (right-hand scale)
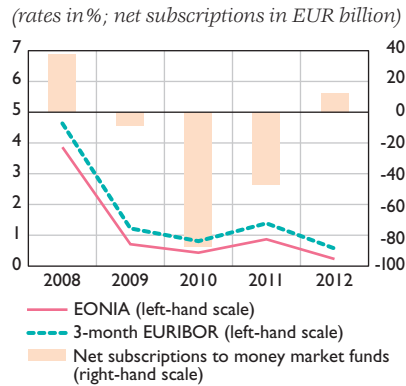
Source: Banque de France.

• The revised definition of money market funds entered into force on 1 July 2011 and brought fund numbers down. Portfolio composition now has to comply with a number of criteria[5] in order for the fund to qualify for this category. The new constraints have prompted some money market funds to move into non-money market fund categories. The European requirements have effectively encouraged greater uniformity in the sector. Outstanding amounts in French money market funds increased by EUR 15 billion (4%) in 2012 after three years of falls between 2009 and 2011 (total loss: EUR 132 billion).

The higher volume of outstanding amounts in 2012 was largely driven by increased subscriptions, which came in at EUR 13 billion during the year, while valuation gains –mainly income capitalisation– stood at just EUR 2 billion due to low short-term interest rates.

After rallying slightly in 2011, the benchmark money market rates (EONIA and three-month EURIBOR) dropped to unprecedented lows in 2012. In contrast to 2009 and 2010, falling yields were accompanied by higher net subscriptions to money market funds in France in 2012. The bulk of subscriptions occurred in the first half of the year and came from financial institutions, particularly insurance companies (see Chart 6).

5 *Money market funds now have to comply with a range of limits relating to the maturity of investments, portfolio sensitivity to interest rate, liquidity and credit risks or the ratings of securities held.*

1|2|2   Inflows buoyed up by insurance segment

In 2012, money market funds returned to positive inflows at EUR 13 billion (2011: EUR -47 billion), buoyed up by EUR 30 billion in net subscriptions from financial institutions,[6] predominantly insurance companies. In contrast, household subscriptions declined for the fourth year in a row, falling EUR 11 billion in 2012 and EUR 50 billion over four years. Non-financial corporations also made net redemptions of EUR 4 billion in 2012, but redemption volumes were lower than in the previous two years (2010: EUR 21 billion; 2011: EUR 46 billion).

As at end-2012, the majority of French money market funds shares/units were held by financial corporations, primarily insurance companies. The proportion held by insurance companies increased by 3 percentage points year-on-year to 27%. Insurance companies continued to adjust portfolio weightings, adding EUR 14 billion in favour of money market funds and cutting the proportion of non-money market funds by EUR 15 billion. This shift could be linked to efforts to balance certain categories of unit-linked instruments in response to:

• negative returns on equities during the second half of 2011;
• low bond yields;
• the need to protect value gains in certain segments.

Chart 6   French money market funds: sectoral breakdown of net subscriptions

(in EUR billion)
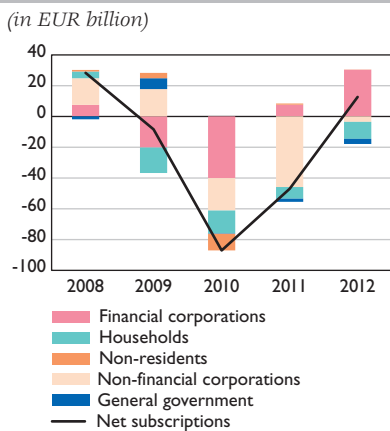
Source: Banque de France.

Chart 7   French money market funds: breakdown of shares/units by sector in 2012 *(and 2011)*
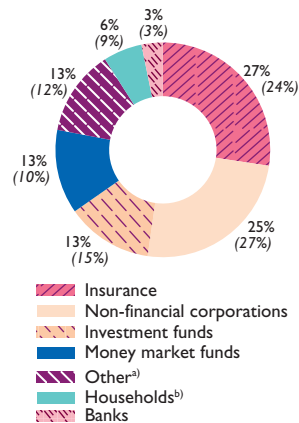
a) General government, other resident and non-resident sectors.
b) Individuals and non-profit institutions serving households.
Source: Banque de France.

6 *The term financial institutions is used here to mean banks, insurance companies, money market funds, non-money market funds and other financial institutions.*

This also reflects management companies' desire to increase the proportion of liquid assets in order to allow for potential life insurance policy redemptions, either for euro-denominated or unit-linked policies.

1|3 Money market funds reduce investment duration

Money market funds are adjusting their portfolios and reducing the average investment term, which in turn has decreased returns. At the end of 2012, portfolios comprised 72% short-term debt securities with maturities of less than one year, 15% units in money market funds and 13% debt securities with an initial term of over one year (see Chart 8).

Chart 8 French money market funds: changes in portfolio composition
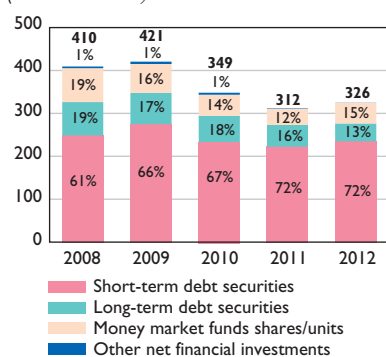
(in EUR billion)

Source: Banque de France.

Chart 9 French money market funds: portfolio composition by issuing sector

(in EUR billion)
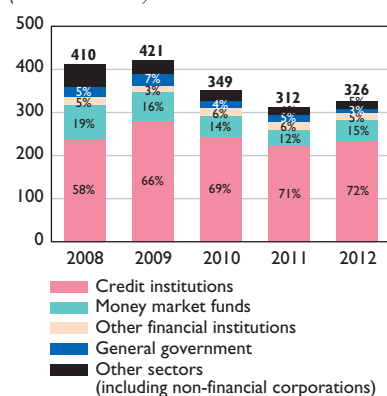
Source: Banque de France.

1|3|1 Portfolios contain highly liquid assets

Money market funds must comply with a number of prudential rules that regulate their investments. These rules aim to ensure share holders' security by limiting the risks taken by the funds. As a result, portfolios consist mainly of short-term securities.

The volume of outstanding amounts has declined by EUR 84 billion since 2008. The bulk of the reductions have focused on long-term debt securities –down EUR 36 billion or 47%– and money market funds shares/units, down EUR 31 billion (39%).

In 2012, outstanding amounts advanced EUR 14 billion (4%). Money market funds reduced long-term debt securities by EUR 9 billion (18%)

while making net acquisitions of short-term debt securities totalling EUR 12 billion and money market funds shares/units worth EUR 11 billion.

Over the past five years, the proportion of bank securities held in French money market fund portfolios has increased significantly, climbing from 58% in 2008 to 72% in 2012. Acquisitions of short-term debt securities, predominantly issued by credit institutions, have more than offset sales of long-term debt securities from the same sector.

Changes in European legislation (see 1|2|1) are one reason for these portfolio adjustments. Average duration is now much shorter (see below). The massive wave of withdrawals observed in 2010 and 2011 against the backdrop of very low short-term interest rates may also have prompted fund managers to increase liquidity levels across all asset classes.

1|3|2 Average residual term of debt securities continues to fall

The average residual term of debt securities decreased constantly throughout the period under review. Between 2008 and 2012, average residual terms fell from 18 months to 3 months, driven by the growing proportion of short-term debt securities in portfolios and the erosion of residual terms for long-term instruments.

Chart 10 French money market funds: residual term of debt instruments

(in years)
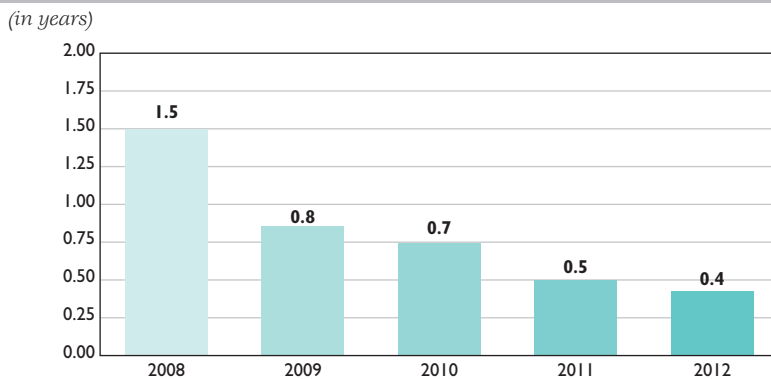
Source: Banque de France.

2| Changes in non-money market fund outstanding amounts varied within euro area

After a slight decline in 2011, net non-money market fund assets within the euro area grew by 16% in 2012. The increase was partly the result of higher prices on the financial markets and varied in scale from one country to the next. French non-money market fund outstanding amounts rose by just 6%, with valuation gains partially offset by net redemptions.

2|1 Non-money market funds in France see outstanding amounts advance more slowly than European counterparts

Between 2008 and 2012, non-money market funds within the euro area posted a 63% increase in outstanding amounts, adding EUR 2,427 billion to climb from EUR 3,862 billion to EUR 6,289 billion. This equates to seven times the figure for money market funds (2011: fivefold; 2008: threefold). In 2012, outstanding amounts increased by EUR 865 billion, or 16% year-on-year.

Chart 11 Euro area non-money market funds: outstanding amounts

(in EUR billion)

Year	France	Luxembourg	Ireland	Germany	Netherlands	Other euro area	Total
2008	19%	31%	8%	20%	4%	16%	3,862
2009	18%	32%	9%	19%	8%	14%	4,802
2010	17%	34%	11%	18%	8%	12%	5,556
2011	15%	33%	14%	19%	8%	11%	5,424
2012	14%	34%	15%	19%	8%	10%	6,289
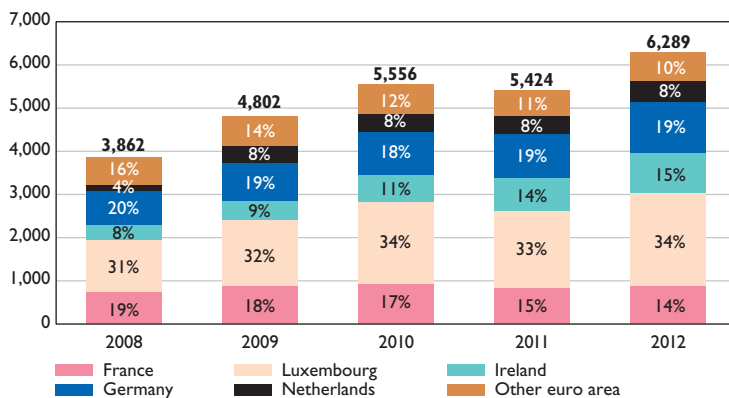
Source: Banque de France.

Growth rates were particularly high in Luxembourg (21%), Ireland (21%) and Germany (16%) in 2012. These three countries accounted for 80% of all growth in the euro area. Luxembourg and Germany consolidated their leading positions in the euro area, accounting for one-third and one-fifth of all outstanding amounts. Ireland overtook France with a 15% market share against France's 14%, while the Netherlands remained in fifth place with 8% of net outstanding amounts.

The number of funds increased in Luxembourg, Germany and Ireland, while France and the remainder of the euro area saw fund numbers decline.

2|2 French non-money market funds boosted by valuation gains

By its nature, the non-money market fund sector is more broadly diversified than its money market counterpart. The sector encompasses four major fund categories: equity, bond, mixed and other investment funds (see Appendix 2).

Non-money market funds saw net assets advance EUR 138 billion between 2008 and 2012 (18%). The rise reflected valuation gains totalling EUR 178 billion, which offset the EUR 40 billion in redemptions.

There has been little change in the relative weightings of the different fund categories over five years. At the end of 2012, mixed funds had a 30% market share, slightly above equity funds (27%) and bond funds (24%). Other investment funds had a slightly smaller share (19%).

Chart 12   Breakdown of fund categories in France

(in EUR billion)

Source: Banque de France.
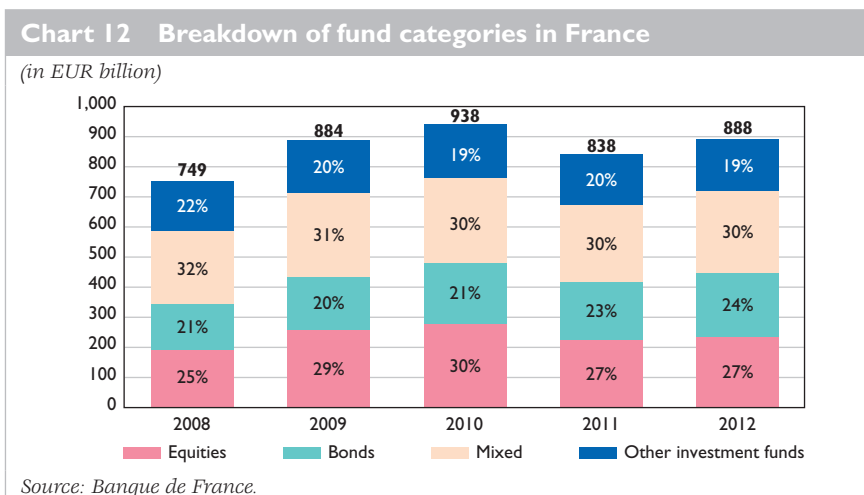
As at end-2012, net assets in French non-money market funds totalled EUR 888 billion, spread between more than 10,000 funds. Average outstanding amounts stood at EUR 80 million, much lower than the EUR 900 million recorded by money market funds. Outstanding amounts advanced 6% in 2012, following an 11% fall in 2011, and as such remained lower than at end-2010.

Non-money market fund value is closely linked to equity and bond market performance. Valuation effects therefore have a significant impact on changes in outstanding amounts during stock market fluctuations.

Between 2008 and 2011, there was a correlation between net subscriptions, net redemptions and valuation effects, highlighting procyclical behaviour among holders of non-money market fund shares/units. Depreciation triggered net redemptions, while price rises resulted in net subscriptions.

Consequently, outstanding amounts declined considerably in 2008 and 2011, down EUR 198 billion and EUR 55 billion, with net redemptions at EUR 82 billion and EUR 45 billion. In contrast, valuation gains in 2009 added EUR 109 billion, followed by EUR 48 billion in 2010, in tandem with improved net inflows: EUR 25 billion and EUR 6 billion respectively. The pattern was not repeated in 2012, with further net redemptions despite higher net realisable values. The change in investor behaviour may reflect greater uncertainty surrounding future market performance and future returns. Private investors tended to focus on regulated savings schemes in 2012, particularly the Livret A passbook –a government-backed, tax-free savings account, which is a cash-only product that offers above-inflation interest. The Livret A passbook investment ceiling was raised on 1 October 2012.

Chart 13   French non-money market funds: net subscriptions and valuation effects
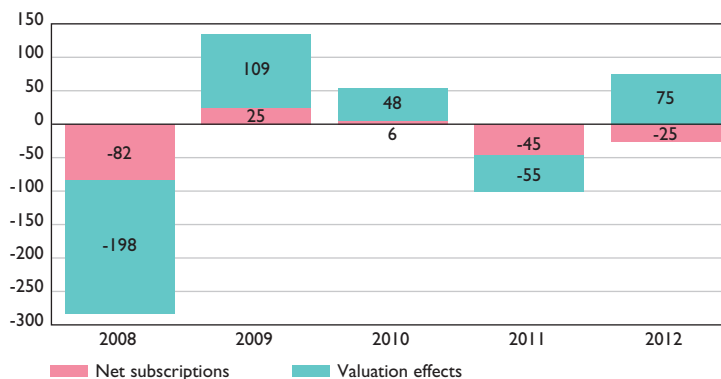
(in EUR billion)

Source: Banque de France.

2|2|1   Key non-money market fund subscribers, insurance companies and households, reduced investments in 2012

Chart 14   Non-money market funds: outstanding amounts by sector

(in EUR billion)
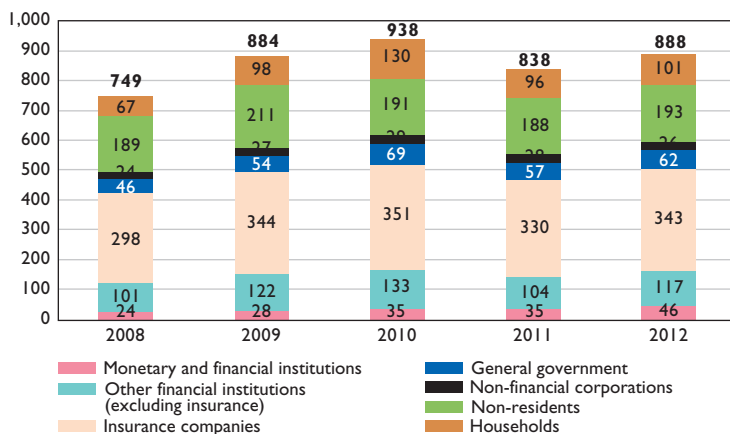
Source: Banque de France.

Chart 15   Non-money market funds: net subscriptions

(in EUR billion)

MFI: Monetary and financial institutions
APU: General government
OFI: Other financial institutions
    (excluding insurance)

IC: Insurance companies
NFC: Non-financial corporations
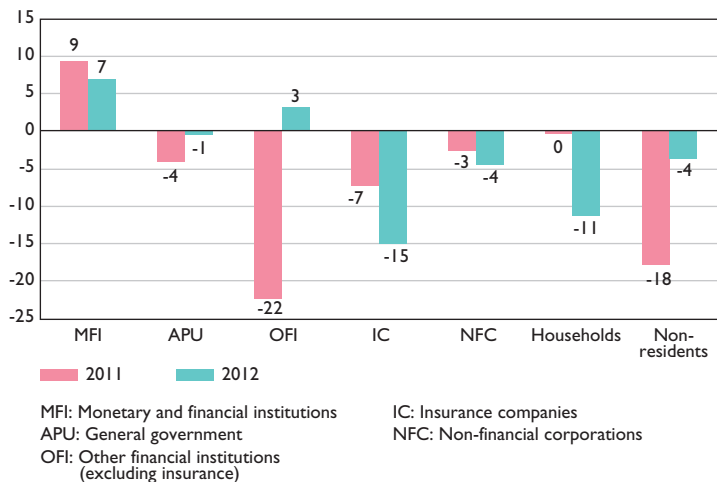
Source: Banque de France.

Between end-2008 and the end of 2012, there was little change in the sectoral breakdown of non-money market fund outstanding amounts. Insurance companies and households remain the two primary subscribers. Outstanding amounts increased from EUR 298 billion and EUR 189 billion respectively in 2008 to EUR 343 billion and EUR 193 billion in 2012.

Non-money market funds recorded an outflow of EUR 25 billion in 2012, mainly as a result of net redemptions by insurance companies (EUR 15 billion) and households (EUR 11 billion).

The bulk of withdrawals were made from equity funds: insurance redemptions EUR 15 billion; households EUR 4 billion. Non-financial corporations and non-residents also contributed to the net redemptions, whereas financial institutions excluding insurance recorded net subscriptions.

2|2|2 Valuation gains in equity funds more than offset net redemptions

The number of equity funds in France fell from 2,327 at the end of 2008 to 2,116 at the end of 2011 and 1,958 at end-2012. Total outstanding amounts advanced 4% in 2012, regaining some of the ground lost in the 19% fall in 2011. Between 2008 and 2012, outstanding amounts rose by 24% despite net redemptions over the period. The rise reflects the 13% gain on the CAC 40, which moved from 3,218 points at the end of 2008 to close 2012 at 3,641 points.

Chart 16
French equity funds: outstanding amounts

(in EUR billion)

Year	Amount
2008	190
2009	256
2010	279
2011	225
2012	235
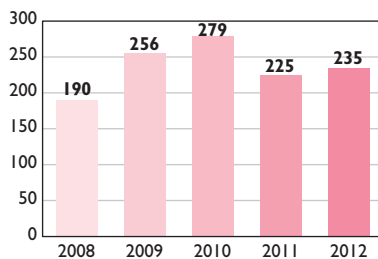
Source: Banque de France.

Chart 17   French equity funds: net subscriptions and valuation effects

(in EUR billion)

	2008	2009	2010	2011	2012
Net subscriptions	-12	10	0	-15	-23
Valuation effects	-133	55	23	-39	33
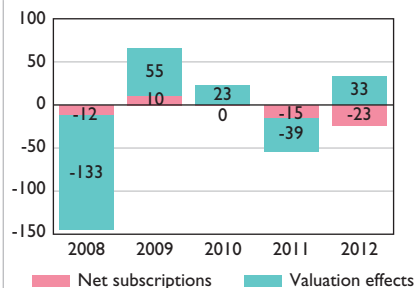
Source: Banque de France.

The EUR 45 billion change in outstanding amounts between 2008 and 2012 comprised EUR 28 billion in net redemptions plus valuation gains totalling EUR 73 billion. At EUR 23 billion, net redemptions were up year-on-year in 2012 (2011: EUR 15 billion), despite the renewed recovery on the equity markets, in which the CAC 40 advanced 15%.

2|2|3 Bond funds boosted by valuation gains

At the end of 2012, net bond fund assets in France came to EUR 212 billion. The number of funds remained virtually unchanged over four years: 1,250 at the end of 2012 compared with 1,189 at end-2008. Over the same period, outstanding amounts climbed EUR 58 billion, up 37% against 2008. As a result, average fund assets also increased, climbing from EUR 130 million at the end of 2008 to EUR 170 million at end-2012.

In 2012, outstanding amounts advanced EUR 22 billion (11%), after a EUR 12 billion drop in 2011.

Net assets were boosted by valuation gains totalling EUR 30 billion and EUR 25 billion in subscription inflows between 31 December 2008 and end-2012.[7]

In 2012, in contrast to previous years, the EUR 13 billion in valuation gains far exceeded net subscription inflows, which came in at EUR 6 billion.[8] Investors appeared to have greater confidence in bond funds than in equity funds, despite record low long-term yield levels.

Chart 18
French bond funds:
outstanding amounts
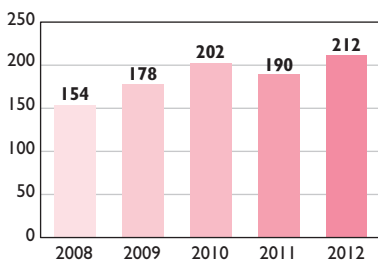
(in EUR billion)

Source: Banque de France.

Chart 19   French bond funds:
net subscriptions
and valuation effects

(in EUR billion)
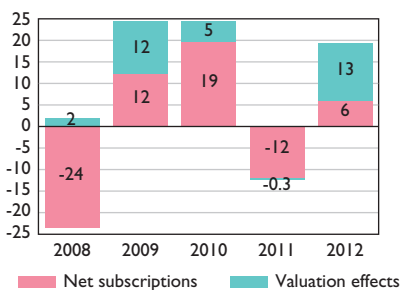
Source: Banque de France.

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7   *The EUR 58 billion gain reported under outstanding amounts comes from reclassifications totalling EUR 3 billion, plus valuation effects and net subscriptions.*
8   *The bulk of the reclassifications referred to in footnote 7 were carried out in 2012.*

2|2|4   Mixed funds see outstanding amounts improve

The number of mixed funds slipped from 3,477 at the end of 2008 to 3,251 at end-2012. Net assets were up by EUR 27 billion, an increase of 11%, coming in at EUR 269 billion at the end of 2012.

Outstanding amounts added 6% in 2012, boosted by EUR 18 billion in valuation gains, whilst redemption outflows fell sharply from EUR 13 billion in 2011 to EUR 1 billion.

**Chart 20
French mixed funds:
outstanding amounts**
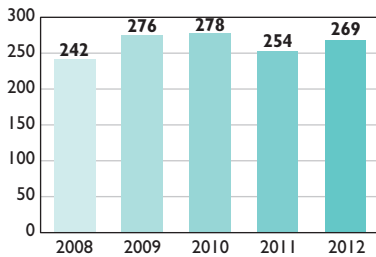
(in EUR billion)

Source: Banque de France.

**Chart 21   French mixed funds:
net subscriptions
and valuation effects**

(in EUR billion)
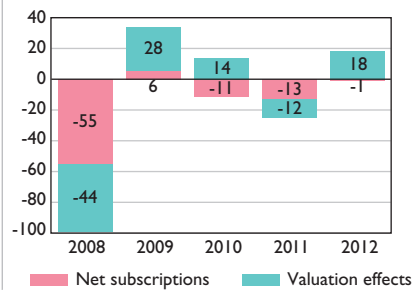
Source: Banque de France.

2|2|5   Modest improvement in outstanding amounts among other investment funds

The category "other investment funds" recorded net assets totalling EUR 172 billion at the end of 2012, spread across over 3,700 funds (2011: 3,900). These funds are very varied in nature: employee savings schemes, formula funds, venture capital funds, innovation funds, managed futures funds, local investment funds, etc. Average fund assets within the category came in at EUR 46 million (2011: EUR 43 million). Outstanding amounts gained EUR 3 billion, with EUR 10 billion in valuation gains offsetting EUR 7 billion in net redemptions.

Outstanding amounts for employee savings schemes came to EUR 90 billion at the end of 2012, or 54% of total outstanding amounts in the category. Outstanding amounts for structured funds came in at EUR 48 billion, significantly above the EUR 26 billion recorded for venture capital funds.

Chart 22
Other investment funds
in France: outstanding amounts
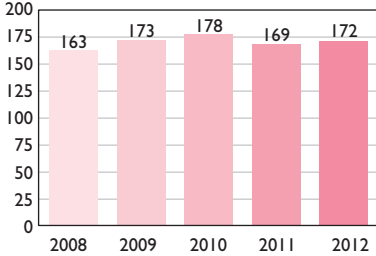
(in EUR billion)

Source: Banque de France.

Chart 23
Other investment funds
in France: net subscriptions
and valuation effects

(in EUR billion)
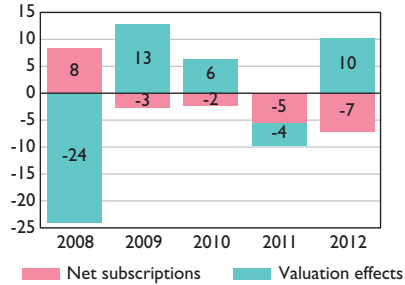
Source: Banque de France.

In 2012, net redemptions for formula funds came to EUR 9 billion, exceeding the EUR 1 billion in net subscriptions for both employee savings schemes and venture capital funds. Valuation gains mainly benefited employee savings schemes, which gained EUR 8 billion, particularly on listed securities funds, and to a lesser extent structured funds, which climbed EUR 3 billion.

2|3 Portfolio composition of French non-money market funds

2|3|1 Equities and debt securities fairly evenly matched

At the end of 2012, non-money market funds in France held similar volumes of equities (EUR 331 billion) and debt securities (EUR 313 billion, all maturities). They held a smaller volume of fund units (EUR 214 billion), mainly in investment funds.

2|3|2 Majority of investment focused on financing non-financial corporations

Non-money market fund equity holdings (39% of portfolio) were divided between French shares (18%), other European equities (11%) and the rest of the world (10%). Shares in euro area non-financial companies were the largest component in the portfolio at 24%. Long-term debt securities accounted for 33% of the investment portfolio, divided fairly evenly between instruments issued by non-financial corporations (12%), general government (11%) and financial institutions (10%).

The regional breakdown of these long-term debt securities reveals a significant emphasis on foreign securities: the euro area excluding France accounted for 14% of the portfolio, with the rest of the world coming in at 7%. French long-term debt securities accounted for 11%.

Short-term debt securities made up 3% of the portfolio and mainly comprised certificates of deposit issued by credit institutions.

Chart 24   Breakdown of French non-money market fund portfolio by asset class[a] and by region at end-2012

(in EUR billion and %)

Long-term debt securities issued by	282
Residents	95
Euro area (excluding France)	123
Rest of world	63
Short-term debt securities	31
Fund units issued by	214
Residents	157
Euro area (excluding France)	48
Rest of world	9
Shares issued by	331
Residents	152
Euro area (excluding France)	93
Rest of world	86
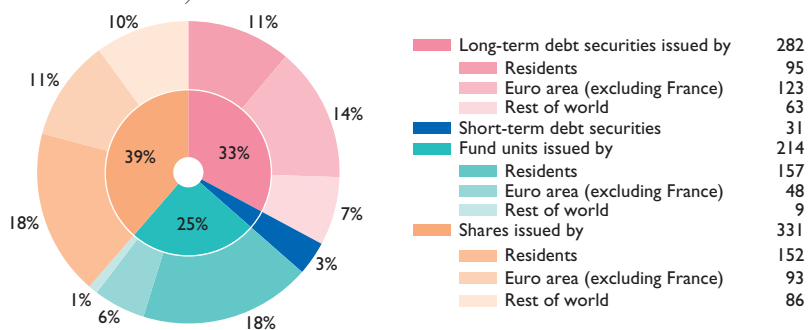
a) Excludes real estate funds, see Appendix 2.
Source: Banque de France.

Chart 25   Breakdown of French non-money market fund portfolio by asset class[a] and by sector at end-2012

(in EUR billion and %)

Long-term debt securities issued by	282
Financial institutions	82
General government	96
Non-financial corporations	104
Short-term debt securities	31
Fund shares/units	214
Non-money market funds	163
Money market funds	50
Shares issued by	331
Non-financial corporations in the euro area	209
Financial institutions in the euro area	36
Other sectors (rest of world equities, all sectors)	86
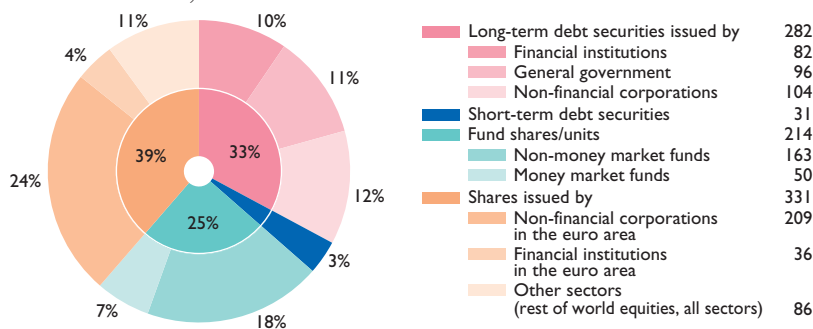
a) Excludes real estate funds, see Appendix 2.
Source: Banque de France.

Chart 26   Breakdown of French bond fund portfolio by asset class and sector in 2012

(in EUR billion and %)

Long-term debt securities issued by	167.4
Financial institutions	51.0
General government	57.4
Non-financial corporations	59.0
Short-term debt securities	17.8
Fund shares/units	19.0
Other net financial investments	0.2
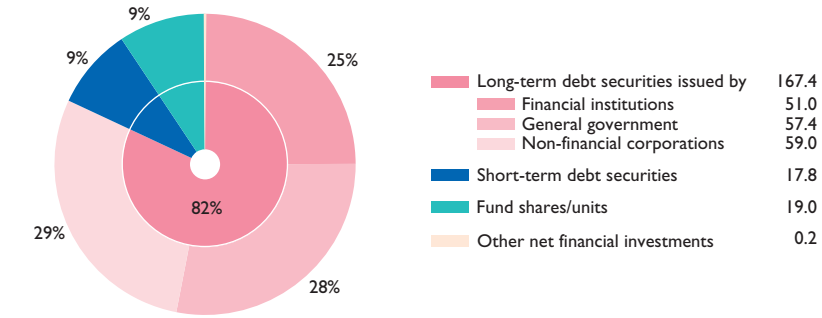
Source: Banque de France.

2|3|3   Bond fund portfolios cut general government component

At the end of 2012, the debt instrument component held by French bond funds contained roughly equal volumes of securities issued by financial institutions (32%), non-financial corporations (30%) and general government (29%). It is worth stressing that the general government component made up over half (51%) of the debt portfolio in 2008. General government investments were reduced by EUR 17 billion from EUR 77 billion in 2008 to EUR 60 billion in 2012. Two-thirds of the reduction related to non-euro area issues. The remaining third was split between the euro area excluding France (11%) and French government bonds (22%).

Breakdown of bond fund portfolios by issuing sector

Between 2008 and 2012, bond funds increased their investment portfolios by EUR 53 billion, a rise of 35%. Non-financial corporations and financial institutions were the main beneficiaries, seeing investment rise by EUR 35 billion (137%) and EUR 27 billion (72%) respectively against 2008. In contrast, bond funds shed EUR 17 billion of government bonds, a reduction of 22%.

Chart 27   French bond funds: portfolio composition

(in EUR billion)
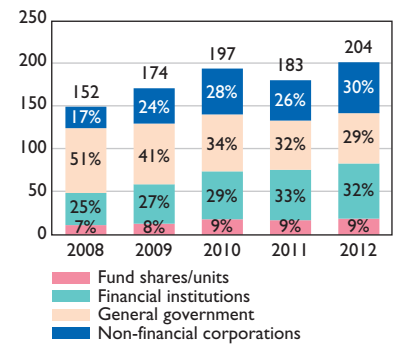
Source: Banque de France.

2|3|4 Respite
from declining residual terms for debt securities held by non-money market funds

At the end of 2012, non-money market funds held debt securities totalling EUR 312 billion, which made up 37% of the investment portfolio.

After several years of declines, the residual term of these instruments remained unchanged against end-2011 at 5.6 years.

Chart 28   French non-money market funds: residual term of debt securities

(in years)

2008	2009	2010	2011	2012
6.5	6.1	5.8	5.6	5.6
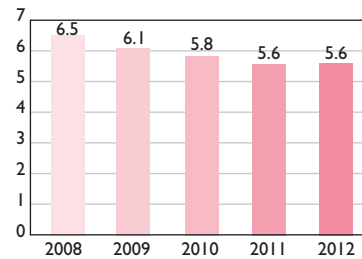
Source: Banque de France.

Box

Investment funds as a source of financing in the French economy

In total, French investment funds had a combined investment portfolio worth EUR 1,184 billion as at 31 December 2012, EUR 922 billion of which was invested in non-fund segments. Investment funds therefore contain a large volume of financing, some of which is channelled into the French economy in accordance with the fund management objectives. Securities from French issuers made up 48% of all non-fund investments at the end of 2012. As shown in Chart A, the majority of this financing went to credit institutions (EUR 210 billion) and non-financial corporations (EUR 189 billion).

Chart A   Regional distribution of French investment fund investments at end-2012 (all issuing sectors excluding investment funds)

(in %)

- France
- Euro area
- Rest of world
- Non-financial corporations
- General government
- Other financial institutions
- Credit institutions
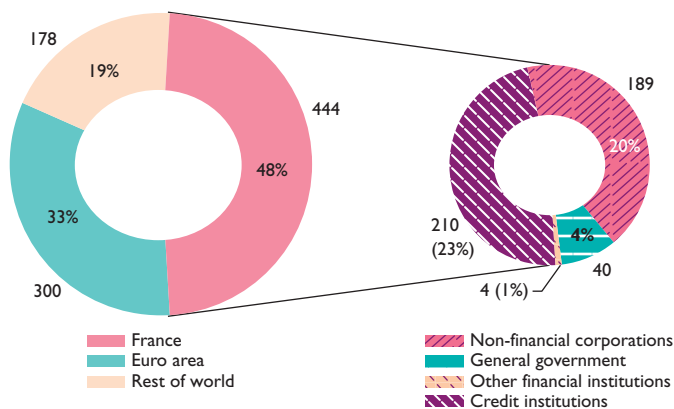
Source: Banque de France.

.../...

Investment funds hold 15% of debt securities issued by resident credit institutions

As at 31 December 2012, French investment funds held EUR 210 billion in securities issued by credit institutions based in France – 15% of all instruments issued by those bank institutions. Debt securities made up 92% of those investments, 72% of which had maturities of one year or less (certificates of deposit). The equity component of the portfolio (8%) mainly comprised listed shares, which accounted for 15% of all listed shares issued by credit institutions (see Chart B).

Investment funds hold 11% of listed shares and debt securities issued by resident non-financial corporations

At the end of 2012, investment funds held EUR 189 billion in instruments issued by resident non-financial corporations, mainly in the form of listed shares (63%), but also debt securities (29%) and unlisted shares (8%).

French investment funds held around 11% of all listed shares and debt securities issued by resident non-financial corporations. However, they held less than 1% of unlisted shares in resident non-financial corporations.

Chart B
French investment funds: investment in resident credit institutions at end-2012

(in EUR billion and %)
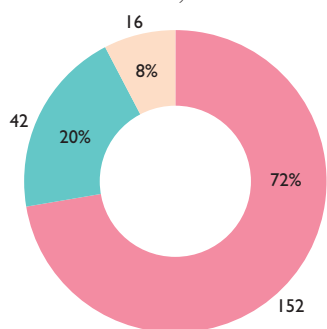
- Debt securities with maturities of up to one year
- Debt securities with maturities of over one year
- Equities

Source: Banque de France.

Chart C   French investment funds: investment in resident non-financial corporations at end-2012

(in EUR billion and %)
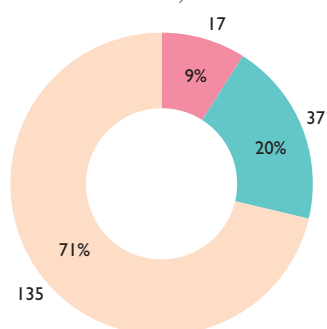
- Debt securities with maturities of up to one year
- Debt securities with maturities of over one year
- Equities

Source: Banque de France.

Appendix 1

Investment fund statistics – methodology

Funds covered

The funds covered by this study comprise all general money market funds and investment funds, corporate investment funds, managed future funds, venture capital investment funds, local investment funds and innovation investment funds.

Sources

The information contained in this article comes from a number of sources:

• Statistics for the euro area and Member States (excluding France), produced and published by the European Central Bank (ECB) at *http://sdw.ecb.europa.eu.*

• Monthly balance sheets for French money market and investment funds submitted by the management companies to the Banque de France. The information obtained for each investment fund includes a detailed breakdown of portfolio positions, security by security, and the combined outstanding amounts for all other balance sheet items, including outstanding shares/units issued by each fund and the number of shares/units issued (all sectors).

• The realisable value of each investment fund (reported by ISIN code and number of shares/units) is submitted to the *Autorité des marchés financiers* (AMF – French Financial Markets Authority), which forwards the information to the Banque de France.

• Two surveys of resident holders of custodian accounts on the breakdown of shares/units in French investment funds by institutional sector ("DTOM" and "PROTIDE") conducted by the Banque de France.

Methodology

The methods and calculations used are identical to those used for the *Stat Info* reports on investment funds, which are published on the Banque de France website (in French): *http://www.banque-france.fr/fileadmin/user_upload/banque_de_france/Economie-et-Statistiques/Titres_Credits_Depots/methode-SI-mensuel-OPCVM.pdf*

Appendix 2

Definition of non-money market fund categories

In France, investment funds are classified by risk profile exposure. The classifications are regulated by the *Autorité des marchés financiers* (AMF –French Financial Markets Authority). The statistics on investment funds contained in this study refer to equity, bond, mixed and other investment funds, but do not include real estate funds.

Equity funds had issued securities worth EUR 235 billion as at end-2012 and comprise:
– "French equity" funds (10% of all equity funds) – with an exposure rate of up to 60% to French shares;
– "Euro area equity" funds (28%) – with an exposure rate of up to 60% to shares issued in one or more euro area countries;
– "EU Member State equity" funds (14%) – with an exposure rate of up to 60% to shares issued in one or more EU countries;
– "International equity" funds (48%) – with an exposure rate of up to 60% to a foreign equity market or to equity markets in several countries.

Bond funds had issued shares/units totalling EUR 212 billion as at end-2012. The equity risk exposure must not exceed 10% of net assets. Bond funds comprise:
– "Bond and other euro-denominated debt securities" funds (69% of all bond funds), with permanent exposure to euro-denominated fixed-income securities;
– "Bond and other international debt securities" funds (31%), with permanent exposure to fixed-income securities denominated in currencies other than the euro, and possibly to euro-denominated fixed-income securities.

Mixed funds had issued shares/units totalling EUR 269 billion as at end-2012 and comprise:
– "Mixed funds" (95%), that encompass funds that do not fall under any other classification;
– Alternative funds (5%), which are funds of funds, invested mainly in equity or shares/units of other investment funds.

Other investment funds had issued shares/units totalling EUR 172 billion as at end-2012 and comprise:
– Employee shareholding funds (FCPE) and investment companies with variable capital under employee share ownership (SICAVAS), irrespective of their investment strategy (54%). All FCPE, even those with a yield close to money market rates are included in this category of non-money market funds;

– Formula funds (28%), whose management objective is to achieve and redistribute, at a scheduled maturity date, a level of return that is calculated by applying a pre-determined mathematical formula, based on market indicators. This performance objective is guaranteed by a credit institution;
– Venture capital mutual investment funds (FCPR), which must hold at least 40% of assets in the form of securities that are not admitted to trading on a regulated financial market; innovative investment funds (FCPI), which are designed to boost the capital base of innovative French SMEs; local investment funds (FIP), whose assets include at least 60% of financial securities, shares in limited liability companies and current account advances, of which at least 20% are in start-up companies (i.e. less than 8 years old). (Combined: 18%);
– Commodity and financial futures funds (FCIMT) (0.1%).

Real estate funds are made up of:
– Real estate collective investment funds (OCPI), which are FCP or SICAV funds (open-ended investment funds) that invest in real estate assets;
– Real estate investment companies (SCPI), which manage only real estate rental property.

Glossary

Debt securities: securities made up of interest-paying bonds –debt instruments issued for a period of time of over three years– and money market instruments –debt instruments issued for a fixed period of time, which can be traded on a regulated market or over the counter. Short-term debt instruments are treasury bonds, commercial paper, certificates of deposit and other short-term negotiable debt securities. Long-term debt securities include bonds and similar securities and BMTN (French negotiable medium term notes and foreign equivalents).

Equities: titles of ownership representing a share in the issuer's equity, which provide remuneration that is not contractually defined but is directly linked to earnings.

Financial and monetary institutions: group that includes credit institutions and money market funds.

General government: all non-commercial producers, comprising central government, local government and social security funds. Most of their income is derived from mandatory contributions.

Institutional sector: group of institutional units with similar economic behaviour characterised by their main activity and the nature of their business. Resident institutional sectors are: monetary authorities, non-financial corporations, financial corporations, general government, households and non-profit institutions serving households.

Net assets: total net assets of an investment fund, valued at market prices and after deduction of liabilities. This figure represents the accounting value of the securities (shares or units) issued by an investment fund.

Non-financial corporations (NFC): legal entities that are market producers and which engage mainly in producing non-financial goods and services. Non-financial corporations may be privately or publicly funded.

Other financial institutions: financial institutions other than credit institutions and investment funds. These are mainly insurance corporations, non-money market funds and investment companies.

Other net financial investments: all financial assets other than equities, debt securities or investment fund shares/units. These are mainly shares in securitisation vehicles, credit derivatives and other derivatives.

Redemptions: sales of investment funds shares/units by investors. They represent a net asset outflow for investment funds.

Residents: legal entities established in France.

Undertakings of Collective Investment in Transferable securities (UCITS): investment vehicles that are either SICAV (open-ended mutual funds) or FCP (collective investment funds). Investment funds manage portfolios of transferable securities (equities, bonds, etc.).

There are two categories of investment funds:
– Money market funds: investment funds whose assets are mainly invested in short-term products indexed to money market rates. In France, these are short-term money market funds and money market funds.
– Non-money market funds: See Appendix 2.

Wage dynamics and current account rebalancing in the euro area

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This paper presents a simulation, using the NiGEM model, of a wage shock in several euro area countries. It provides a quantification of this type of shock in current account balance terms. Wage moderation, i.e. lowering the annual growth rate of wages in "deficit" countries of the euro area by one percentage point would improve the current account balance by 0.2 to 0.3 GDP percentage point over a five-year horizon. A symmetrical adjustment of euro area countries in which German wages followed a more dynamic path (growing by an additional percentage point per year) would raise the size of the adjustment (to 0.5 GDP percentage point). The recently observed rebalancing within the euro area is probably more related to other factors such as a sharp contraction in domestic demand associated with a reversal in capital flows within the euro area since the crisis.

The accumulation of current account imbalances between the early 2000s and the start of the crisis in 2008 considerably weakened the economies of the euro area's peripheral countries. Charts 1 below show an increase in current account imbalances in the euro area over this period. Chen *et al.* (2013) also point out that in 2010 the net external positions of Greece, Spain, Portugal and Ireland were negative and close to 100% of GDP. A relative price adjustment in euro area deficit countries would help to rebalance current accounts and net external positions, provided that trade elasticities are sufficiently high.

The deterioration in current account balances across the euro area occurred in a context of highly heterogeneous wage dynamics and unit labour costs in the euro area. While unit labour costs rose in France, Spain and Italy (see Chart 1a), they remained stable in Germany before the crisis. Wage adjustments, and particularly wage moderation in euro area peripheral countries, are therefore often viewed as a means of correcting current account imbalances.

In this paper, we present a simulation of a wage shock for several euro area countries in order to provide a quantification of the expected effects in terms of rebalancing. Given that the exchange rate cannot be used as an instrument for adjusting imbalances within the euro area, real exchange rate adjustments are based on relative price changes. In the simulations presented here, it is assumed that wages may be steered to follow a lower (deficit countries) or higher (surplus countries) long-term trajectory. These adjustments may be understood as the result of policies that, throughout the euro area, aim to foster wage moderation through a change in the relationship between wage increases and productivity gains (de-indexation, greater labour market flexibility, etc.).

The wage shock is simulated using the NiGEM[1] model developed by the National Institute of Economic and Social Research (NIESR). In a first scenario, wage moderation is applied in five "deficit" countries of the euro area: France, Italy, Ireland, Portugal and Greece. These five euro area countries showed current account deficits prior to the global crisis of 2008, some of them with a significantly deteriorated net external position. In a second scenario, we consider a symmetrical adjustment in which wage moderation in euro area "deficit" countries is accompanied by faster wage growth in Germany. Two additional scenarios are simulated to measure the sensitivity of our results to the model's assumptions. In the first of these, the fixed exchange rate rule is changed in order to allow for a variation in euro area exchange rates. In the second, we examine the sensitivity of our results to a reversal of our negative assumption regarding the impact of corporate profit sharing on consumption.

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1 *NiGEM is a macro-economic multi-country model used in a neo-Keynesian framework. A more detailed presentation of the model is offered in the box below. A complete description is provided on the website of the NIESR: http://nimodel.niesr.ac.uk/logon/nigem-index.php?t=1&b=1.*

Charts I   Changes in Unit labour costs, wages (whole economy) and current account balances in the euro area

(LHS: unit labour costs and wages in indices: base 100 in 1999: RHS: current account balances as % of GDP)

a) Unit labour costs

b) Hourly wages

— Germany (left-hand scale)	▢ Germany's current account balance (right-hand scale)
— France (left-hand scale)	
···· Spain (left-hand scale)	▢ Average current account balance for Spain-France-Italy (right-hand scale)
···· Italy (left-hand scale)	
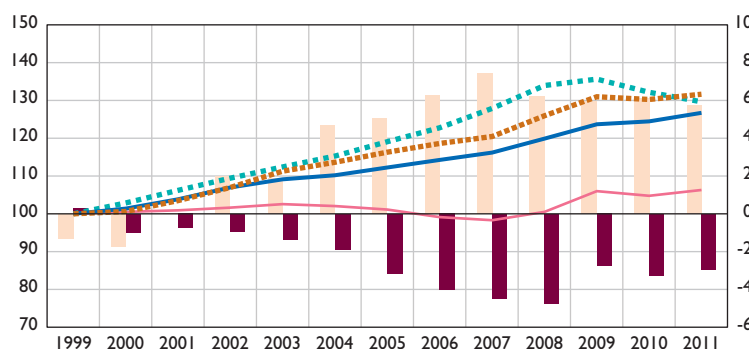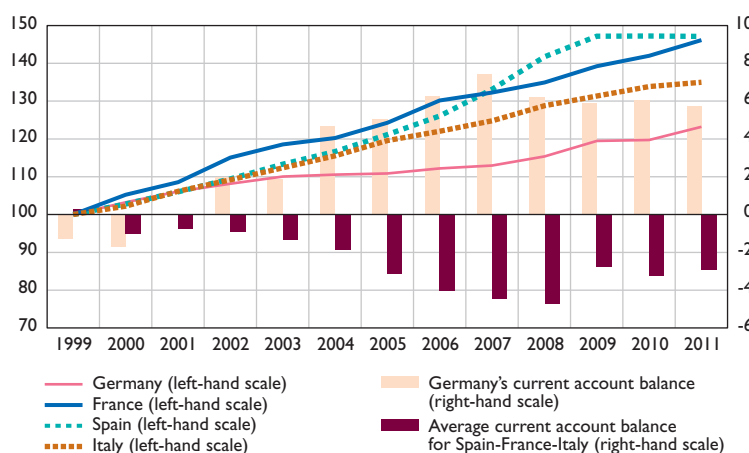
Sources: Eurostat (unit labour costs and current account balances) and OECD (hourly wages).

The results of our scenarios show that wage moderation policies conducted in euro area "deficit" countries result in a limited improvement in their current account balances over a 5-year horizon: the current account balance improves by 0.2 to 0.3 GDP percentage point following a 5% ex ante wage slowdown (one point per year) relative to the NiGEM central forecasts in 2017 when the shock is not simulated. This weak reaction can be explained by an incomplete transmission of the wage shock onto export prices, and by a rebound in employment, which, in turn, limits the ex post effect of the wage restraint. In addition, wage moderation in euro area "deficit" countries spreads to competitors' export prices, which limits relative price variations. When the exchange rate of

the euro reflects purchasing power parity,[2] wage moderation leads to a nominal appreciation of the euro, which lowers competitiveness gains. The impact of wage adjustments is even more limited if corporate profits are redistributed to households and subsequently support consumption by offsetting the decline in their wage incomes.

To what extent would a symmetrical adjustment, i.e. one involving a wage acceleration in the surplus countries of the euro area, help rebalance current accounts? This issue has been widely debated in Europe. On 5 May 2012, Wolfgang Schäuble (German Finance Minister) declared: "It is normal that wages in Germany should currently be rising faster than in other EU countries".[3] Overall, the data represented in Chart 2 show that current account adjustments occur mostly among deficit countries and that there are no significant adjustments of the euro area's surplus countries.[4]

The simulations in our second NiGEM model scenario show that a symmetrical adjustment of euro area countries (wage moderation in the "deficit" countries combined with wage acceleration in Germany) would considerably increase the reaction of current account balances to a given ex ante wage shock: the current account balance improves by close to half a GDP point in the group of "deficit" countries in 2017, while the German current account surplus drops significantly.[5]

Chart 2   The dynamics of current account balances within the advanced economies

(x-axis: average current account balance 2005-2008 (as a percentage of GDP).
y-axis: Change in GDP percentage points in current account balance, 2008-2011)
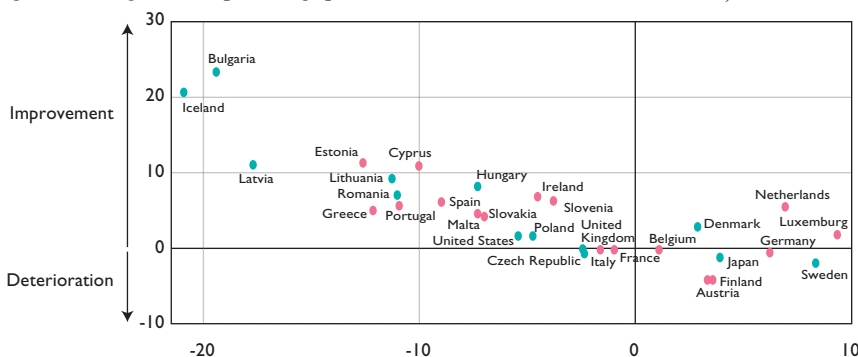
Note: The countries indicated in pink are members of the euro area.
Sources: Eurostat and author calculations.

2 *The currencies convert at a rate that maintains permanent purchasing power parity.*
3 *German weekly:* Focus *of 5 May 2012.*
4 *This result confirms the result of a study by Paul De Grauwe (2012) which shows that the bulk of the correction of imbalances within the euro area since 2008/2009 has been borne by the peripheral countries (in particular Ireland, Greece and Spain).*
5 *Currently close to 6% of GDP, i.e. the upper threshold of the European mechanism for the surveillance of macroeconomic imbalances introduced in the "Six Pack" that came into force in December 2011. The alert thresholds are fixed at − 4 and + 6% of GDP on average over three years.*

These results highlight a significant yet limited impact of wage adjustments on euro area current account balances. Indeed, it would appear that wage moderation and lower unit labour costs are not the main explanations for the very rapid adjustments of current account balances recorded since the crisis, notably in Spain. The drop in domestic demand, which plays only a limited role in our simulations, accounts for a larger share of the current account balance improvement. Net capital outflows from the weaker economies of the euro area could explain this rebalancing, given the associated negative demand shock.[6] Other studies have also shown that a deterioration in the net external position of several European countries before the crisis was mainly due to capital inflows from other European countries (see Chen *et al.*, 2013) rather than to a rapid increase in unit labour costs resulting in a decline in export performances (Gaulier and Vicard, 2012; Gabrisch and Staehr, 2012).[7]

The results of the simulations presented in this paper add to a series of recent studies on the issue of current account imbalances in the euro area and the role of real exchange rate adjustments. In particular, some studies have put forward the idea that an asymmetrical adjustment of euro area deficit countries via an "internal devaluation" would not be sufficient to ensure a rapid rebalancing. On the other hand, an adjustment could be facilitated either by higher inflation in the euro area (Carton and Hervé, 2012) that would create an inflation differential between core and peripheral countries without causing any deflation in the periphery, or by a depreciation of the euro conducive to an external adjustment (Darvas, 2012).[8]

In the presence of adjustments through the "extensive margin" of international trade (net entry of firms into the export market), Corsetti *et al.* (2013) show that smaller variations in the real exchange rate are required to balance the current account.[9]

Beyond the effects of an internal devaluation on competitiveness and the external balance, the issue of the impact of a fall in prices in terms of the debt-to-GDP ratio is now being discussed (Corsetti, 2010).[10] Lower prices would in fact increase the debt burden measured in units of domestic production. This "balance sheet effect" is well known to economists who have worked on the effects of a devaluation in the presence of foreign currency

6 Pisani-Ferry and Merler (2012 a) document the existence of sudden stops, associated with an interruption of private foreign financing in the worst hit countries of the euro area since the crisis began.

7 The deterioration of cost-competitiveness via a rapid increase in unit labour costs in the peripheral euro area countries could well be a consequence of the influx of capital from Northern euro area countries, massively invested in the non-tradable goods sector, notably. Gabrisch and Staehr (2012) show that there is no causal effect of the evolution of unit labour costs on the evolution of current account balances.

8 Pisani-Ferry and Merler (2012b) also show that there is a risk related to the implementation of austerity measures in the peripheral euro area countries. When ECB monetary policy aims to stabilise inflation in the Northern countries, the deflation prompted by austerity measures in the Southern countries tends to raise their debt/GDP levels. Holland and Portes (2012) using NiGEM model simulations show that austerity measures in all the European Union countries would most likely raise debt/GDP ratios.

9 Berthou and Vicard (2013) nevertheless show that newly-formed export companies are generally smaller and that only a limited number of high-performance firms manage to survive and grow rapidly on export markets. The contribution of the extensive margin of trade is therefore limited, at least in the short and medium term.

10 In certain cases the equations are estimated for a group of two countries, which means that the coefficients must be the same.

loans during balance of payments crises in emerging economies (Hausmann and Panizza, 2003 and 2011). The results of the simulations confirm that an internal devaluation in the peripheral economies of the euro area would raise, at least temporarily, the debt-to-GDP ratio in these economies.

Section 1 presents the simulation of a wage shock in the euro area using the NiGEM model, the assumptions used and the results of the simulation. Section 2 discusses these results. Lastly, Section 3 concludes.

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Box

NiGEM (National Institute's Global Econometric Model) and the assumptions used

NiGEM is a multi-country neo-Keynesian model developed by the London-based National Institute of Economic and Social Research (NIESR). The version used (v1.12-b) includes blocks of equations for 60 countries or geographical zones. For each developed country (United States, Japan, Western European countries), more than 150 equations are used to trace developments in key supply, demand and price variables. Less detailed blocks of equations are used to model the other economies (China, Eastern Europe, OPEC countries etc. with 60 equations or less). Overall international calibration is achieved using external trade equations (taking into account competitiveness effects on export equations) and financial flows (assets held by non-residents and associated incomes).

Trade elasticities

The model's equations are estimated on a country-by-country basis in the form of error-correction models.[1] The resulting elasticities obtained are then used to calibrate the model. The simulations are therefore very sensitive to the values expressed by these elasticities. Table A shows the estimated elasticities used in NiGEM for four euro area countries. The price elasticities of the export volume equations are very heterogeneous, with a minimum of − 0.4 for Germany, versus − 1.24 for Spain.

The calculation of trade elasticities is the subject of intense debate between macroeconomists and international trade specialists. Macroeconomists use trade elasticities that may be less than one and that are estimated on the basis of aggregate trade equations. Very dissimilar results for the trade elasticities of the different countries are generally obtained, and the values are highly dependent on the calculation methods used and the price variables employed (Goldstein and Kahn, 1978; Hooper et al., 2000; Chinn, 2005).[2] The elasticities obtained from estimates based on microeconomic data

1 *In certain cases the equations are estimated for a group of two countries which means that the coefficients must be the same.*
2 *A substantial proportion of these studies are based on estimates for the United States, whereas Hooper et al. (2000) use data and present estimates for several G7 countries. In a contribution annexed to the report published by the French Council of Economic Analysis (No. 64, co-authored in 2006 by Patrick Artus and Lionel Fontagné), Antoine Deruennes presents an estimate of an equation of total exports for France, with a price elasticity close to one.*

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are generally higher than those obtained from estimates based on macroeconomic data, and are usually above one.[3]

Table	Long-term elasticities in the NiGEM trade block				
	France	**Italy**	**Spain**	**Germany**	**Euro area (calibration)**
Export volumes					
Relative prices (δ)	0.52	1.01	1.24	0.40	1.00
External demand	1.00	1.00	1.00	1.00	1.00
Import volumes					
Relative prices (φ)	1.05	1.01	1.01	1.05	1.00
External demand	1.24	1.24	1.24	1.24	1.00
Export prices					
Competitors' prices (ω)	0.24	0.86	0.88	0.29	0.25
Domestic prices	0.76	0.14	0.12	0.71	0.75
Import prices					
Competitors' prices (α)	1.00	1.00	1.00	1.00	
Marshall-Lerner conditions (vis-à-vis foreign trade coverage ratio)	0.69	1.01	1.04	0.62	1.00

Sources: NiGEM model and authors' calculations.
Note: A positive number for the Marshall-Lerner conditions implies an improvement of the coverage rate following a depreciation of the currency.

In order to avoid subjecting the results of the simulations to an erroneous measurement of the trade elasticities measured in NiGEM, we decided to calibrate the model's trade block for the euro area countries. The price elasticities of the export equations for the euro area countries are fixed at one, as indicated in column 5 of the table above. This leads, in particular, to an upward adjustment of the trade price elasticities for France and Germany, but a slightly reduced elasticity for Spain.

We verify that these trade elasticities allow the Marshall-Lerner condition to be met, i.e. that a real depreciation in the currency allows an improvement in the foreign trade coverage ratio (exports over imports, in value terms). As in Potier and Saint-Guilhem (2006), the Marshall-Lerner condition is stated:

$$\omega + \delta(1-\omega) - \alpha(1-\varphi) > 0$$

With ω the elasticity of export prices to foreign prices, δ the elasticity of the volume of exports to domestic prices, α the elasticity of import prices to foreign prices and φ the price-elasticity of imports. The parameters initially presented in the model lead, in all

3 These differences can partly be explained by the existence of heterogeneity biases, leading to an erroneous estimation of the elasticities on the basis of macroeconomic data. The factoring in of sectoral and geographic heterogeneity to the composition of aggregated trade flows actually produces higher elasticities (Berthou, 2010; Imbs and Méjean, 2009). In addition, the introduction of endogeneity into trade equation estimates (Erkel-Rousse and Mirza, 2002; Caliendo and Parro, 2012) generally produces elasticity estimates greater than one.

.../...

scenarios, to an improvement in the foreign trade coverage ratio following a currency depreciation. Calibration of the elasticities at one leads to an increase of the sensitivity of the coverage ratio in the cases of France and Germany.

Other calibrations

Household consumption

In NiGEM, household income consists of a mix of labour and capital income, which together determine household spending. In our simulation, a fall in real wages tends to lower real income and depress household consumption. However, corporate profits increase and are distributed, which tends to offset the initial contraction in consumption. At the same time, households enjoy a wealth effect as higher corporate profitability raises the value of their financial assets, thereby further offsetting the fall in household spending.

In our main model, we have neutralised both households' capital income and the wealth effect linked to the rise in asset values. This modelling choice is based on several factors. Firstly, in the current context of crisis in the euro area, it is reasonable to assume that companies will seek to bolster their savings, which means that additional profits will not be directed towards additional household consumption. In addition, NiGEM makes no allowance for differences between households in terms of income and wealth[4] despite the fact that increases in income from capital primarily concern the wealthiest households which tend to save more.[5] In view of these factors, it is therefore reasonable to assume that a rise in capital income is unlikely to have a significant impact on household spending in the countries most affected by the crisis.

Monetary policy and exchange rates

We retain the standard assumption of the NiGEM model. Monetary policy is modelled in the form of a Taylor rule. It takes the form of a "two-pillar rule" for the euro area, which defines the ECB's short-term rate by reference to the gap between nominal GDP and potential nominal GDP, and the gap between observed inflation and target inflation (2%). For the other economies in the NiGEM model, the Taylor rule used is based on the difference between observed GDP (in volume) and potential GDP (in volume).

Exchange rate fluctuations (outside the euro area) reflect differences in purchasing power parities. A rise (or fall) in prices for the entire euro area versus the prices of its trading partners will tend to weaken (or strengthen) the relative value of the euro. This assumption is modified in our alternative scenarios in order to neutralise exchange rate fluctuations in our NiGEM simulations (assumption of fixed nominal exchange rates).

4   Atkison et al. (2011) observe very strong heterogeneity in the distribution of incomes within the advanced economies.
5   Juster et al. (2006) show that the wealthiest households have a higher propensity to save.

1| Simulation of a wage shock in the euro area

1|1 Calibration of the wage shock

Only euro area countries integrated into NiGEM are taken into account in our simulated wage shock. Chart 3 shows the average current account balance as a percentage of GDP for the economies of the euro area over the 2005-2008 period, i.e. before the crisis. The orange bars in the chart represent those economies that are not present in the NiGEM model, or for which the equation block has been greatly simplified, which prevents any simulation of a wage shock.

Among the remaining countries (green bars), six of them (Greece, Portugal, Spain, Ireland, Italy and France) showed, on average, a current account deficit over the 2005-2008 period. In our simulation, these countries are identified as the group of "deficit" countries for which we simulate the impact of an "internal devaluation", i.e. a negative shock to the growth rate of wages. The remaining five countries (the Netherlands, Germany, Finland, Austria and Belgium), represented by pink bars, are identified as the group of "surplus" countries. We simulate for Germany a positive shock to wage growth in order to determine whether a symmetrical (i.e. "two-way") wage adjustment would help to rebalance current accounts in the euro area.

We propose two main scenarios. Scenario 1 corresponds to an internal devaluation in the deficit countries of the euro area. Scenario 2 corresponds to an internal devaluation in the deficit countries of the euro area, combined with a wage revaluation in Germany.[11]

Chart 3   Current account balances of euro area economies

(as a % of GDP, average over the period 2005-2008)

Source: Eurostat.
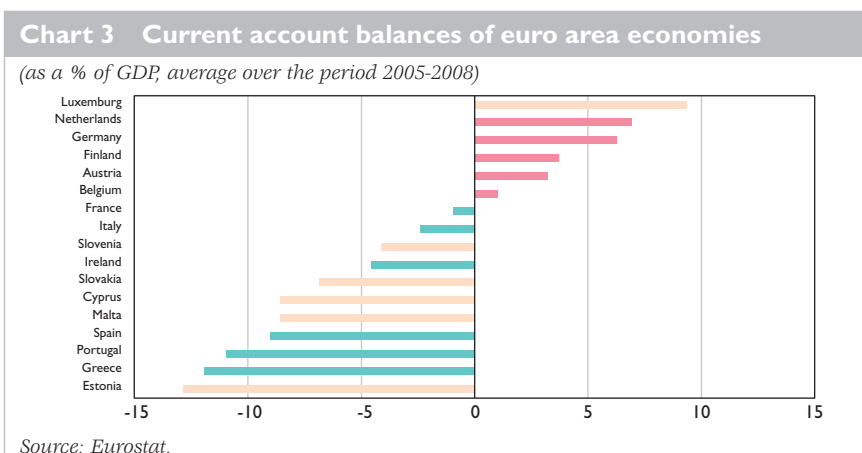
11 *The selection of Germany as the only surplus country to experience a positive wage shock in our second scenario is based on the fact that Germany had the highest current account surplus of the euro area countries before the crisis (more than 180 billion euros in 2007), far larger than the Netherlands (more than 38 billion euro in 2007). The use of a positive wage shock in just one surplus country also ensures the stability of the model in the simulations.*

In order to build these two scenarios, we simulate a shock to the residual of the wage equation,[12] slowing or accelerating the increase in wages relative to the model's central forecasts. Such structural changes in the labour market have been observed since the start of the crisis in the euro area's peripheral economies as well as in France very recently.[13] The simulated shock creates a *de facto* differential into the growth rates of productivity and wages. In the deficit countries of the euro area, wage moderation results in a decline in unit labour costs.

In the first scenario considered, the shock is calibrated so as to reduce the annual growth in wages by 1% relative to the model's central forcasts (– 0.25% per quarter) as of the first quarter of 2012. The ex ante rise in wages by 2017 is therefore, in the first scenario, roughly 5% lower than in the model's central forecasts.

Measured ex post, however, the wage growth differential between the first scenario and the model's central forecasts is smaller given the knock-on effect of wage moderation to employment, which generates a positive feedback effect on wages. That is why our simulation results show not only the results of the wage shock on the current account of each country, but also the wage changes observed ex post.

In the model, the wage shock in deficit countries is transmitted to the current account mainly via domestic prices – which depend on the unit cost of production and wages – and via the resulting export prices. However, nominal rigidities impair the quality of this transmission. So for this exercise, we have adopted a calibration for the euro area countries which implies that export price changes stem primarily (75%) from domestic price changes and to a lesser extent (25%) from changes in competitors' prices (see table in box). This calibration is applied to all the euro area countries.

In our second scenario, we raise German wages by the same proportions: the wage growth differential relative to the model's central forecasts, measured ex ante, is +1% per year. The results of this second simulation are then compared with the results obtained from the first simulation to determine whether a symmetrical adjustment in the euro area is conducive to a rebalancing of current accounts.

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12 *The wage shock is constructed in order to reflect both private and public sector wages. In the model, we index the evolutions of public expenditure (in value terms) on the evolution of wages rather than on the evolution of the GDP deflator in order to allow this transmission. The evolution of public expenditure in volume terms and of public investments, are fixed so that only the wage shock impacts the dynamic of the economies affected.*

13 *Wage disindexation in certain countries, the CICE (tax credit for competitiveness and employment) in France, implies a fall in employers' social security contributions. In the case of the CICE, wage incomes do not fall but purchasing power is reduced by a rise in VAT, notably accompanied by a drop in public expenditure (Heyer et al., 2012). The French Accord National Interprofessionnel (ANI) (National Inter-professional Agreement) of 11 January 2013 is also likely to modify the relationship between productivity and wages.*

1|2 Scenario 1: internal devaluation in the group of "deficit" countries

The first scenario's simulation results are shown in Charts 4 for three countries in the "deficit" group (France, Spain and Italy) and for Germany. Details of the simulations are reported in the appendix (see Table A1). The figures shown correspond to the percentage deviations from the central forecasts by the first quarter of 2017 following a wage shock initiated in the first quarter of 2012. The results for the current account balances are expressed as GDP percentage points and percentage deviations from the central forecasts.

The wage shock is expected ex ante to result in a wage growth deviation from the central forecasts of – 1% per year, corresponding to a – 5% deviation by the first quarter of 2017. The results in Chart 4 show that this ex ante wage shock is not fully reflected in the ex post wage changes in the euro area deficit countries. The largest adjustment is observed in Spain; the differences between countries in the "deficit" group are due to the different elasticities in the model's wage equations. Overall, the lesser degree of ex post wage adjustment can be explained by a rebound in employment in the countries for which we simulate an ex ante wage moderation, due to capital-labour substitution. In total, only part of the wage shock spills over into consumer prices (which also depend on technical progress and the capacity utilisation rate) and into export prices (which also depend on foreign price developments). Corporate margins therefore increase since only part of the cost reduction is passed on to prices.

Our modeling choices imply that the increase in corporate margins has no impact on consumption since households' capital income is not at all affected. In the end, therefore, the decrease in consumption reflects the negative wage shock, which overrides the impact of the increase in employment. The GDP of those economies for which we simulate wage moderation is only marginally impacted.

It should be noted that a wage moderation is also observed in Germany: lower import prices raise workers' purchasing power and curb nominal wage increases. Export prices are impacted directly through lower wages, and indirectly via changes in competitors' prices (pricing-to-market behaviour).

In sum, we note a substantial change in current account balances of the main euro area economies. The figures shown in Charts 4 reflect deviations from the central forecasts in GDP percentage points. In the first quarter of 2017, the average current account balance of France, Spain and Italy gained between 0.2 and 0.3 GDP percentage points, whereas Germany's current account balance lost almost 0.3 GDP percentage points.

Charts 4   Impact of a wage shock in scenario 1
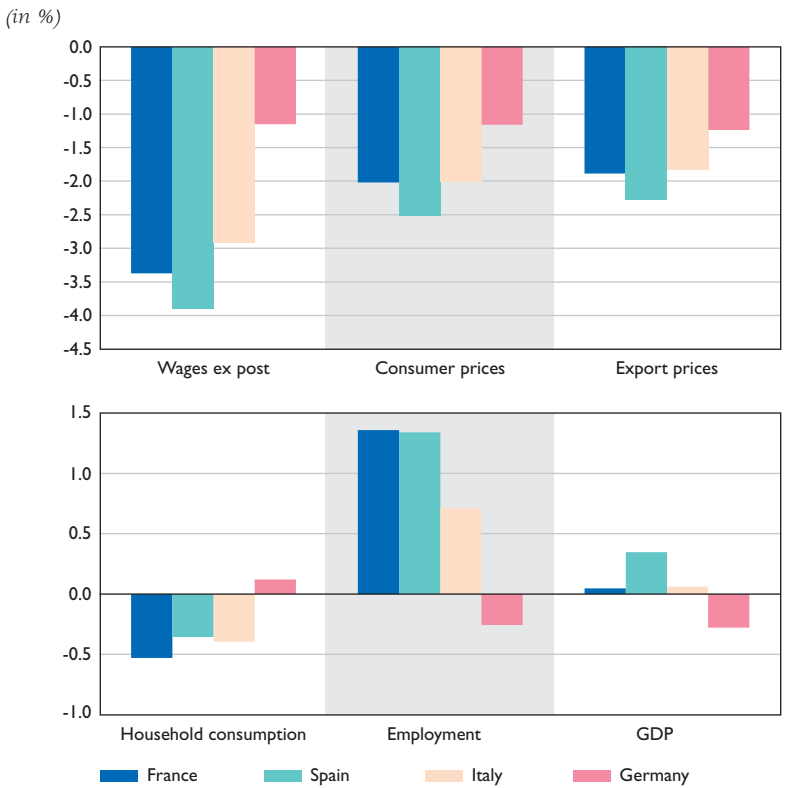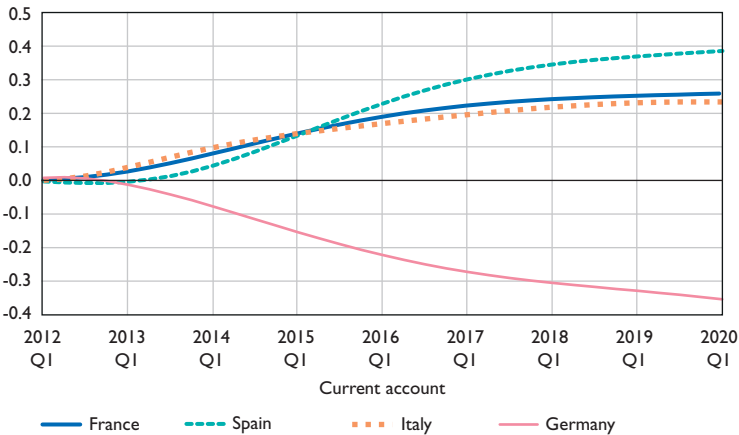
(in %)

(GDP percentage points)

Current account

Note: Simulation of scenario 1. The differences versus the NiGEM central forecasts for all the variables are expressed in percentages, except for the current account difference, which is expressed in GDP% points. An ex ante wage slowdown of 5% by the first quarter of 2017 versus the central forecasts in the deficit countries of the euro area.
Source: Banque de France – simulation of the units based on the NiGEM model.

The impact of our simulations on the current accounts of the euro area's major economies is therefore modest considering the scale of the simulated shock and of the current account imbalances observed before 2008. In 2011, i.e. just before our model's simulated wage shock, the current account balances of Spain, Italy and France posted an average deficit of approximately 3% of GDP.[14] The results obtained from our model's simulations imply that in order to halve this current account deficit, wages would have to reduce by 25% over five years compared with the central forecasts.

1|3 Scenario 1: sensitivity analysis

As mentioned in Box 1, we propose two variants of the scenario 1 simulation.

The first variant consists in removing the assumption of exchange rates being determined on the basis of purchasing power parity (PPP). Under a PPP assumption, a fall in prices in the euro area "deficit" countries and, by extension, throughout the euro area, mechanically leads to an appreciation of the euro that undermines the price competitiveness of euro area exports. This mechanism is absent under a fixed exchange rate assumption.

The results of this alternative simulation are shown in Chart 5 below. The impacts on current account balances are slightly more pronounced than in the initial scenario. Under a fixed exchange rate assumption, our annual wage growth moderation of 1% ex ante versus the baseline scenario has a positive effect of 0.35 GDP percentage points on the current account balances of France and Spain, and of 0.25% GDP percentage points on Italy's balance by the first quarter of 2017. Germany's balance is less reduced than in the baseline scenario (– 0.1 GDP percentage points) as a result of a slight competitiveness gain outside the euro area.[15]

In a second alternative scenario we revise our negative assumption regarding the role of consumption by assuming that consumption reflects not only changes in wages, but also profits and asset price increases (wealth effect).

The results of this latter simulation are presented in Chart 6. The impact on current account balances of the wage shock with this revised assumption is substantially smaller than in the baseline scenario 1. With consumption being less reduced in this alternative scenario (profits are not saved), imports are significantly less reduced and hence current account balances show a less pronounced improvement.

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14 In GDP percentage points: Spain – 3.5, Italy – 3.1; France – 2, versus Germany + 5.7.
15 The current account of the euro area as a whole was balanced until 2011 and then moved into surplus territory, reaching + 1.2% of euro area GDP in 2012. The improvement may be largely explained by the weakness of demand in the deficit countries and by the permanence of the German surplus.

Chart 5 Evolution of current account balances under a fixed exchange rate assumption (in scenario 1)

(in GDP percentage points)
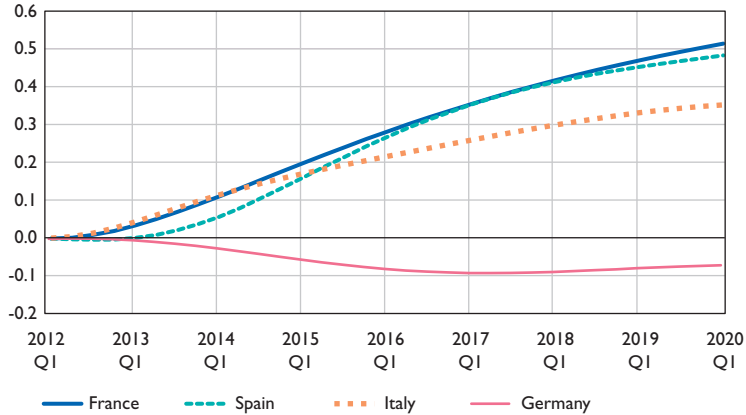
Note: Simulation of scenario 1. Difference versus NiGEM central forecasts in GDP percentage points.
Source: Banque de France – simulation of the units based on the NiGEM model.

Chart 6 Evolution of current account balances with consumption enhanced by profits (in scenario 1)

(in GDP percentage points)
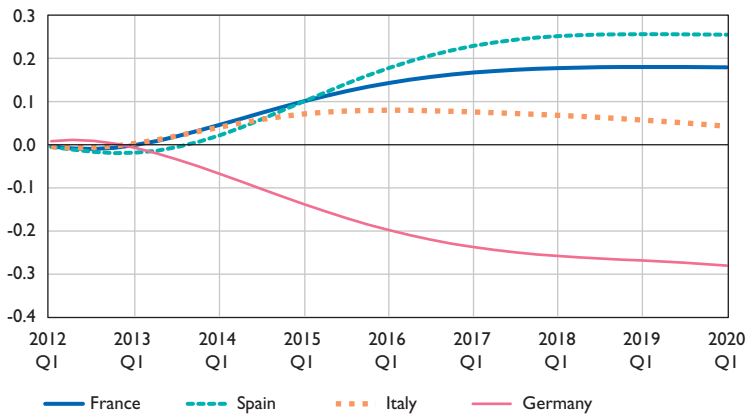
Note: Simulation of scenario 1. Difference versus NiGEM central forecasts in GDP percentage points.
Source: Banque de France – simulation of the units based on the NiGEM model.

1|4 Scenario 2: internal devaluation in the deficit countries and wage increase in Germany

Our second scenario assesses the impact of a "symmetrical" two-way wage adjustment within the euro area. In the area's "deficit" countries, wage moderation is identical to the one simulated in scenario 1. In the group of "surplus" countries, we simulate an acceleration of wages for Germany only. The euro exchange rate is defined on the basis of purchasing power parity (PPP) and the consumption functions of the euro area countries for which we simulate a wage shock are set to reflect the wage adjustments, but not changes in profits, as in the scenario 1 baseline. We also introduce an additional assumption into the German labour market dynamic by blocking the translation of higher wages into lower employment. This calibration is justified by the existence of substantial margins at German companies and by the existence within Germany of a consensus in favour of job preservation.

The simulation results are presented in Charts 7. The detailed results for all the euro area countries are presented in the Appendix (see Table A2). The ex post wage slowdowns for the deficit countries are largely similar to those simulated in scenario 1, and, as in scenario 1, the change in prices also reflects only part of the wage shock. Household consumption falls very substantially while the employment level rises as a result of the lower wages. Overall, we note that for the countries pursuing wage moderation, there is a very limited GDP rise by the first quarter of 2017. The impact on current account balances is more pronounced. By the first quarter of 2017, the current account balances of the deficit countries improves by approximately 0.5 GDP percentage points versus the central forecasts.

The scenario 2 simulations also show that wages progress in Germany as a result of the ex ante positive shock. As in the other countries, Germany's price development only reflects part of the wage evolutions, notably due to nominal rigidities, which implies a loss in profitability for German companies. The increase in consumption in Germany is very substantial as the wage rise has no adverse effect on employment, and the lower profitability of German businesses does not negatively impact household consumption. Germany posts a contraction of GDP. The country's current account surplus is substantially reduced by 1.25 GDP percentage points by the first quarter of 2017.

The sizes of the adjustments induced in our second (two-way wage shock) scenario lead to a substantially more pronounced impact on current account balances than that obtained in our first (one-way) scenario using the same level of ex ante wage shock. Considering the elasticities obtained, a 15% wage slowdown would be required to cut Spain's current account deficit in half by 2017 whereas in scenario 1 it would only be reduced by a quarter. However, this result would require a significant increase in German wages.

Charts 7   Impact of a wage shock in scenario 2
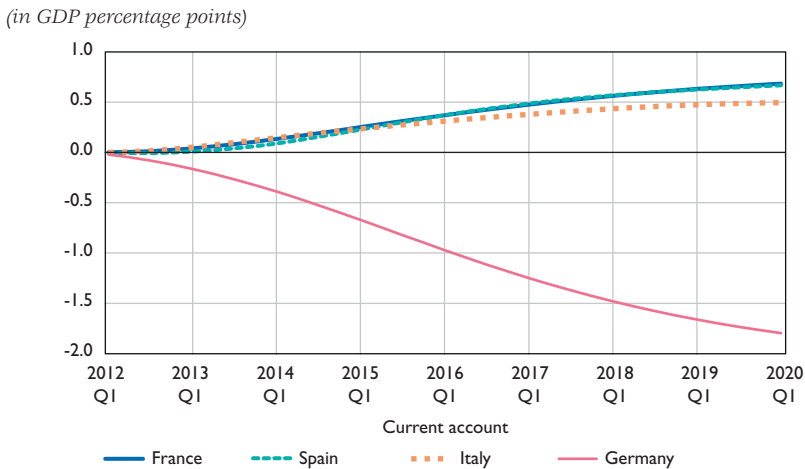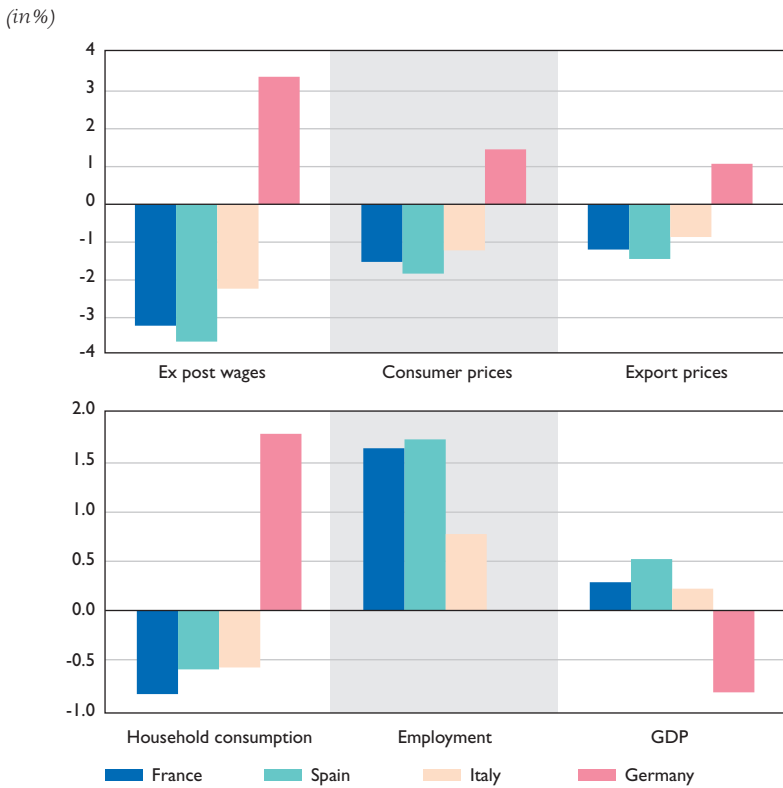
(in %)

Ex post wages   Consumer prices   Export prices

Household consumption   Employment   GDP

■ France   ■ Spain   ■ Italy   ■ Germany

(in GDP percentage points)

Current account

— France   ---- Spain   ···· Italy   — Germany

*Note: Simulation of scenario 2. The differences versus the NiGEM central forecasts for all the
variables are expressed in percentages, except for the current account difference, which is expressed
in GDP percentage points. An ex ante wage slowdown of 5% by Q1 2017 versus the NiGEM
central forecasts in the euro area deficit countries and a relative wage acceleration in Germany.
Source: Banque de France – simulation of the units based on the NiGEM model.*

2| Discussion of the simulation results

2|1 Adjustments of wages and unit labour costs

In our simulations with NiGEM presented above, the reactions of current account balances to wage shocks in the euro area economies were limited. The scenario of a two-way wage shock generates a stronger current account reaction; but our simulation suggests that a very substantial wage shock in its "deficit" countries would be required to generate a significant rebalancing of euro area current accounts. In reality, wage cuts are generally constrained by nominal rigidities. This is confirmed by empirical analyses using individual data for twelve advanced economies,[16] Dickens *et al.* (2007). These asymmetries are even observed in economies with reputedly flexible labour markets (United States, United Kingdom).[17]

The descriptive statistics presented at the beginning of this article, as well as Chart 8 below, provide an illustration of the adjustments under way among the euro area economies and particularly the role played by wages. Spain's current account deficit reduced by 6.1 GDP percentage points between 2008 and 2011 (an adjustment that continued in 2012, with the country's trade balance approaching equilibrium by the end of the year). At the same time, Spain's unit labour costs fell by 3.2% and its average hourly wage stabilised. The moderation of unit labour costs in Spain since the beginning of the crisis seems to be more related to productivity gains resulting from the lower level of employment than to wages moderation.[18]

Above all, considering the elasticities obtained in our simulations, Spain's adjustment cannot be explained alone by diminishing unit labour costs. It seems likely that the major adjustment in Spain's current account balance is related to a sharp contraction in domestic demand (divestment, private sector savings, fiscal consolidation). The changes in Spain's cost competitiveness since the beginning of the crisis are probably more related to the contraction of domestic demand than to underlying rebalancing determinants.[19, 20]

16 *The authors use a multi-country database produced by the International Wage Flexibility Project that contains data relating to a total of 31 million wage adjustments in 12 countries over several years.*

17 *Schmitt Grohé and Uribe (2012) developed a macroeconomic model to assess the effects of a negative external shock on a small open economy with a fixed exchange rate. The national policies implemented appear to be relatively ineffective in reducing unemployment because of downward nominal wage rigidities.*

18 *Nevertheless, inter and intra-sector composition effects can contribute to an increase in the apparent productivity of the economy and may mask a drop in wages if job losses are greater in companies with low productivity and wages (particularly in the construction sector).*

19 *Other studies, notably Benassy Quéré et al. (2008), have stressed the role played by capital flows in rebalancing current account positions at a global level, and particularly in the case of China.*

20 *Between 1999 and 2007, the growth rates of Spanish and German exports of goods were the same in value (+11.7% p.a. in dollars, WTO data), whereas Spanish imports increased more rapidly by 3.6% p.a. (+14.1% p.a. versus +10.5% p.a.). Between 2007 and 2012 (provisional data) Spain's exports grew at a faster pace than Germany's (+2.9%, versus +1.3% p.a.); but the principal contributor to the current account rebalancing was the change in the pace of imports: +2% p.a. for Germany versus –3.1% p.a. for Spain.*

Chart 8   **Wages, unit labour costs current account balance in Spain**

(left-hand scale: wages and unit labour costs: base 100 in 1999: right-hand scale: current account balance as % of GDP)

Current account balance (right-hand scale)
Hourly wages (left-hand scale)
Unit labour costs (left-hand scale)
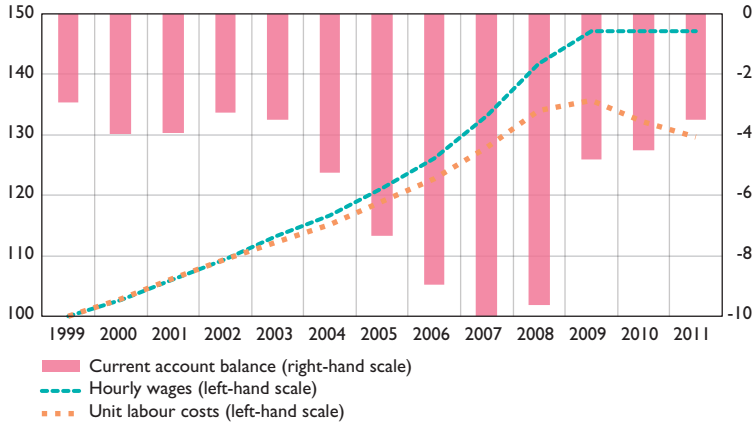
Sources: Eurostat and OECD.

2|2 Nominal adjustments and debt

Alongside the adjustment of their external accounts, euro area countries need to set their public finances onto a sustainable trajectory. In particular, the risks of a price dynamic that counteracts the fall in debt ratios are discussed by Corsetti (2010).

It is therefore interesting to examine whether these two objectives are compatible in the framework of our simulations. With public expenditure assumed to be fixed in volume terms, the budget balances respond to fiscal income and price levels. The evolution of the fiscal income depends on the GDP dynamic (via VAT, income taxes and corporate taxes). In the short term, countries undergoing a negative wage shock experience a drop in demand before the positive effects of enhanced competitiveness and higher employment actually stimulate fiscal income.

The price effects associated with wage shocks have a double-edged effect on debt-to-GDP ratios. On the one hand, lower wages in the public sector tend to reduce the ratio's numerator[21] and on the other hand, the fall in the GDP deflator mechanically reduces the denominator.

Lastly, our simulations (scenario 2 with a two-way wage shock) show that the debt-to-GDP ratios of the deficit countries only improve versus the NiGEM central forecasts after the third year in the best of cases. In the case of our one-way adjustment, the more negative short-term effects on

---

21 *Our simulation effectively imposes an identical wage shock for the public sector and for the private sector.*

demand, the lower competitiveness gains and, above all, the more acute deflation imply that only France records a reduction in public debt after five years, whereas, Spain's debt ratio remains unchanged and Italy's is substantially worse at the end of the five-year simulation. Note that these projections ignore the risk of an increase in the risk premium demanded for holding public debt.[22]

Deflation can also hinder the return to sustainable paths for net external positions (in GDP percentage terms). A deterioration in net external position implies that larger current account surpluses, or surpluses over a longer period, need to be obtained. A model like NiGEM can hardly reflect the evolution of net external positions, notably because valuation effects play an essential role: the prices of assets owned abroad and of foreign liabilities can experience fluctuations that override the fluctuations of current account balance in the overall dynamic of net external positions.[23]

3| Conclusions

The results of the NiGEM simulations presented in this article allow a quantification of the effects of a negative wage shock in the euro area countries that had accumulated a current account deficit in the recent period preceding the euro area crisis. The results of our simulations suggest that a rebalancing of current accounts via this channel alone would require a very substantial wage shock considering the weakness of the impacts obtained. A major wage shock could be limited by the existence of downward rigidities on wages, a fact well identified in micro-economic studies based on individual country data.

The impact on current account balances is significantly greater in our model when we simulate a simultaneous acceleration of wages in Germany. For a salary shock of 1% per year over five years (negative in deficit countries, positive in Germany), the current account balance improved by close to half a GDP percentage point in the deficit countries in 2017, while the German surplus dropped substantially.

The impact of changes in the euro's nominal exchange rate is not neutral. Assuming purchasing power parity, the fall in euro area prices in our first scenario causes an appreciation of the euro. The initially simulated

---

22 *Using the NiGEM model, Holland and Portes (2012) study the austerity policies planned in the European Union and also find that in the absence of an accommodative monetary policy (key rates close to zero) and with households being unable to smooth their consumption (liquidity constraints), public debt ratios increased in response to the generalised implementation of fiscal consolidation policies throughout the euro area.*

23 *Without proposing here a quantitative evaluation, we nevertheless note that an internal devaluation, as opposed to an "external" devaluation (via exchange rates) does not necessarily result in a mechanical reduction of the net external position. In effect, in the event of depreciation in the exchange rate, the value of assets abroad automatically increases in the home currency. In the case of an internal devaluation, the improvement in corporate profitability can deteriorate the net external position by raising the value of assets held abroad.*

competitiveness shock is subsequently partially offset by a deterioration of the competitiveness of exports to countries outside the euro area.

The consequences of the wage shock in the euro area deficit countries are not neutral from the point of view of other variables of interest for these economies in periods of crisis. The wage shock has the effect of reducing the nominal GDP in these countries, which, in our simulations, raises the weight of debt as a percentage of GDP.

Lastly, the adjustments already observed in the euro area, and which have been very rapid for certain countries, seem to indicate that other transmission channels are at work. The rebalancing currently underway in the euro area economies worst affected by the crisis may well be substantially explained by a withdrawal of capital invested before 2008 and by the resulting negative demand shock.

Appendix

Details of the simulations in scenarios 1 and 2

Table A1   Impact of a wage shock in NiGEM (scenario 1)

(variables expressed as percentages, except in relation to the current account balance, expressed in GDP percentage points)

	France	Spain	Italy	Portugal	Greece	Ireland	Germany
Wages	-3.37	-3.90	-2.92	-3.18	-3.67	-2.42	-1.15
Consumer prices	-2.02	-2.52	-2.01	-2.02	-2.23	-1.37	-1.16
Export prices	-1.89	-2.28	-1.83	-1.82	-1.97	-1.43	-1.24
Consumption	-0.53	-0.36	-0.39	-0.15	-0.44	-0.28	0.12
Employment	1.36	1.34	0.71	1.28	1.15	0.74	-0.26
GDP	0.05	0.35	0.06	0.10	0.04	-0.20	-0.28
Export volumes	0.40	0.72	0.30	0.08	0.41	-0.08	-0.34
Import volumes	-0.66	-0.89	-0.60	-0.41	-0.78	-0.02	0.26
Current account balance	0.22	0.30	0.20	0.12	0.24	0.06	-0.27

Note: Simulation of scenario 1. The differences versus the NiGEM central forecasts for all the variables are expressed in percentages, except the current account difference, which is expressed in GDP percentage points. An ex ante wage slowdown of 5% by the first quarter of 2017 versus the central forecasts in the deficit countries of the euro area.
Source: Banque de France – simulation of the units based on the NiGEM model.

Table A2   Impact of a two-way wage shock in NiGEM (scenario 2)

(variables expressed as percentages, except in relation to the current account balance, expressed in GDP percentage points)

	France	Spain	Italy	Portugal	Greece	Ireland	Germany
Wages	-3.21	-3.63	-2.23	-2.73	-3.55	-1.87	3.38
Consumer prices	-1.52	-1.83	-1.22	-1.17	-1.79	-0.72	1.46
Export prices	-1.20	-1.45	-0.87	-0.81	-1.25	-0.29	1.07
Consumption	-0.85	-0.60	-0.58	-0.32	-0.81	-0.24	1.80
Employment	1.65	1.74	0.78	1.86	1.46	1.07	0.00
GDP	0.29	0.52	0.22	0.21	0.18	0.31	-0.83
Export volumes	1.10	1.19	0.72	0.34	1.05	0.08	-1.55
Import volumes	-1.27	-1.32	-0.99	-0.69	-1.50	-0.41	1.65
Current account balance	0.48	0.49	0.38	0.28	0.53	0.49	-1.25

Note: Simulation of scenario 2. The differences versus the NiGEM central forecasts for all the variables are expressed in percentages, except the current account difference, which is expressed in GDP percentage points. An ex ante wage slowdown of 5% by the first quarter of 2017 versus the central forecasts in the deficit countries of the euro area.
Source: Banque de France – simulation of the units based on the NiGEM model.

References

Artus (P.) and Fontagné (L.) (2006)
"Évolution récente du commerce extérieur français", Rapport du Conseil d'analyse économique, No. 64.

Atkinson (A.), Piketty (T.) and Saez (E.) (2011)
"Top incomes in the long run of history", *Journal of Economic Literature,* Vol. 49 (1).

Bénassy Quéré (A.), Béreau (S.) and Mignon (V.) (2008)
"Equilibrium exchange rates: a guidebook for the euro-dollar rate", *Working Paper*, No. 2008-02, CEPII.

Berthou (A.) (2010)
"Real exchange rate movements and bilateral exports: the dampening effect of trade costs", mimeo.

Berthou (A.) and Vicard (V.) (2013)
"Firms' export dynamics: experience vs. size", *ECB Working Papers* (to be published).

Caliendo (L.) and Parro (F.) (2012)
"Estimates of the trade and welfare effects of NAFTA", *NBER Working Papers*, 18508.

Carton (B.) and Hervé (K.) (2012)
"Euro area real effective exchange rate misalignments", *La lettre du CEPII*, No. 319.

Chen (R.), Milesi Ferretti (G M.) and Tressel (T.) (2013)
"Eurozone external imbalances", *Economic Policy*, January, pp. 101-142.

Chinn (M.) (2005)
"A primer on real effective exchange rates: determinants, overvaluation, trade flows and competitive devaluation", *NBER working paper*, 11521.

Corsetti (G.) (2010)
"The 'original sin' in the Eurozone", Vox EU, 9 May.

Corsetti (G.), Martin (P.) and Pesenti (P.) (2013)
"Varieties and the transfer problem", *Journal of International Economics*, Vol. 89, No. 1, pp. 1-12.

Darvas (Z.) (2012)
"Intra-euro rebalancing is inevitable but insufficient", Policy Contributions, 747, Bruegel.

De Grauwe (P.) (2012)
"In search of symmetry in the Eurozone", *CEPS Papers*, 6901, Centre for European Policy Studies.

Dickens (W. T.), Goette (L.), Groshen (E. L.), Holden (S.), Messina (J.), Schweitzer (M. E.), Turunen (J.) and Ward (M. E.) (2007)
"How wages change: micro evidence from the international wage flexibility project," *Journal of Economic Perspectives*, Vol. 21(2), pp. 195-214.

Erkel Rousse (H.) and Mirza (D.) (2002)
"Import price elasticities: reconsidering the evidence", *Canadian Journal of Economics*, Vol. 35(2), pp. 282-306.

Gabrisch (H.) and Staehr (K.) (2012)
"The euro plus pact: competitiveness and external capital flows in the EU countries," *Bank of Estonia Working Papers*, 2012-5.

Gaulier (G.) and Vicard (V.) (2012)
"Évolution des déséquilibres courants dans la zone euro : choc de compétitivité ou choc de demande ?", *Bulletin de la Banque de France*, No. 189.

Goldstein (M.) and Khan (M. S.) (1978)
"The supply and demand for exports: a simultaneous approach," *The Review of Economics and Statistics*, Vol. 60(2), pp. 275-86.

Hausmann (R.) and Panizza (U.) (2011)
"Redemption or abstinence? original Sin, currency mismatches and counter-cyclical policies in the new millennium", *Journal of Globalization and Development*, Vol. 2(1), pp. 4.

Hausmann (R.) and Panizza (U.) (2003)
"On the determinants of Original Sin: an empirical investigation," *Journal of International Money and Finance*, Vol. 22(7), pp. 957-990.

Heyer (E.), Plane (M.) and Timbeau (X.) (2012)
"Impact économique de la 'quasi TVA sociale' simulations macroéconomiques et effets sectoriels", Revue de l'OFCE / Débats et politiques No. 122.

Holland (D.) and Portes (J.) (2012)
"Self-defeating austerity?", *National Institute Economic Review*, No. 222.

Hooper (P.), Johnson (K.) and Marquez (J.) (2000)
"Trade elasticities for G7 countries", *International Finance Discussion Papers*, 609, Board of Governors of the Federal Reserve System.

Imbs (J.)and Méjean (I.) (2009)
"Elasticity optimism", *FMI Working Papers*, 09/279.

Juster (T.), Lupton(J.), Smith (J.) and Stafford (F.) (2006)
"The decline in household saving and the wealth effect", *The Review of Economics and Statistics*, Vol. 88(1), pp. 20-27.

Pisani Ferry (J.) and Merler (S.) (2012a)
"Sudden stops in the euro area", *Policy Contributions*, 718, Bruegel.

Pisani Ferry (J.) and Merler (S.) (2012b)
"The simple macroeconomics of North and South in EMU", *Working Papers*, 740, Bruegel.

Potier (L.) and Saint Guilhem (A.) (2006)
"Scénarios d'ajustement du solde courant américain : une évaluation avec différentes calibrations de NiGEM", Bulletin de la Banque de France, No. 153, pp. 23-41.

Schmitt-Grohé (S.) and Uribe (M.) (2012)
"The Case For Temporary Inflation in the Eurozone", *CEPR Discussion Papers*, 9133.

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Economic developments

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Nota bene

Statistical data are updated monthly on the Banque de France's website.

Table 1
Industrial activity indicators – Monthly Business Survey – France

(NAF revision 2; seasonally-adjusted data)

	2013						
	Jan.	Feb.	March	April	May	June	July
Changes in production from the previous month [a)]							
Total manufacturing	-4	3	1	5	-1	5	2
Food products and beverages	1	2	4	5	5	5	2
Electrical, electronic and computer equipement and other machinery	0	4	-2	6	1	7	7
Automotive industry	-21	-10	5	16	13	1	-12
Other transport equipment	3	8	2	12	-2	12	11
Other manufacturing	-3	5	0	3	-11	6	3
Production forecasts [a)]							
Total manufacturing	2	0	1	-1	3	6	1
Food products and beverages	9	6	8	6	8	11	9
Electrical, electronic and computer equipement and other machinery	2	2	5	-2	4	5	1
Automotive industry	4	-2	6	-7	-2	-2	4
Other transport equipment	6	4	6	2	5	6	9
Other manufacturing	0	-1	-2	-1	1	5	-4
Changes in orders from the previous month [a)]							
Total manufacturing	-3	2	-2	3	-1	6	-2
Foreign	0	3	-4	4	2	5	-2
Order books [a)]							
Total manufacturing	-10	-9	-11	-10	-10	-10	-9
Food products and beverages	6	5	-1	0	-4	-4	2
Electrical, electronic and computer equipement and other machinery	-6	-6	-14	-10	-8	-7	-5
Automotive industry	-65	-58	-53	-54	-53	-58	-56
Other transport equipment	43	44	49	46	46	44	30
Other manufacturing	-14	-14	-15	-13	-12	-11	-11
Inventories of finished goods [a)]							
Total manufacturing	2	2	2	3	2	2	2
Food products and beverages	2	1	1	3	5	2	2
Electrical, electronic and computer equipement and other machinery	5	6	6	6	5	6	7
Automotive industry	0	-2	-1	0	-1	-3	-2
Other transport equipment	5	5	-2	0	1	4	3
Other manufacturing	1	1	1	2	1	1	1
Capacity utilisation rate [b)]							
Total manufacturing	75.2	75.4	75.3	75.9	75.4	75.5	75.9
Staff levels (total manufacturing) [a)]							
Changes from the previous month	-1	-2	-2	-1	-2	-2	-2
Forecast for the coming month	-2	-2	-2	-2	-1	-2	-4
Business sentiment indicator [c)]							
	95	96	93	94	94	96	95

a) Data given as a balance of opinions. Forecast series are adjusted for bias when it is statistically significant.
b) Data given as a percentage.
c) The indicator summarises industrial managers' sentiment regarding business conditions. The higher the indicator is, the more positive the assessment. The indicator is calculated using a principal component analysis of survey data smoothed over three months. By construction, the average is 100.

Source: Banque de France. *Produced 20 August 2013*

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

Business sentiment indicator

(100 = 1981 – last value)

Orders [a]

(balance of opinions; monthly change)
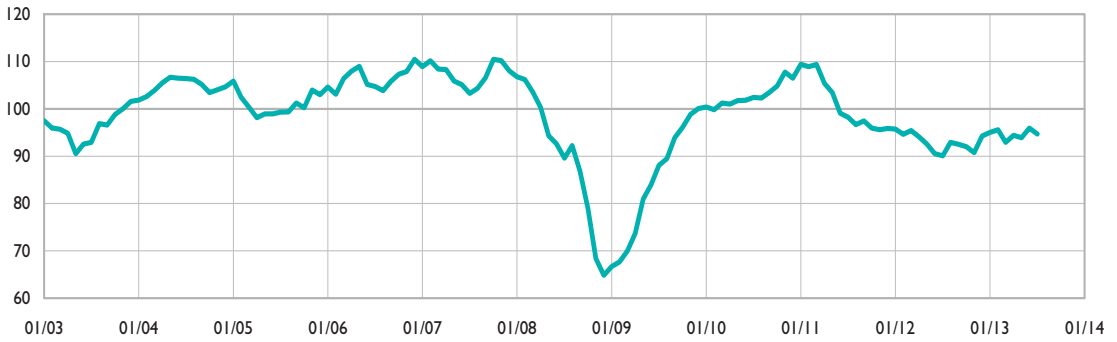
- Total orders
- Total orders (three-month moving average)
- Foreign orders (three-month moving average)
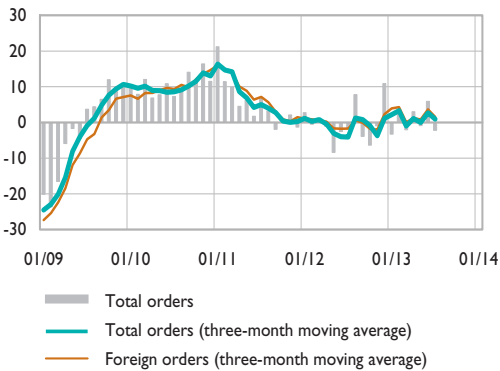
Production [a]

(balance of opinions; monthly change)

- Past production
- Forecast production (series adjusted for the observed statistical bias)
- Past production (three-month moving average)
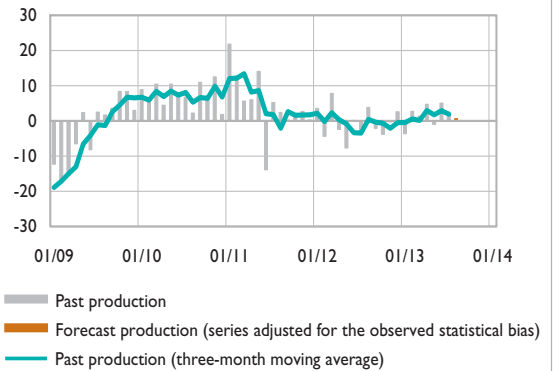
Inventories and order books [a]

(balance of opinions; compared to levels deemed normal)

- Inventories
- Order books

Capacity utilisation rate [a]

(%)

- Capacity utilisation rate
- Long-term average since 1981
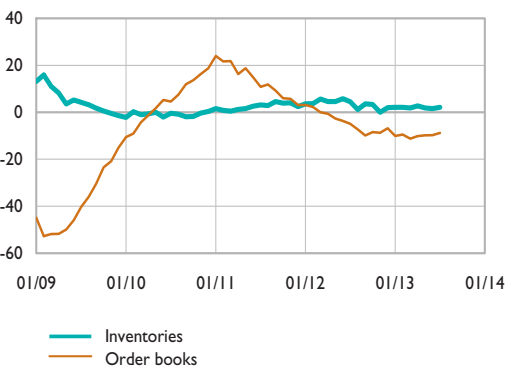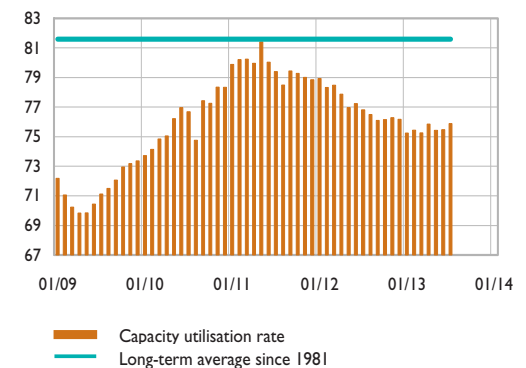
a) Manufacturing.
Source: Banque de France.

Produced 20 August 2013

Table 3
Consumer price index [a]

(annual % change)

	2012		2013						
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July
France	1.6	1.5	1.4	1.2	1.1	0.8	0.9	1.0	1.2
Germany	1.9	2.0	1.9	1.8	1.8	1.1	1.6	1.9	1.9
Italy	2.6	2.6	2.4	2.0	1.8	1.3	1.3	1.4	1.2
Euro area	2.2	2.2	2.0	1.8	1.7	1.2	1.4	1.6	1.6
United Kingdom	2.7	2.7	2.7	2.8	2.8	2.4	2.7	2.9	2.8
European Union	2.4	2.4	2.1	2.0	1.9	1.4	1.6	1.8	1.7
United States	1.8	1.7	1.6	2.0	1.5	1.1	1.4	1.8	2.0
Japan	-0.2	-0.1	-0.3	-0.6	-0.9	-0.7	-0.3	0.2	na

(annual average)   *(seasonally-adjusted monthly % change)*

	2010	2011	2012	2013					
				Feb.	March	April	May	June	July
France	1.7	2.3	2.2	0.0	0.2	-0.1	0.2	0.2	0.2
Germany	1.2	2.5	2.1	0.3	0.1	-0.4	0.6	0.3	0.2
Italy	1.6	2.9	3.3	0.0	0.2	-0.1	0.2	0.3	0.0
Euro area	1.6	2.7	2.5	0.2	0.1	-0.3	0.2	0.1	0.2
United Kingdom	3.3	4.5	2.8	0.2	0.2	-0.1	0.3	0.2	0.2
European Union [b]	2.3	2.0	2.6	–	–	–	–	–	–
United States	1.6	3.2	2.1	0.7	-0.2	-0.4	0.1	0.5	0.2
Japan	-0.7	-0.3	0.0	-0.1	-0.2	0.2	0.1	0.3	na

France and the euro area

(annual % change)

- Euro area
- France
- Amplitude [c]
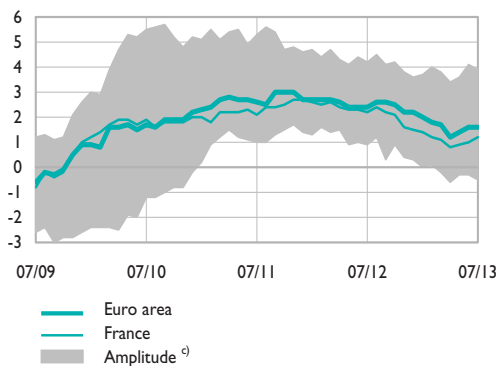
International comparisons

(annual % change)

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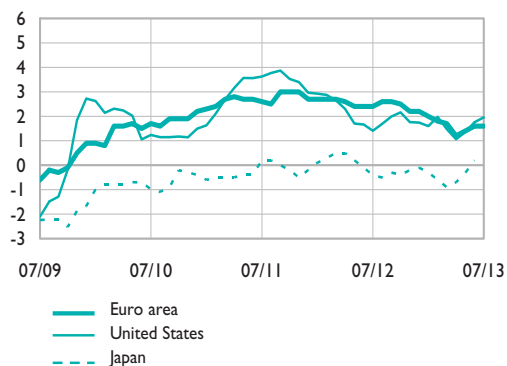
a) Harmonised indices except for the United States and Japan (national indices).
b) The series of seasonally adjusted monthly changes in the HIPC is not available for the European Union.
c) Gap between the extreme values of harmonised price indices observed in the euro area (changing composition).

Table 4
The competitiveness of France's economy

Indicators deflated by consumer prices

(1st quarter 1999 = 100)

Competitiveness improvement

—— Compared to the euro area
—— Compared to the EU-28
– · – Compared to industrial countries
—— Compared to the 46 major trading partners

Indicators deflated by consumer prices

(1st quarter 1999 = 100)

Competitiveness improvement

—— Compared to the United States
—— Compared to Japan
– · – Compared to the United Kingdom
—— Compared to emerging Asian countries
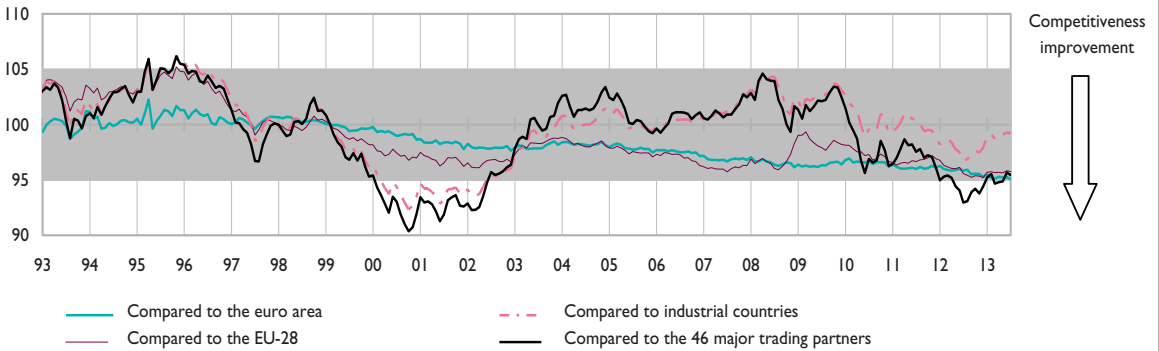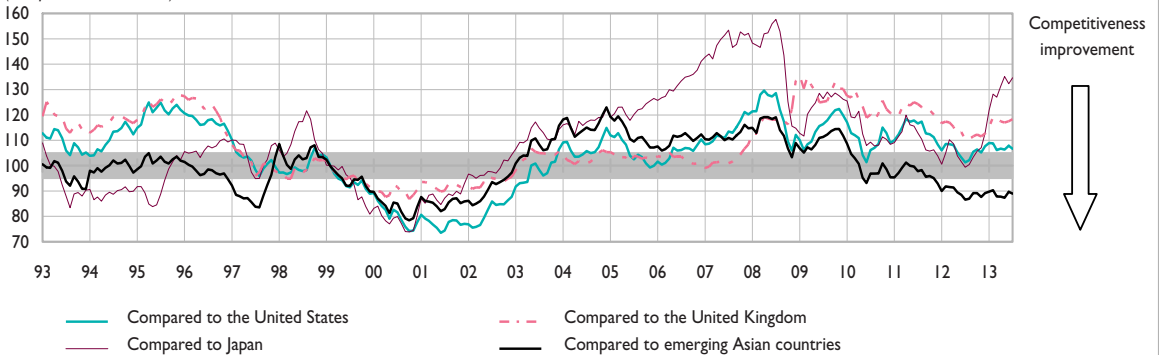
Indicators of competitiveness compared to 24 OECD countries

(1st quarter 1999 = 100)

Competitiveness improvement

—— Nominal exchange rate
—— Deflated by consumer prices
– · – Deflated by unit labour costs in the manufacturing industry
—— Deflated by unit labour costs for the economy as a whole
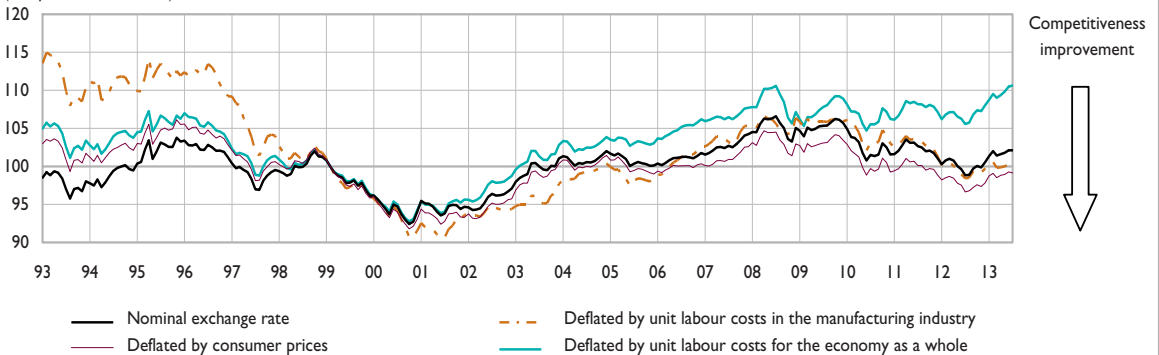
Grey area: change in competitiveness compared to long-term average less than 5%.
Sources: National data, Banque de France, ECB, IMF, OECD, Thomson Financial Datastream.

Calculations: Banque de France.

Produced 20 August 2013

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

(unadjusted data, EUR billions)

	2011	2012	2012				2013
			Q1	Q2	Q3	Q4	Q1
Current account	**-35.2**	**-44.4**	**-11.8**	**-16.9**	**-6.6**	**-9.2**	**-12.4**
Goods	-76.6	-70.6	-19.3	-19.1	-15.7	-16.4	-17.2
Services	31.5	32.6	5.5	8.3	10.6	8.2	3.9
Income	45.1	29.7	9.6	3.7	8.2	8.3	10.1
Current transfers	-35.2	-36.2	-7.6	-9.7	-9.7	-9.2	-9.1
Capital account	0.0	-0.4	0.0	-0.1	-0.5	0.2	0.0
Financial account	**53.6**	**74.2**	**24.1**	**4.3**	**26.4**	**19.5**	**-20.1**
Direct investment	-15.1	-9.4	4.0	-5.2	-8.5	0.3	-0.3
French direct investment abroad	*-42.8*	*-28.9*	*5.3*	*-19.1*	*-11.1*	*-4.0*	*0.3*
Foreign direct investment in France	*27.7*	*19.5*	*-1.3*	*13.9*	*2.6*	*4.3*	*-0.6*
Portfolio investment	228.5	39.2	37.1	33.6	-32.4	0.9	6.5
Assets	*166.6*	*6.3*	*7.6*	*11.0*	*0.7*	*-13.0*	*-37.4*
Liabilities	*61.9*	*32.9*	*29.6*	*22.6*	*-33.1*	*13.9*	*43.8*
Financial derivatives	13.9	14.3	-0.5	5.2	0.4	9.1	4.3
Other investment	-179.3	34.1	-16.7	-28.5	67.3	11.9	-31.0
Reserve assets	5.5	-4.0	0.2	-0.9	-0.5	-2.8	0.5
Net errors and omissions	**-18.4**	**-29.4**	**-12.3**	**12.7**	**-19.3**	**-10.5**	**32.5**

Current account balance

(unadjusted data, EUR billions)

- Current transfers
- Goods
- Services

Financial account balance

(unadjusted data, EUR billions)

- Direct investment
- Portfolio investment – equities
- Portfolio investment – debt securities

Source: Banque de France.   *Produced 20 August 2013*
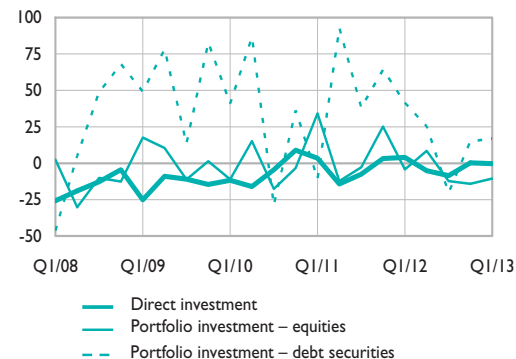
Table 6
Balance of payments – Current and capital accounts (quarterly data) – France

(unadjusted data, EUR billions)

	2011	2012	2012				2013
			Q1	Q2	Q3	Q4	Q1
Current account	**-35.2**	**-44.4**	**-11.8**	**-16.9**	**-6.6**	**-9.2**	**-12.4**
Goods	**-76.6**	**-70.6**	**-19.3**	**-19.1**	**-15.7**	**-16.4**	**-17.2**
Exports	*424.4*	*437.8*	*111.5*	*109.8*	*105.8*	*110.7*	*108.4*
Imports	*501.0*	*508.4*	*130.8*	*128.9*	*121.5*	*127.1*	*125.6*
General merchandise	-77.4	-71.2	-19.4	-19.3	-16.0	-16.5	-17.5
Goods procured in ports by carriers	-2.8	-3.0	-0.9	-0.7	-0.7	-0.8	-0.7
Goods for processing and repairs on goods	3.6	3.6	1.0	0.9	0.9	0.8	0.9
Services	**31.5**	**32.6**	**5.5**	**8.3**	**10.6**	**8.2**	**3.9**
Exports	*169.4*	*168.3*	*36.8*	*42.6*	*46.8*	*42.1*	*36.3*
Imports	*137.9*	*135.7*	*31.2*	*34.3*	*36.2*	*33.9*	*32.4*
Transportation	-2.5	-0.4	-0.2	-0.2	0.0	0.0	-0.7
Travel	7.1	11.3	1.0	3.0	5.8	1.4	0.4
Communications services	2.3	1.9	0.4	0.6	0.5	0.4	0.5
Construction services	2.1	1.8	0.1	0.4	0.5	0.9	0.3
Insurance services	1.6	1.3	0.1	0.3	0.3	0.7	-0.1
Financial services	2.1	1.6	0.5	0.5	0.4	0.2	0.5
Computer and information services	-0.7	-1.6	-0.4	-0.4	-0.4	-0.4	-0.4
Royalties and license fees	3.7	2.2	0.8	0.5	0.3	0.6	0.1
Other business services	15.4	13.8	3.0	3.4	3.1	4.3	3.1
Personal, cultural and recreational services	0.4	0.4	0.1	0.1	0.1	0.1	0.1
Government services	0.2	0.3	0.1	0.1	0.1	0.0	0.1
Income	**45.1**	**29.7**	**9.6**	**3.7**	**8.2**	**8.3**	**10.1**
Compensation of employees	14.7	15.5	3.8	3.9	3.9	3.9	3.9
Investment income	30.4	14.2	5.7	-0.2	4.3	4.4	6.2
Direct investment	*38.7*	*32.1*	*7.1*	*10.0*	*7.8*	*7.2*	*7.6*
Portfolio investment	*-9.0*	*-18.3*	*-1.5*	*-10.3*	*-3.6*	*-2.9*	*-1.7*
Other investment	*0.7*	*0.4*	*0.1*	*0.1*	*0.1*	*0.1*	*0.2*
Current transfers	**-35.2**	**-36.2**	**-7.6**	**-9.7**	**-9.7**	**-9.2**	**-9.1**
General government	-17.4	-17.6	-3.0	-4.9	-5.1	-4.6	-4.1
Other sectors	-17.7	-18.6	-4.6	-4.9	-4.5	-4.6	-5.0
of which workers' remittances	*-7.6*	*-8.2*	*-2.1*	*-2.1*	*-2.1*	*-2.1*	*-2.1*
Capital account	0.0	-0.4	0.0	-0.1	-0.5	0.2	0.0

Source: Banque de France.   *Produced 20 August 2013*

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

(unadjusted data, EUR billions)

	2011	2012	2012				2013
			Q1	Q2	Q3	Q4	Q1
Financial account	**53.6**	**74.2**	**24.1**	**4.3**	**26.4**	**19.5**	**-20.1**
Direct investment	-15.1	-9.4	4.0	-5.2	-8.5	0.3	-0.3
French direct investment abroad	-42.8	-28.9	5.3	-19.1	-11.1	-4.0	0.3
of which equity capital and reinvested earnings	*-28.4*	*-40.7*	*-5.2*	*-13.0*	*-13.5*	*-8.9*	*-2.4*
Foreign direct investment in France	27.7	19.5	-1.3	13.9	2.6	4.3	-0.6
of which equity capital and reinvested earnings	*20.2*	*15.5*	*0.4*	*3.9*	*2.0*	*9.1*	*3.5*
Portfolio investment	228.5	39.2	37.1	33.6	-32.4	0.9	6.5
Assets	166.6	6.3	7.6	11.0	0.7	-13.0	-37.4
Equity securities	*39.3*	*-50.1*	*-5.2*	*2.2*	*-13.2*	*-33.9*	*-13.3*
Bonds and notes	*87.2*	*78.8*	*43.2*	*10.1*	*17.7*	*7.7*	*-25.5*
Short-term debt securities	*40.1*	*-22.4*	*-30.4*	*-1.3*	*-3.7*	*13.1*	*1.4*
Liabilities	61.9	32.9	29.6	22.6	-33.1	13.9	43.8
Equity securities	*5.0*	*27.9*	*0.9*	*6.2*	*1.0*	*19.8*	*2.8*
Bonds and notes	*80.3*	*41.7*	*29.4*	*16.8*	*-18.2*	*13.8*	*21.3*
Short-term debt securities	*-23.4*	*-36.7*	*-0.7*	*-0.4*	*-15.9*	*-19.7*	*19.7*
Financial derivatives	13.9	14.3	-0.5	5.2	0.4	9.1	4.3
Other investment	-179.3	34.1	-16.7	-28.5	67.3	11.9	-31.0
Reserve assets	5.5	-4.0	0.2	-0.9	-0.5	-2.8	0.5
Net errors and omissions	**-18.4**	**-29.4**	**-12.3**	**12.7**	**-19.3**	**-10.5**	**32.5**

Direct investment account

(cumulated flows over 4 quarters)

- Direct investment
- French direct investment abroad
- -- Foreign direct investment in France

Portfolio investment account

(cumulated flows over 4 quarters)

- Portfolio investment
- Equity securities
- -- Debt securities

Source: Banque de France.

Produced 20 August 2013
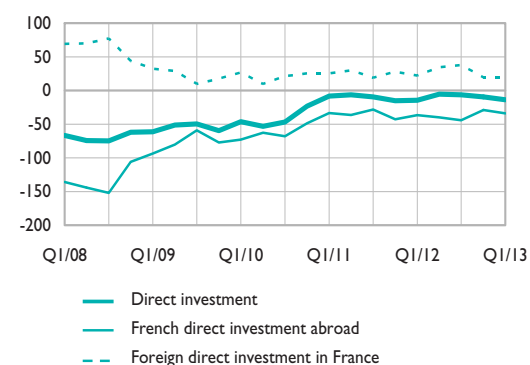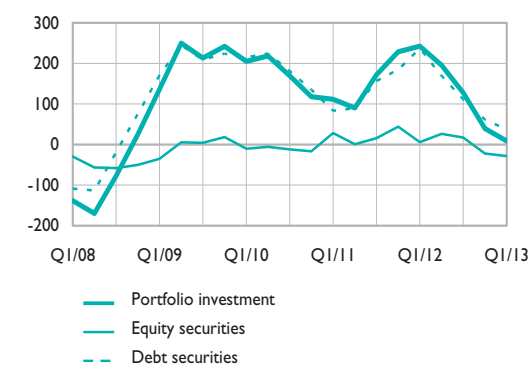
Table 8
Balance of payments – Geographical breakdown (quarterly data) – France

(unadjusted data, EUR billions)

	1st quarter 2013					
	EMU [a)]	**EU-27 excl. EMU** [b)]	**USA**	**Japan**	**Switzerland**	**China**
Current account	**2.7**	**-0.2**	**0.5**	**-0.1**	**2.0**	**na**
Receipts	*31.0*	*18.1*	*6.0*	*0.7*	*5.4*	*1.7*
Expenditure	*28.3*	*18.3*	*5.5*	*0.8*	*3.4*	*na*
Goods	-0.2	-0.4	-0.2	0.1	-0.1	-0.2
Receipts	*2.6*	*0.5*	*0.1*	*0.0*	*0.1*	*0.0*
Expenditure	*2.7*	*0.9*	*0.3*	*0.0*	*0.2*	*0.2*
Services	0.4	-0.1	-0.6	-0.2	0.2	0.6
Receipts	*13.1*	*5.0*	*2.6*	*0.2*	*1.9*	*1.4*
Expenditure	*12.7*	*5.1*	*3.2*	*0.3*	*1.7*	*0.8*
Income	4.1	2.4	1.4	0.1	2.6	na
Receipts	*13.9*	*4.1*	*3.0*	*0.5*	*3.0*	*0.3*
Expenditure [c)]	*9.7*	*1.8*	*1.7*	*0.4*	*0.4*	*na*
Current Transfers	-1.7	-2.1	-0.1	-0.1	-0.8	-0.1
Financial account						
Direct investment	-4.1	-2.5	1.7	1.0	3.6	-0.3
French direct investment abroad	*-5.7*	*-1.9*	*0.2*	*0.9*	*3.4*	*-0.3*
Foreign direct investment in France	*1.6*	*-0.6*	*1.5*	*0.1*	*0.2*	*0.0*
Portfolio investment – Assets [d)]	-27.5	1.3	-13.2	2.4	-0.2	-0.1
Equity securities	*-6.7*	*1.0*	*-8.1*	*-0.4*	*-0.2*	*0.0*
Bonds and notes	*-18.5*	*-1.0*	*-5.3*	*0.1*	*0.2*	*0.0*
Short-term debt securities	*-2.3*	*1.2*	*0.2*	*2.7*	*-0.3*	*-0.1*
Other investment	-62.1	35.0	14.1	-6.5	4.1	-8.9

a) 17 Member States (including Estonia as of 1 January 2011).
b) Denmark, United Kingdom, Sweden, European Institutions and New Member States (Czech Republic, Hungary, Latvia, Lithuania, Poland, Bulgaria, Romania).
c) Geographical breakdown of portfolio investment income based on data compiled by the IMF (Coordinated Portfolio Investment Survey); data not available for China.
d) The geographical breakdown is not available for liabilities.

Produced 20 August 2013

Table 9
Balance of payments (monthly data) – France

(unadjusted data, EUR billions)

					12-month total	
	2012	2013			2012	2013
	June	April	May	June	June	June
Current account	**-1.8**	**-4.1**	**-9.5**	**4.2**	**-42.2**	**-37.6**
Goods	-6.2	-4.7	-6.0	-3.8	-74.7	-64.0
Services	3.0	2.4	2.6	4.1	31.9	31.8
Income	4.4	1.9	-2.7	7.9	38.2	33.5
Current transfers	-2.9	-3.7	-3.4	-3.9	-37.7	-38.9
Capital account	0.0	0.4	0.2	0.2	-0.1	0.5
Financial account	**2.8**	**7.1**	**15.0**	**12.1**	**41.1**	**59.9**
Direct investment	-8.1	4.2	0.5	0.6	-5.6	-3.2
French direct investment abroad	*-12.9*	*2.7*	*-0.7*	*-0.7*	*-40.0*	*-13.4*
Equity capital	*-10.3*	*2.4*	*-0.3*	*0.4*	*-34.0*	*-17.8*
Reinvested earnings	*-0.5*	*-0.5*	*-0.5*	*-0.5*	*-5.9*	*-6.1*
Other capital	*-2.2*	*0.8*	*0.2*	*-0.6*	*-0.1*	*10.4*
Foreign direct investment in France	*4.8*	*1.5*	*1.2*	*1.2*	*34.4*	*10.2*
Equity capital	*1.5*	*0.8*	*0.9*	*1.0*	*16.9*	*16.8*
Reinvested earnings	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.8*
Other capital	*3.3*	*0.6*	*0.2*	*0.2*	*17.4*	*-7.4*
Portfolio investment	76.2	3.8	-7.5	41.0	195.4	12.2
Assets	*54.5*	*-9.7*	*-23.9*	*41.2*	*208.1*	*-42.1*
Equity securities	*9.7*	*3.4*	*-10.9*	*16.7*	*29.6*	*-51.1*
Bonds and notes	*23.5*	*6.7*	*-13.7*	*16.0*	*172.6*	*9.0*
Short-term debt securities	*21.2*	*-19.8*	*0.7*	*8.4*	*5.9*	*0.1*
Liabilities	*21.7*	*13.5*	*16.4*	*-0.2*	*-12.7*	*54.3*
Equity securities	*19.3*	*-9.6*	*11.0*	*9.8*	*-3.2*	*34.8*
Bonds and notes	*14.9*	*14.8*	*7.4*	*-1.4*	*42.0*	*37.7*
Short-term debt securities	*-12.5*	*8.2*	*-2.0*	*-8.6*	*-51.6*	*-18.3*
Financial derivatives	0.1	0.6	0.1	6.0	7.4	20.5
Other investment	-65.8	-1.7	21.9	-35.5	-162.9	33.0
Reserve assets	0.3	0.3	-0.1	0.1	6.8	-2.5
Net errors and omissions	**-1.0**	**-3.3**	**-5.7**	**-16.5**	**1.2**	**-22.8**

Source: Banque de France. *Produced 20 August 2013*

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

(EUR billions)

	2008	2009	2010	2011	2012	2013
	Dec.	Dec.	Dec.	Dec.	Dec.	Q1
Assets	**4,414.1**	**4,661.2**	**5,547.5**	**5,976.0**	**6,115.9**	**6,152.4**
French direct investment abroad	975.3	1,036.0	1,109.3	1,142.8	1,167.4	1,170.3
Equity capital and reinvested earnings	*658.6*	*726.1*	*835.3*	*852.6*	*889.9*	*893.7*
Other capital	*316.7*	*309.9*	*274.0*	*290.2*	*277.4*	*276.7*
Portfolio investment (foreign securities held by residents)	1,857.4	2,049.9	2,078.0	1,826.7	1,947.9	2,000.6
Financial derivatives	234.0	273.5	868.0	1,237.1	1,301.6	1,225.3
Other investment	1,273.5	1,209.5	1,367.6	1,636.3	1,559.1	1,617.1
Reserve assets	74.0	92.4	124.5	133.1	139.9	139.1
Liabilities	**-4,633.3**	**-4,864.1**	**-5,742.4**	**-6,192.6**	**-6,439.1**	**-6,463.2**
Foreign direct investment in France	-684.5	-683.9	-714.8	-737.3	-756.4	-756.6
Equity capital and reinvested earnings	*-395.3*	*-408.4*	*-430.6*	*-443.8*	*-459.1*	*-462.7*
Other capital	*-289.2*	*-275.5*	*-284.2*	*-293.5*	*-297.2*	*-294.0*
Portfolio investment (French securities held by non-residents)	-1,872.5	-2,299.7	-2,430.8	-2,425.5	-2,629.2	-2,687.7
Financial derivatives	-289.3	-311.8	-906.1	-1,278.6	-1,344.3	-1,273.0
Other investment	-1,787.0	-1,568.6	-1,690.7	-1,751.2	-1,709.2	-1,745.8
Net position	**-219.2**	**-202.8**	**-194.9**	**-216.6**	**-323.1**	**-310.8**

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

(%)

- △ CAC 40 equities
- ■ Government negotiable debt securities

France's international investment position

(EUR billions)

- ◇ With direct investment measured at book value
- ■ With direct investment measured at market value
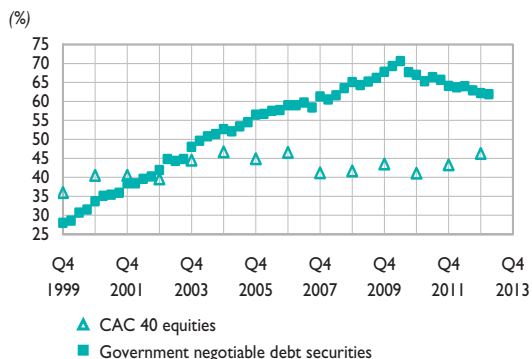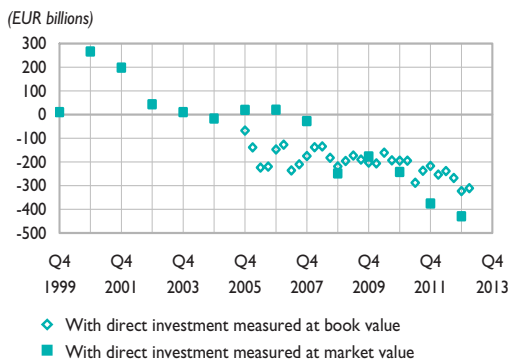
Table 11
Main monetary and financial aggregates – France and the euro area

(annual percentage growth rate)

	2010	2011	2012	2012	2012	2013					
	Dec.	Dec.	Dec.	June	Dec.	Jan.	Feb.	March	April	May	June
M1											
Euro area [a]	4.4	1.9	6.4	3.5	6.4	6.5	7.0	7.1	8.7	8.4	7.5
France (contribution)	8.6	5.7	3.0	5.8	3.0	-2.8	-0.4	-0.6	2.8	1.7	2.5
M2											
Euro area [a]	2.2	1.9	4.5	2.9	4.5	4.4	4.3	4.2	4.9	4.7	4.1
France (contribution)	5.5	7.0	5.3	7.1	5.3	2.8	3.4	4.0	5.6	4.7	4.5
M3											
Euro area [a]	1.1	1.6	3.5	3.0	3.5	3.4	3.1	2.5	3.2	2.9	2.3
France (contribution)	6.4	3.0	2.6	4.5	2.6	2.0	3.1	2.5	3.8	3.3	2.4
Loans to the private sector											
Euro area [a]	1.7	0.9	-0.6	-0.4	-0.6	-0.9	-0.8	-0.7	-0.9	-1.1	-1.6
France [b]	4.7	3.1	2.5	1.0	2.5	2.1	2.2	2.5	3.2	3.1	2.4

M1

(annual percentage growth rate)

— Euro area
— France (contribution)

M2

(annual percentage growth rate)

— Euro area
— France (contribution)

M3

(annual percentage growth rate)

— Euro area
— France (contribution)

Loans to the private sector

(annual percentage growth rate)
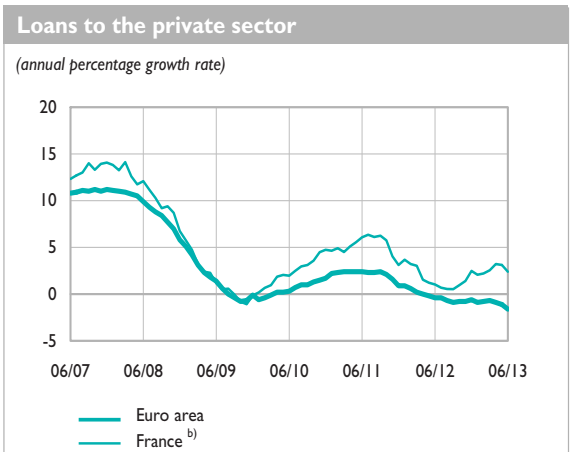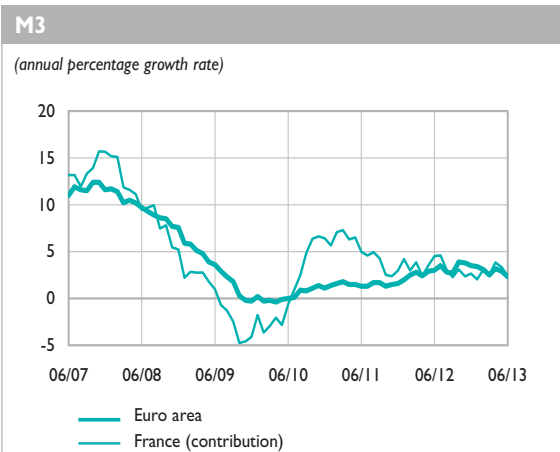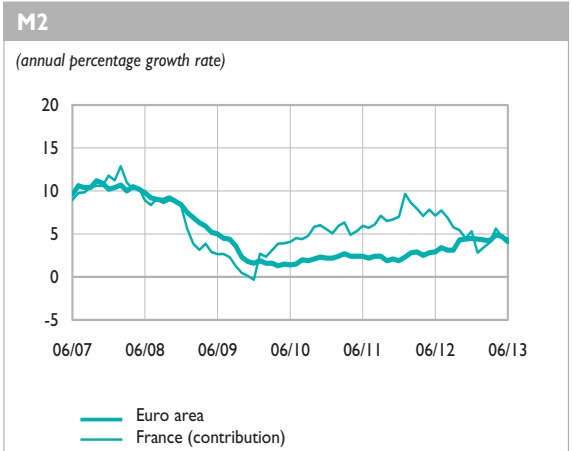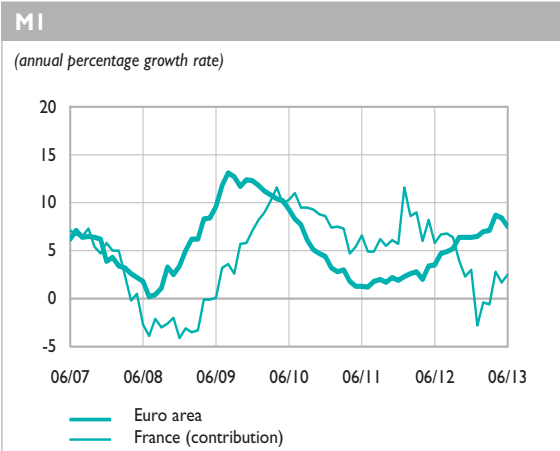
— Euro area
— France [b]

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 August 2013

Table 12
Banque de France Monthly Statement [a)]

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

	2010	2011	2012	2012	2013			
	Dec.	Dec.	Dec.	July	April	May	June	July
Assets								
National territory	103.4	295.9	326.4	334.5	246.9	238.6	240.3	233.1
Loans	56.3	218.4	234.2	234.9	163.8	154.3	156.3	151.6
MFIs [b)]	*56.1*	*218.2*	*234.0*	*234.7*	*163.6*	*154.1*	*156.2*	*151.4*
General government	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Other sectors	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*	*0.2*
Securities other than shares	46.6	77.0	92.1	99.5	83.0	84.2	83.8	81.4
MFIs	*24.3*	*34.1*	*32.2*	*35.5*	*25.5*	*25.4*	*25.4*	*25.2*
General government	*22.3*	*42.9*	*59.9*	*64.0*	*57.5*	*58.8*	*58.4*	*56.1*
Other sectors	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Shares and other equity	0.5	0.5	0.1	0.1	0.1	0.1	0.1	0.1
Other euro area countries [b)]	102.5	106.8	87.6	99.0	94.0	91.6	93.7	92.0
Rest of the world [b)]	99.1	110.5	114.9	104.6	106.5	101.3	100.2	102.8
Gold	82.6	95.3	98.8	103.3	87.4	84.2	72.0	77.7
Not broken down by geographical area [c)]	97.7	105.1	109.6	104.6	103.0	101.2	107.3	107.3
Total	**485.3**	**713.6**	**737.3**	**746.0**	**637.8**	**616.9**	**613.5**	**612.8**
Liabilities								
National territory – Deposits	51.6	185.6	200.3	277.1	124.5	115.0	127.0	125.9
MFIs	49.6	176.2	194.8	228.4	122.0	113.5	123.7	124.6
General government	1.5	8.9	4.9	48.3	1.8	0.9	2.6	0.7
Other sectors	0.4	0.5	0.6	0.5	0.7	0.6	0.7	0.6
Other euro area countries – Deposits	28.3	79.6	73.9	3.3	73.5	71.1	66.5	56.1
Rest of the world – Deposits	122.9	143.4	146.0	146.7	139.0	135.2	133.3	133.5
Not broken down by geographical area	282.6	305.0	317.1	318.8	300.8	295.6	286.8	297.2
Banknotes and coins in circulation [d)]	160.1	169.0	173.5	170.8	171.5	172.2	173.1	174.6
of which coins [e)]	2.7	2.8	2.9	2.9	2.9	2.9	2.9	3.0
Debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital reserves and revaluation account	97.6	112.4	117.0	124.3	107.9	104.6	91.8	97.5
Other liabilities	24.9	23.6	26.5	23.8	21.5	18.8	21.9	25.1
Total [f)]	**485.3**	**713.6**	**737.3**	**746.0**	**637.8**	**616.9**	**613.5**	**612.8**

a) These statistics are transmitted to the European Central Bank, on the 15th working day following the end of the month to which they relate, within the production of the consolidated balance sheet of the monetary financial institutions (Regulation ECB/2008/32).
b) This item includes the outstanding amounts of market operations.
c) Including the adjustment linked to the method of accounting used for measuring the euro notes on the liability side of the balance sheet of the Banque de France since January 2002.
d) Since January 2002, banknotes in circulation are treated according to specific euro area accounting conventions to bring them in line with the capital key share. 8% of the total value of euro banknotes in circulation is allocated to the European Central Bank. The remaining 92% is broken down between the NCBs in proportion to their share in the paid-up capital of the ECB.
e) Coins in circulation are not a liability of MFIs in the participating Member States, but a liability of the central government. However, coins are part of the monetary aggregates and, by convention, this liability is to be entered under the category 'currency in circulation'. The counterpart to this liability is to be included within 'remaining assets'. (Regulation ECB/2008/32.)
f) The total of the balance sheet at end 2012 published in March 2013 (731.8 bn) can be calculated by substracting from the total of the Monthly Statement at end December 2012 (737.3 bn): coins (2.9 bn) and miscellaneous amounts linked to the accounting gap between the statement established in the early January 2013 and the Annual Accounts, which include all the year-end entries (2.6 bn).

Table 13
Deposits – France

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

	2010	2011	2012	2012	2013			
	Dec.	Dec.	Dec.	June	March	April	May	June
Overnight deposits								
Total non-financial sectors	516.3	546.3	555.9	540.6	531.4	543.3	541.9	553.1
(excluding central government)								
Households and similar	*278.4*	*284.4*	*279.2*	*289.1*	*277.9*	*286.1*	*279.9*	*288.7*
Non-financial corporations	*182.5*	*203.3*	*214.7*	*199.2*	*199.8*	*202.1*	*204.8*	*209.6*
General government (excl. central government)	*55.4*	*58.6*	*62.0*	*52.3*	*53.7*	*55.1*	*57.1*	*54.7*
Other sectors	39.1	39.3	42.5	39.0	38.5	43.7	41.0	40.5
Total – Outstanding amounts	**555.1**	**585.1**	**598.0**	**578.9**	**569.6**	**586.6**	**582.5**	**593.2**
Total – Growth rate	**8.0**	**5.3**	**2.8**	**5.8**	**-0.6**	**2.7**	**1.8**	**2.5**
Passbook savings accounts								
"A" and "Blue" passbooks	193.5	214.7	247.0	225.9	258.9	261.8	262.1	262.3
Housing savings accounts	36.1	36.1	35.2	36.4	34.7	34.8	34.6	34.5
Sustainable development passbook accounts	68.0	69.4	91.9	71.3	96.9	98.4	98.6	98.8
People's savings passbooks	54.4	52.4	51.7	51.8	49.9	50.0	49.8	49.7
Youth passbooks	7.0	7.0	7.0	6.8	6.8	6.8	6.8	6.8
Taxable passbooks	159.8	179.7	179.1	190.5	179.4	181.7	180.3	178.1
Total – Outstanding amounts	**518.8**	**559.3**	**611.7**	**582.7**	**626.6**	**633.5**	**632.2**	**630.2**
Total – Growth rate	**3.5**	**7.3**	**9.4**	**8.4**	**8.9**	**9.0**	**8.8**	**8.2**

Overnight deposits	Passbook savings accounts
(annual growth rate)	*(annual growth rate)*

Overnight deposits — *(annual growth rate)*
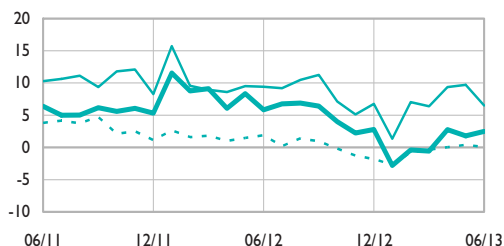
Legend:
— Total
— Non-financial corporations
.... Households

Passbook savings accounts — *(annual growth rate)*
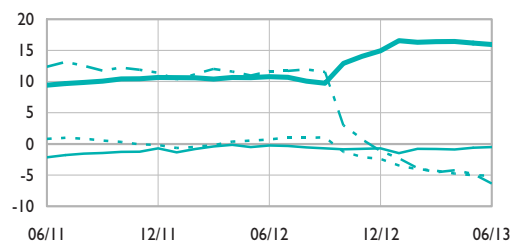
Legend:
— "A" and "Blue" passbooks
— Youth passbooks
.... Housing savings accounts
— · · Taxable passbooks

Source: Banque de France.   *Produced 20 August 2013*

Table 14
Time deposits – France

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

	2010	2011	2012	2012	2013			
	Dec.	Dec.	Dec.	June	March	April	May	June
Deposits with agreed maturity up to two years								
Total non-financial sectors (excl. central government)	89.1	108.1	111.8	111.8	114.0	114.5	111.7	111.3
Households and similar	*24.5*	*31.7*	*30.9*	*33.5*	*30.1*	*29.8*	*29.3*	*29.3*
Non-financial corporations	*63.9*	*75.5*	*79.9*	*77.3*	*83.0*	*83.8*	*81.5*	*81.1*
General government (excl. central government)	*0.7*	*1.0*	*0.9*	*1.0*	*0.9*	*0.9*	*0.9*	*1.0*
Other sectors	44.2	42.7	40.7	36.8	41.9	40.2	38.1	34.3
Total – Outstanding amounts	**133.4**	**150.9**	**152.5**	**148.6**	**155.9**	**154.7**	**149.8**	**145.7**
Total – Growth rate	**1.6**	**10.9**	**-1.1**	**7.8**	**3.5**	**3.3**	**0.1**	**-2.0**
Deposits with agreed maturity of over two years								
Total non-financial sectors (excl. central government)	282.6	306.7	328.9	321.1	331.3	331.4	332.5	332.2
Households and similar	*248.0*	*259.0*	*269.4*	*266.5*	*268.5*	*268.1*	*268.4*	*267.4*
PEL	*182.3*	*186.6*	*188.2*	*185.9*	*188.8*	*189.0*	*189.2*	*189.3*
PEP	*26.6*	*24.4*	*24.0*	*23.9*	*23.7*	*23.5*	*23.4*	*23.2*
Other	*39.1*	*48.0*	*57.2*	*56.7*	*56.0*	*55.6*	*55.9*	*54.8*
Non-financial corporations	*34.0*	*46.6*	*58.1*	*53.3*	*61.4*	*61.6*	*62.4*	*63.1*
General government (excl. central government)	*0.6*	*1.1*	*1.4*	*1.2*	*1.5*	*1.6*	*1.7*	*1.7*
Other sectors	94.4	177.0	154.7	175.6	163.5	165.5	165.9	171.0
Total – Outstanding amounts	**377.0**	**483.7**	**483.5**	**496.7**	**494.9**	**496.9**	**498.4**	**503.2**
Total – Growth rate	**3.5**	**18.8**	**0.3**	**14.6**	**-0.1**	**0.0**	**1.9**	**1.5**

Deposits up to 2 years

(annual percentage growth rate)

Total
Households
Non-financial corporations
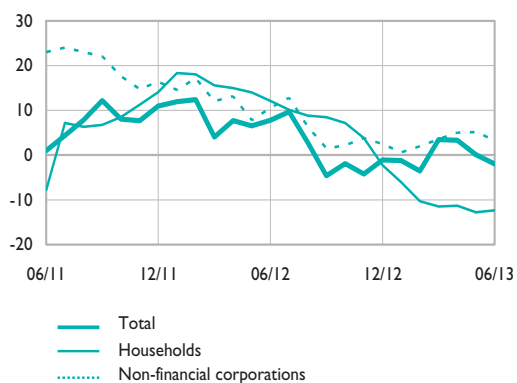
Deposits over 2 years

(annual percentage growth rate)

Total
PEL
PEP
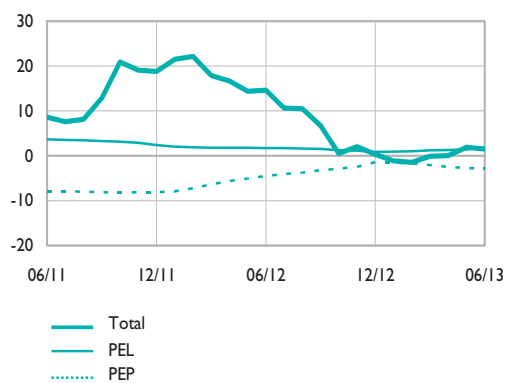
Table 15

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

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

	2010	2011	2012	2012	2013				
	Dec.	Dec.	Dec.	June	Feb.	March	April	May	June
Loans to resident clients									
Private sector	1,976.4	2,053.7	2,100.0	2,077.5	2,108.9	2,116.3	2,123.4	2,130.2	2,123.0
General government	214.8	195.1	206.8	196.9	207.2	206.8	208.5	208.7	207.5
Total – Outstanding amounts	**2,191.2**	**2,248.7**	**2,306.7**	**2,274.4**	**2,316.1**	**2,323.1**	**2,332.0**	**2,338.9**	**2,330.5**
Private sector	4.7	3.1	2.5	1.0	2.2	2.5	3.2	3.1	2.4
General government	9.5	-6.7	6.1	5.2	5.8	6.2	5.6	5.8	5.2
Total – Growth rate	**5.2**	**2.2**	**2.8**	**1.4**	**2.5**	**2.9**	**3.4**	**3.4**	**2.6**
Loans to non-financial companies									
Fixed investment	525.0	547.1	563.0	554.9	562.5	561.2	562.8	562.6	562.3
Inventories and working capital	179.7	187.5	174.1	184.2	173.0	175.2	173.4	172.8	173.6
Other lending	76.1	81.2	82.0	81.7	79.1	81.5	80.4	80.5	83.7
Total – Outstanding amounts	**780.8**	**815.9**	**819.1**	**820.7**	**814.6**	**817.9**	**816.7**	**815.9**	**819.6**
Total – Growth rate	**1.2**	**4.4**	**1.0**	**2.1**	**1.0**	**1.1**	**0.9**	**0.9**	**0.6**
Loans to households									
Loans for house purchase	798.1	847.0	874.2	861.6	877.8	880.8	883.2	885.1	888.2
Consumer loans	164.4	161.1	160.4	160.9	157.1	157.2	157.6	157.4	157.1
Other lending	88.0	92.8	92.1	92.1	92.2	92.5	92.6	93.0	92.9
Total – Outstanding amounts	**1,050.5**	**1,100.9**	**1,126.7**	**1,114.6**	**1,127.2**	**1,130.5**	**1,133.3**	**1,135.5**	**1,138.1**
Total – Growth rate	**6.2**	**5.6**	**2.3**	**3.7**	**1.8**	**1.8**	**2.0**	**2.0**	**1.9**

Loans to non-financial companies – France

(annual percentage growth rate)

Inventories and working capital
Fixed investment
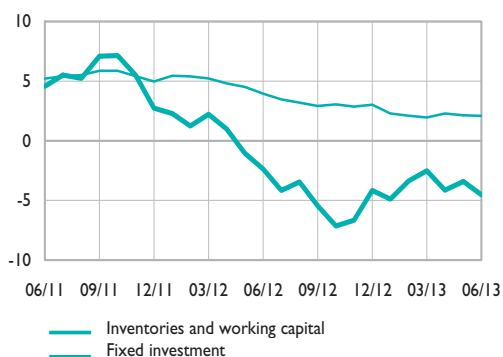
Loans to households – France

(annual percentage growth rate)

Consumers loans
Loans for house purchase
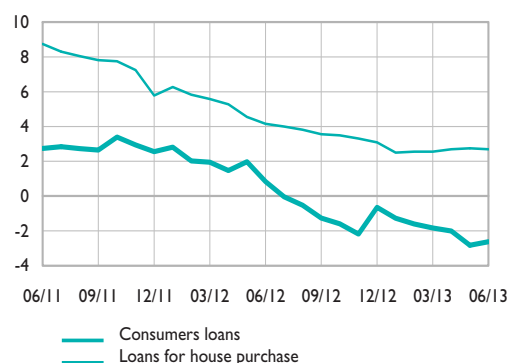
Table 16
New loans to residents, (excl. overdrafts) – France

(monthly flows - seasonally adjusted - in euro billions)

	2012			2013		
	April	**May**	**June**	**April**	**May**	**June**
Loans to non-financial corporations						
Loans ≤ 1 million euro [a]	5.9	6.2	5.6	6.1	6.7	5.1
Loans > 1 million euro [a]	13.7	14.7	13.4	10.8	11.2	12.7
Loans to households						
Cash loans to sole traders and individuals (excl. revolving consumer credit)	4.0	4.2	4.2	4.1	4.0	3.9
Housing loans	6.2	6.3	7.8	11.8	11.8	12.6

Non-financial corporations – Loans ≤ 1 million euro

(monthly flows - seasonally adjusted - in euro billions)
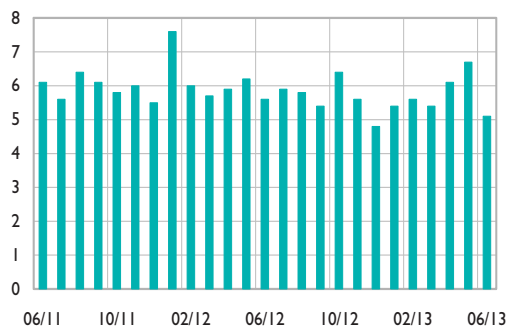
Non-financial corporations – Loans > 1 million euro

(monthly flows - seasonally adjusted - in euro billions)
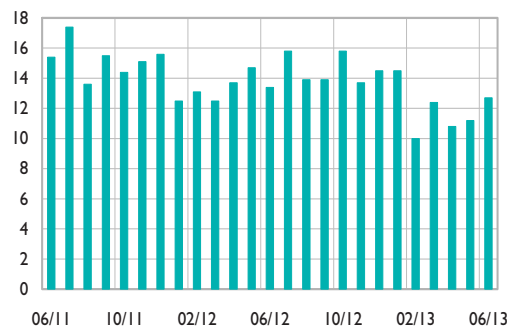
Households - Cash loans

(monthly flows - seasonally adjusted - in euro billions)
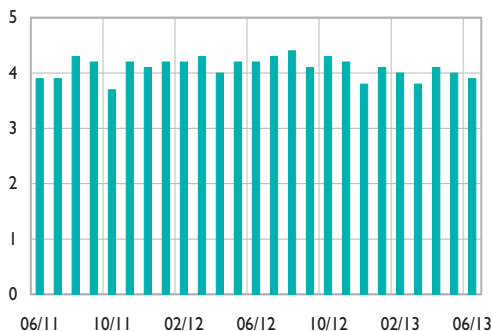
Households - Housing loans

(monthly flows - seasonally adjusted - in euro billions)
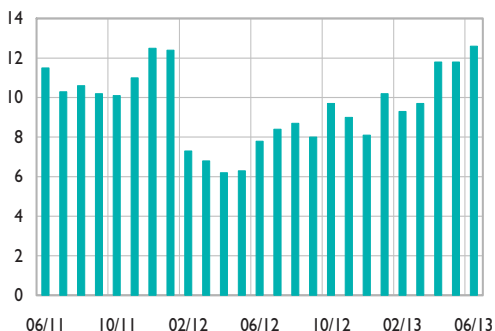
a) All initial rate fixation periods.

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

(EUR billions)

Euro area						
	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2012				2013	2013
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	25.2	10.3	-12.5	0.1	-6.3	811.1
of which deposits included in M3 [a]	*28.9*	*15.0*	*2.5*	*15.7*	*11.6*	*217.2*
Short-term debt securities	11.9	13.4	10.4	-5.9	-1.5	65.7
Long-term debt securities	31.1	40.7	74.9	129.4	104.2	3,031.9
Loans	8.4	2.5	15.6	13.1	19.0	496.4
Shares and other equity	107.9	99.8	73.0	99.0	101.3	2,783.0
of which quoted shares	*-14.1*	*-11.2*	*-13.6*	*-2.7*	*0.5*	*412.5*
Remaining net assets	-50.5	-9.7	-5.2	-41.1	-25.0	245.4
Financing						
Debt securities	4.6	1.2	2.6	7.3	5.8	55.5
Loans	3.2	7.2	9.2	-11.6	4.1	296.3
Shares and other equity	2.1	3.7	2.7	0.6	1.4	480.4
Insurance technical reserves	104.2	108.9	123.8	151.9	177.9	6,566.4
Life insurance	*102.2*	*100.1*	*111.6*	*129.9*	*151.0*	*5,716.6*
Non-life insurance	*2.1*	*8.7*	*12.2*	*22.0*	*26.9*	*849.7*
Net lending/net borrowing (B9B)	**19.9**	**36.0**	**17.8**	**46.4**	**2.5**	

(EUR billions)

France						
	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2012				2013	2013
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	9.9	6.1	3.0	2.8	2.1	33.2
Short-term debt securities	9.0	9.7	9.3	-9.4	-4.1	26.6
Long-term debt securities	-20.7	-16.8	-8.9	32.9	35.9	1,250.1
Loans	0.9	0.8	0.7	0.9	1.3	36.1
Shares and other equity	24.4	32.8	24.2	15.0	13.9	668.3
of which quoted shares	*-7.4*	*-5.2*	*-7.5*	*-9.2*	*-5.1*	*66.4*
Remaining net assets	-7.9	-8.9	-11.6	-11.3	-7.6	5.1
Financing						
Debt securities	1.3	0.0	0.0	0.6	0.9	9.3
Loans	-3.2	-5.1	-3.4	7.2	11.1	91.9
Shares and other equity	0.8	1.0	1.7	2.1	1.6	104.8
Insurance technical reserves	16.3	8.6	7.6	21.9	36.9	1,745.1
Life insurance and pension funds	*13.8*	*5.3*	*4.7*	*16.1*	*29.4*	*1,486.3*
Non-life insurance	*2.5*	*3.3*	*2.9*	*5.8*	*7.5*	*258.7*
Net lending/net borrowing (B9B)	**5.6**	**23.6**	**14.4**	**5.9**	**1.1**	

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.

Table 18
Investment and financing – Households – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2012				2013	2013
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**March**
Financial assets						
Currency and deposits	208.2	209.8	203.6	236.1	235.2	7,075.8
of which deposits included in M3 [a)]	*123.1*	*132.3*	*150.8*	*213.4*	*213.9*	*5,366.9*
Short-term debt securities	16.4	14.9	23.1	-3.0	-11.4	39.9
Long-term debt securities	38.8	-6.8	-12.9	-94.3	-132.8	1,200.0
Shares and other equity	14.2	40.3	29.4	58.8	64.5	4,642.4
Quoted shares	20.6	36.0	11.7	4.0	-0.6	793.0
Unquoted shares and other equity	46.5	51.8	47.2	51.1	35.6	2,403.4
Mutual fund shares	-52.9	-47.5	-29.5	3.7	29.6	1,446.0
of which money market fund shares	*-15.2*	*-12.6*	*-28.3*	*-32.9*	*-49.3*	*112.6*
Insurance technical reserves	96.6	96.6	101.6	124.2	146.3	6,315.8
Remaining net assets	-22.3	-24.8	-43.6	-32.3	-0.4	-3.0
Financing						
Loans	68.8	39.6	18.7	15.3	3.2	6,160.9
of which from euro area MFIs	*33.9*	*12.6*	*1.1*	*25.1*	*21.0*	*5,278.6*
Revaluation of financial assets						
Shares and other equity	-267.3	-286.3	324.0	368.0	314.1	
Insurance technical reserves	98.1	97.4	181.5	173.9	151.3	
Other flows	42.2	-25.1	35.2	78.5	-24.6	
Change in net financial worth	**156.1**	**76.4**	**823.3**	**894.7**	**739.0**	

Investment flows

(EUR billions, cumulated flows over 4 quarters)

- Debt securities
- Currency and deposits
- Insurance technical reserves
- Shares and other equity

Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)

- Financial investment
- Loans (financing)
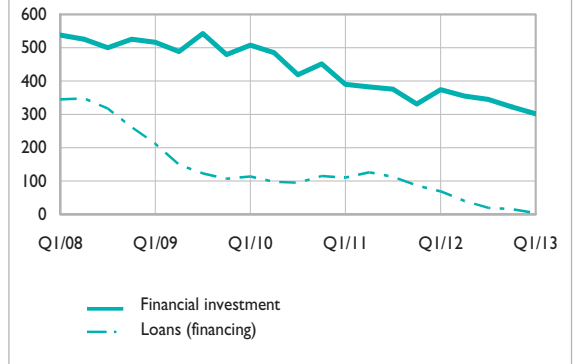
a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of households held with MFIs and central government.

Table 19
Investment and financing – Households – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2012				2013	2013
	Q1	**Q2**	**Q3**	**Q4**	**Q1**	**March**
Financial assets						
Currency and deposits	71.5	72.1	66.3	57.0	45.5	1,281.5
Short-term debt securities	-0.5	-0.2	-0.3	-0.7	-0.5	0.9
Long-term debt securities	3.7	1.3	1.3	3.3	-1.8	64.3
Shares and other equity	3.4	3.4	-4.1	2.9	7.3	1,035.7
Quoted shares	-1.4	0.4	-5.0	-6.1	-4.5	151.5
Unquoted shares and other equity	16.3	13.2	15.3	21.0	21.6	584.4
Mutual fund shares	-11.5	-10.2	-14.4	-12.0	-9.9	299.8
of which money market fund shares	*-6.1*	*-3.8*	*-6.9*	*-8.3*	*-7.7*	*25.3*
Insurance technical reserves	14.6	6.5	5.8	18.2	32.0	1,581.3
Remaining net assets	23.0	3.0	12.8	4.2	15.7	81.5
Financing						
Loans	48.3	37.2	31.1	27.0	21.6	1,155.3
Revaluation of financial assets						
Shares and other equity	-42.4	-74.4	76.6	86.8	58.8	
Insurance technical reserves	-3.0	-12.9	19.3	23.7	15.7	
Other flows	4.7	4.2	11.0	8.5	4.3	
Change in net financial worth	**26.7**	**-34.1**	**157.7**	**176.9**	**155.5**	

Investment flows
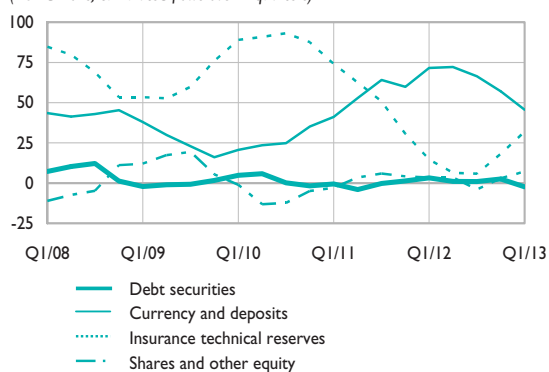
(EUR billions, cumulated flows over 4 quarters)

- —— Debt securities
- —— Currency and deposits
- ······ Insurance technical reserves
- —·— Shares and other equity

Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)

- —— Financial investment
- —— Loans (financing)

Produced 20 August 2013

Table 20

Investment and financing – Non-financial corporations – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2012				2013	2013
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	95.5	68.3	39.4	92.6	69.4	2,134.3
of which deposits included in M3 [a)]	*10.6*	*10.5*	*32.8*	*72.4*	*79.5*	*1,645.3*
Debt securities	0.2	13.7	0.9	-15.5	-37.2	323.6
Loans	123.5	143.9	148.1	94.1	57.8	2,967.5
Shares and other equity	229.3	137.5	131.4	93.8	140.2	8,286.5
Insurance technical reserves	7.0	4.1	1.9	1.3	1.7	180.6
Remaining net assets	-68.6	-54.5	5.7	27.5	17.5	7.6
Financing						
Debt	213.1	165.3	182.8	136.9	100.4	9,723.7
Loans	135.3	70.0	73.0	18.0	-6.1	8,306.2
of which from euro area MFIs	*12.4*	*-30.0*	*-71.6*	*-107.7*	*-113.0*	*4,510.0*
Debt securities	73.0	90.5	105.1	115.0	102.7	1,068.2
Pension fund reserves	4.8	4.8	4.7	3.9	3.8	349.3
Shares and other equity	232.3	212.7	181.3	168.1	138.7	13,717.2
Quoted shares	*19.5*	*15.1*	*15.6*	*26.5*	*11.0*	*3,890.7*
Unquoted shares and other equity	*212.9*	*197.6*	*165.7*	*141.6*	*127.7*	*9,826.5*
Net lending/net borrowing (B9B)	**-58.5**	**-64.9**	**-36.7**	**-11.3**	**10.3**	

Investment flows	Financing flows
(EUR billions, cumulated flows over 4 quarters)	*(EUR billions, cumulated flows over 4 quarters)*
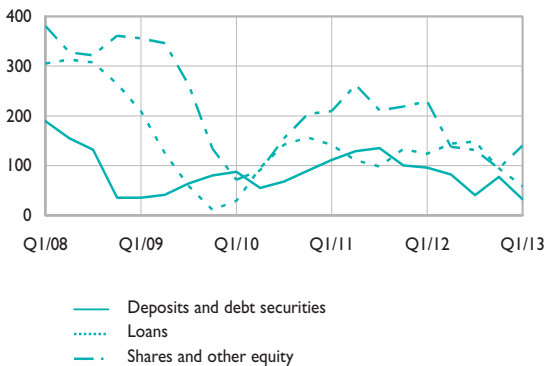
Investment flows legend:
— Deposits and debt securities
······· Loans
—·— Shares and other equity

Financing flows legend:
······· Loans
— Debt securities
—·— Shares and other equity
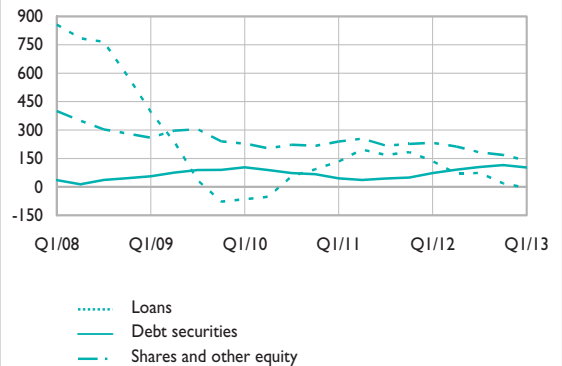
a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of non-financial corporations held with MFIs and central government.
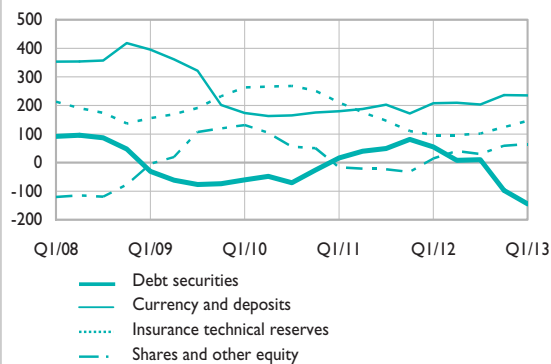
Table 21
Investment and financing – Non-financial corporations – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2012				2013	2013
	Q1	Q2	Q3	Q4	Q1	March
Financial assets						
Currency and deposits	46.0	36.4	26.8	56.0	50.1	458.8
Debt securities	6.9	-1.2	-10.0	-1.3	-17.4	58.5
Loans	-4.3	2.3	1.7	-0.5	5.2	706.5
Shares and other equity	67.3	52.6	52.4	70.3	71.7	2,912.2
Insurance technical reserves	0.1	0.5	0.4	0.8	1.0	54.3
Remaining net assets	-48.1	-30.5	-1.7	-25.8	-29.8	-53.1
Financing						
Debt	83.9	94.2	77.7	52.5	42.7	2,138.5
Loans	43.5	40.6	26.1	1.4	2.2	1,627.4
Debt securities	40.4	53.6	51.5	51.1	40.5	511.1
Shares and other equity	100.4	85.0	82.8	87.8	72.6	4,454.7
Quoted shares	*10.6*	*7.0*	*6.7*	*10.4*	*9.4*	*1,174.6*
Unquoted shares and other equity	*89.8*	*78.0*	*76.1*	*77.5*	*63.2*	*3,280.1*
Net lending/net borrowing (B9B)	**-116.5**	**-119.1**	**-91.0**	**-40.9**	**-34.6**	

Investment flows

(EUR billions, cumulated flows over 4 quarters)

Deposits and debt securities
Loans
Shares and other equity

Financing flows

(EUR billions, cumulated flows over 4 quarters)

Loans
Debt securities
Shares and other equity

Source: Banque de France.

Produced 20 August 2013
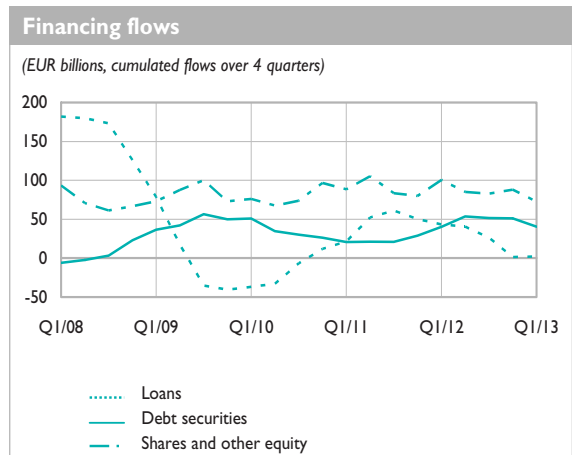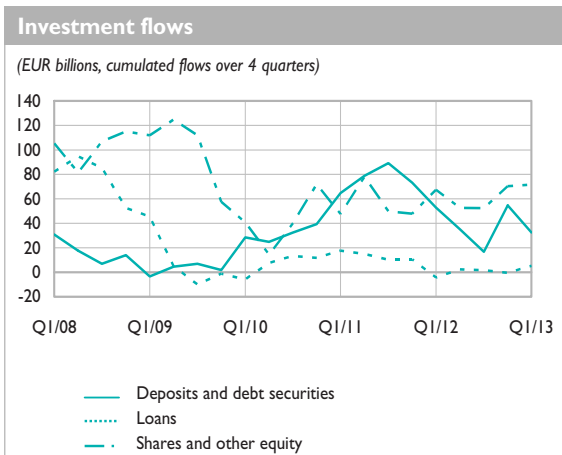
Table 22

Interest rates on bank deposits – France and the euro area

(average monthly rates – %)

	2011	2012	2012	2013				
	Dec.	Dec.	June	Feb.	March	April	May	June
Euro area								
Overnight deposits – households	0.54	0.39	0.47	0.36	0.36	0.34	0.33	0.32
Deposits redeemable at notice up to 3 months – households	1.79	1.59	1.73	1.39	1.37	1.36	1.31	1.30
Time deposits with agreed maturity over 2 years – non-financial corporations	2.90	2.16	2.69	2.08	1.99	1.90	1.98	1.77
France								
"A" passbooks (end of period)	2.25	2.25	2.25	1.75	1.75	1.75	1.75	1.75
Regulated savings deposits	2.25	2.25	2.25	1.77	1.77	1.77	1.77	1.77
Market rate savings deposits	2.07	1.82	2.03	1.66	1.54	1.55	1.51	1.52
Deposits with agreed maturity up to 2 years	2.47	2.26	2.40	2.27	2.23	2.19	2.17	2.13
Deposits with agreed maturity over 2 years	3.12	3.01	3.15	3.10	3.00	3.00	2.96	2.98

Euro area

(average monthly rates – %)

— Overnight deposits – households
— Deposits redeemable at notice up to 3 months – households
········· Time deposits with agreed maturity over 2 years – non-financial corporations

France

(average monthly rates – %)

— "A" passbooks
— Market rate savings deposits
········· Deposits with agreed maturity up to 2 years
— · · Deposits with agreed maturity over 2 years
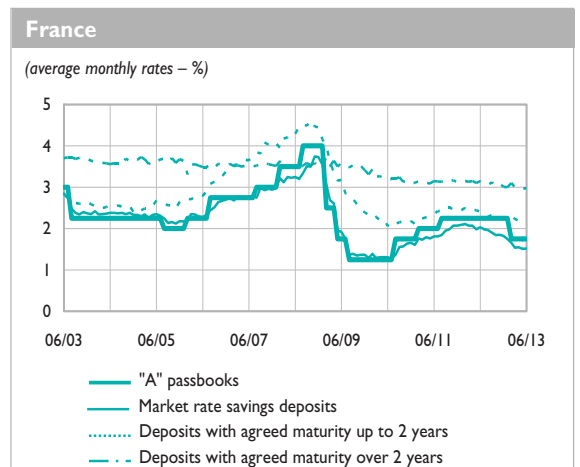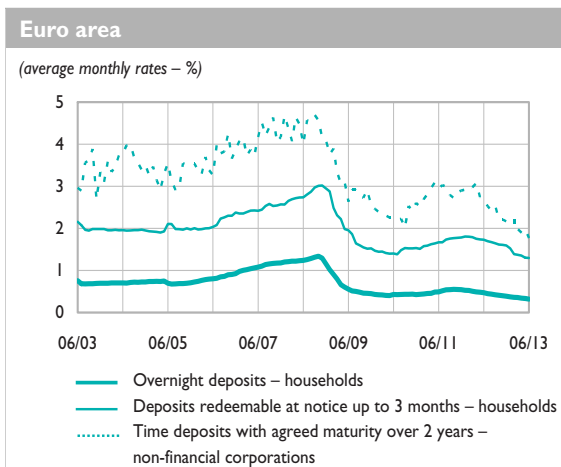
Table 23

Interest rates on bank loans – France and the euro area

(average monthly rate – %)

	2012						2013					
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Euro area												
Consumer loans												
Floating rate and IRFP of up to 1 year [a]	5.76	5.79	5.78	5.62	5.62	5.35	5.76	5.89	5.86	5.73	6.00	5.84
Loans for house purchase												
Floating rate and IRFP of between 1 and 5 years	3.40	3.33	3.27	3.24	3.18	3.25	3.17	3.17	3.19	3.13	3.09	2.99
Non financial corporations of over EUR 1 million												
IRFP of up to 1 year [a]	2.40	2.16	2.21	2.22	2.18	2.28	2.20	2.12	2.12	2.21	2.17	2.16
France												
Consumer loans	6.34	6.37	6.21	6.12	6.14	6.07	6.17	6.08	6.08	5.99	5.92	5.85
Loans for house purchase												
IRFP of up to 1 year [a]	3.28	3.25	3.21	3.16	3.01	2.95	2.97	2.97	2.87	2.72	2.81	2.63
IRFP of over 1 year [a]	3.80	3.73	3.68	3.59	3.51	3.45	3.37	3.36	3.32	3.28	3.23	3.17
Non-financial corporations												
IRFP of up to 1 year [a]	2.15	1.95	1.87	1.83	1.83	1.92	1.82	1.85	1.86	1.85	1.82	1.77
IRFP of over 1 year [a]	3.70	3.59	3.60	3.43	3.41	3.23	3.25	3.21	3.26	3.21	3.18	3.11

Euro area *(percentage points)*
- Consumer loans IRFP up to 1 year
- Housing loans IRFP of between 1 and 5 years
- Non-financial corporations IRFP up to 1 year

France *(percentage points)*
- Housing loans IRFP up to 1 year
- Housing loans IRFP over 1 year
- Non-financial corporations IRFP up to 1 year
- Non-financial corporations IRFP over 1 year
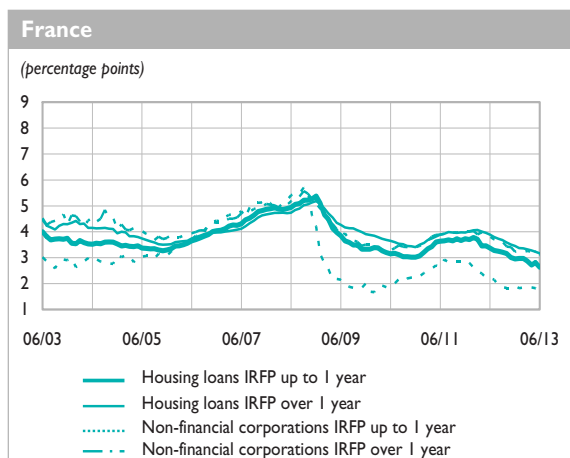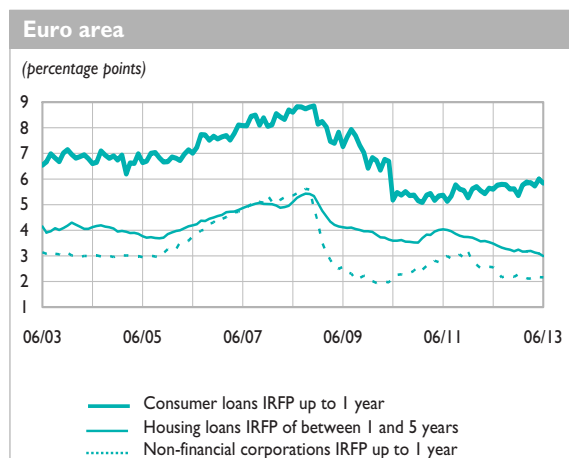
a) IRFP: initial rate fixation period i.e. the period for which the rate of a loan is fixed.
IRFP ≤1 year: loans for which the rate is adjusted at least once a year + fixed-rate loans with an initial maturity of up to 1 year.
IRFP > 1 year: loans for which the rate is adjusted less than once a year + fixed-rate loans with an initial maturity of over 1 year.

Table 24
Usury rates on loans to households and cost of business credit – France

(%)

Usury ceiling with effect from the 1st day of the reference period	2012	2013		
	Oct.	Jan.	April	July
Loans to households under Articles L312-1 to L312-36 of the french Consumer Code (housing loans)				
Fixed-rate loans	5.99	5.72	5.43	5.23
Floating-rate loans	5.64	5.37	5.01	4.68
Bridge loans	5.89	5.79	5.55	5.44
Loans to households not within the scope of Articles L312-1 to L312-36 of the French Consumer Code (consumer loans)				
Loans up to EUR 3,000		20.29	20.29	20.09
Loans comprised between EUR 3,000 and EUR 6,000		16.25	16.25	15.77
Loans over EUR 6,000		11.48	11.48	11.05

	2012			2013	
	April	July	Oct.	Jan.	April
Loans to enterprises					
Discount					
up to EUR 15,245	3.22	3.29	2.70	2.57	2.75
EUR 15,245 to EUR 45,735	3.27	3.32	3.12	2.77	2.98
EUR 45,735 to EUR 76,225	3.09	3.10	3.07	2.90	3.26
EUR 76,225 to EUR 304,898	2.74	2.26	2.14	2.33	2.27
EUR 304,898 to EUR 1,524,490	1.74	1.53	1.20	1.44	1.60
over EUR 1,524,490	1.40	0.75	0.76	1.05	0.90
Overdrafts					
up to EUR 15,245	9.85	9.76	9.73	9.79	9.84
EUR 15,245 to EUR 45,735	6.62	6.48	6.26	6.01	6.39
EUR 45,735 to EUR 76,225	5.21	5.12	4.93	4.43	4.50
EUR 76,225 to EUR 304,898	3.33	3.18	2.97	2.74	3.40
EUR 304,898 to EUR 1,524,490	2.18	2.17	1.89	1.82	1.95
over EUR 1,524,490	1.70	1.58	1.34	1.19	1.24
Other short-term loans					
up to EUR 15,245	3.90	3.70	3.76	3.40	3.57
EUR 15,245 to EUR 45,735	3.49	3.37	3.30	3.05	3.09
EUR 45,735 to EUR 76,225	3.18	2.88	2.68	2.75	2.57
EUR 76,225 to EUR 304,898	2.69	2.49	2.07	2.13	2.19
EUR 304,898 to EUR 1,524,490	2.04	1.90	1.66	1.67	1.61
over EUR 1,524,490	1.98	1.95	1.57	1.76	1.74
Medium and long-term loans					
up to EUR 15,245	4.13	4.01	3.63	3.51	3.23
EUR 15,245 to EUR 45,735	3.80	3.62	3.34	3.13	2.97
EUR 45,735 to EUR 76,225	3.77	3.58	3.31	3.08	2.93
EUR 76,225 to EUR 304,898	3.83	3.60	3.38	3.13	3.07
EUR 304,898 to EUR 1,524,490	3.61	3.44	3.26	2.99	2.86
over EUR 1,524,490	2.84	2.83	2.64	2.55	2.49

Table 25
Interest rates

(%)

	Monthly average [a]										Key interest rates at 19/08/13
	2012			2013							
	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	
Short-term interbank interest rates											
Euro											**0.50**
Overnight	0.05	0.04	0.02	0.02	0.01	0.03	0.06	0.08	0.07	0.07	
3-month	0.14	0.15	0.14	0.15	0.15	0.15	0.15	0.14	0.15	0.16	
1-year	0.54	0.51	0.47	0.51	0.54	0.50	0.51	0.48	0.46	0.43	
Pound sterling											**0.50**
Overnight	0.47	0.47	0.44	0.45	0.46	0.47	0.48	0.48	0.47	0.47	
3-month	0.64	0.65	0.59	0.59	0.60	0.59	0.59	0.58	0.58	0.57	
1-year	0.98	1.01	1.02	0.92	0.89	0.90	0.90	0.88	0.87	0.88	
Dollar											**0.25**
Overnight	0.13	0.11	0.12	0.14	0.15	0.17	0.18	0.18	0.17	0.16	
3-month	0.36	0.35	0.36	0.39	0.41	0.42	0.40	0.39	0.34	0.32	
1-year	1.00	0.95	0.89	0.87	0.76	0.87	0.81	0.82	0.68	0.69	
Yen											**0.10**
Overnight	0.10	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.09	0.08	
3-month	0.19	0.19	0.18	0.17	0.16	0.16	0.16	0.16	0.15	0.16	
1-year	0.58	0.53	0.46	0.45	0.38	0.38	0.38	0.40	0.33	0.34	
10-year benchmark government bond yields [b]											
France	2.19	2.14	2.01	2.17	2.24	2.07	1.80	1.87	2.21	2.25	
Germany	1.52	1.39	1.35	1.57	1.60	1.41	1.25	1.37	1.62	1.62	
Euro area	2.31	2.25	2.10	2.40	2.86	3.03	2.86	2.69	3.07	3.10	
United Kingdom	1.81	1.79	1.84	2.05	2.11	1.90	1.71	1.87	2.21	2.36	
United States	1.73	1.65	1.70	1.89	1.98	1.96	1.73	1.93	2.29	2.57	
Japan	0.78	0.74	0.74	0.78	0.75	0.61	0.58	0.78	0.85	0.83	

3-month interbank market rates

(monthly average, %)

Legend: Euro, Dollar, Pound sterling, Yen
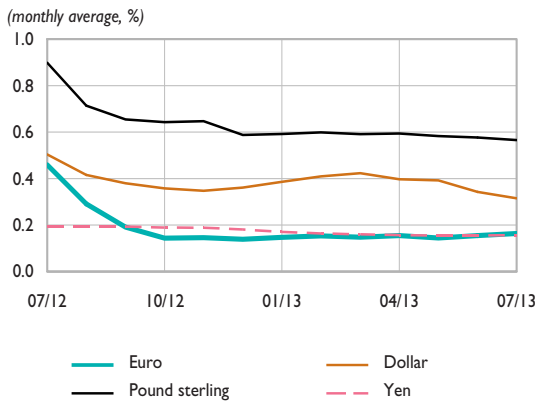
Yield curve for French government bonds

(%)

Legend: 31 December 2012, 31 July 2013, 19 August 2013
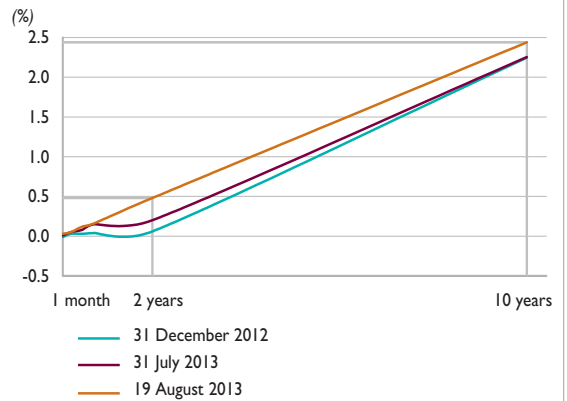
a) Short-term: the interbank average of rates situated in the middle of the range between bid and ask rates. Quotes taken from Reuters, posted at 4.30pm for the euro and 11.30am for other currencies.
b) Benchmark bonds: rates posted by Reuters at 4.30pm.

Sources: Banque de France, European Central Bank.

Produced 20 August 2013

Table 26

Banking system liquidity and refinancing operations – Euro area

(EUR billions, daily average for the reserve maintenance period from 12 June to 9 July 2013)

	Liquidity providing	Liquidity absorbing	Net contribution
Contribution to banking system liquidity			
(a) Eurosystem monetary policy operations	**818.1**	**287.1**	**531.0**
Main refinancing operations	108.9		108.9
Longer-term refinancing operations	708.0		708.0
Standing facilities	1.3	92.1	-90.8
Other	0.0	195.0	-195.0
(b) Other factors affecting banking system liquidity	**757.2**	**1,001.8**	**-244.5**
Banknotes in circulation		909.3	-909.3
Government deposits with the Eurosystem		92.5	-92.5
Net foreign assets (including gold)	615.9		615.9
Other factors (net)	141.4		141.4
(c) Reserves maintained by credit institutions (a) + (b)			**286.5**
including reserve requirements			*105.1*

Net contribution to banking system liquidity

(EUR billions, daily average for the reserve maintenance period from 12 June to 9 July 2013)
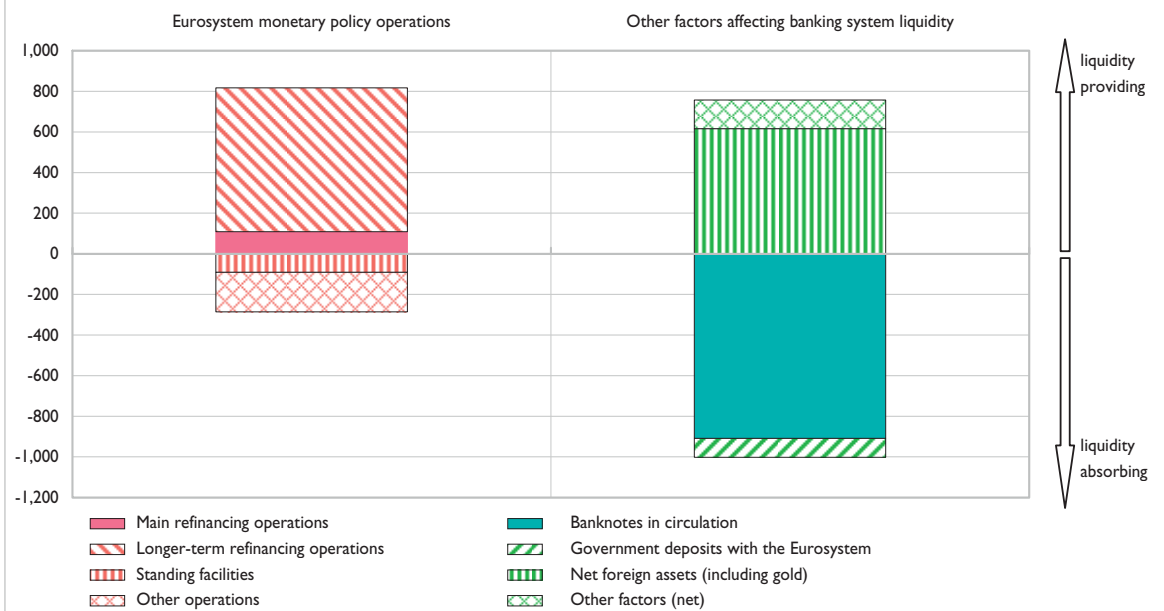

Main refinancing operations
Longer-term refinancing operations
Standing facilities
Other operations
Banknotes in circulation
Government deposits with the Eurosystem
Net foreign assets (including gold)
Other factors (net)

Table 27
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		
08/12/2011	14/12/2011	1.00	08/12/2011	14/12/2011	0.25	1.75
05/07/2012	11/07/2012	0.75	05/07/2012	11/07/2012	0.00	1.50
02/05/2013	08/05/2013	0.50	02/05/2013	08/05/2013	0.00	1.00

(%)

Main refinancing operations				Longer-term refinancing operations		
		Marginal rate	**Weighted average rate**			**Marginal rate**
2013	10 July a)	0.50	0.50	2013	30 May	0.50
	17 July	0.50	0.50		12 June	0.50
	24 July	0.50	0.50		27 June	0.50
	31 July	0.50	0.50		10 July	0.50
	7 August	0.50	0.50		31 July	0.50
	14 August	0.50	0.50		7 August	0.50

(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**	
2013	12 February	105.40	19.00	466.20	71.90	360.80	52.90	0.75
	12 March	105.60	19.50	403.00	47.10	297.40	27.60	0.75
	9 April	104.90	19.60	346.00	45.60	241.10	26.00	0.75
	7 May	104.90	19.60	322.20	43.20	217.30	23.60	0.75
	11 June	105.30	19.80	300.30	39.50	195.00	19.70	0.50
	9 July	105.10	19.90	286.50	39.00	181.40	19.10	0.50

Eurosystem key rates and EONIA
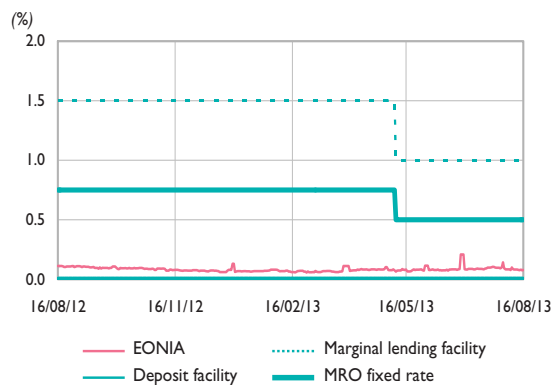
Central bank key rates
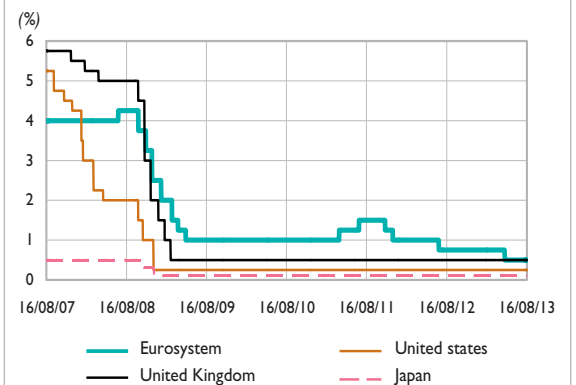
a) Fixed rate tender procedure.

Sources: European Central Bank, ESCB.

Produced 20 August 2013

Table 28
Negotiable debt securities – France

Certificates of deposit

| | EUR billions [a] | | Number |
	Issues	Stocks	of issuers
18/05/13 to 24/05/13	46.96	314.83	152
25/05/13 to 31/05/13	54.70	314.31	151
01/06/13 to 07/06/13	52.20	310.11	150
08/06/13 to 14/06/13	51.97	306.87	150
15/06/13 to 21/06/13	47.79	306.42	149
22/06/13 to 28/06/13	41.66	295.45	149
29/06/13 to 05/07/13	38.00	289.25	151
06/07/13 to 12/07/13	50.17	296.16	150
13/07/13 to 19/07/13	43.50	296.56	150
20/07/13 to 26/07/13	50.38	299.80	149
27/07/13 to 02/08/13	70.60	294.57	148
03/08/13 to 09/08/13	48.60	296.84	149
10/08/13 to 16/08/13	40.05	297.57	149

Certificates of deposit

(daily data, EUR billions)

- issues (left-hand scale)
- outstanding amounts (right-hand scale)

Commercial paper

| | EUR billions [a] | | Number |
	Issues	Stocks	of issuers
18/05/13 to 24/05/13	4.56	65.16	91
25/05/13 to 31/05/13	5.68	63.56	95
01/06/13 to 07/06/13	5.58	62.35	96
08/06/13 to 14/06/13	4.08	55.38	97
15/06/13 to 21/06/13	7.70	57.03	93
22/06/13 to 28/06/13	7.35	53.71	89
29/06/13 to 05/07/13	9.69	55.19	89
06/07/13 to 12/07/13	8.21	53.88	90
13/07/13 to 19/07/13	7.17	53.07	95
20/07/13 to 26/07/13	7.78	54.57	94
27/07/13 to 02/08/13	6.53	55.31	94
03/08/13 to 09/08/13	5.34	55.67	96
10/08/13 to 16/08/13	3.93	56.06	95

Commercial paper

(daily data, EUR billions)

- issues (left-hand scale)
- outstanding amounts (right-hand scale)

Negotiable medium-term notes

| | EUR billions [a] | | Number |
	Issues	Stocks	of issuers
18/05/13 to 24/05/13	0.09	76.28	118
25/05/13 to 31/05/13	0.08	75.52	118
01/06/13 to 07/06/13	0.14	75.50	118
08/06/13 to 14/06/13	0.11	75.54	118
15/06/13 to 21/06/13	0.54	75.85	119
22/06/13 to 28/06/13	0.27	75.44	119
29/06/13 to 05/07/13	0.14	75.35	119
06/07/13 to 12/07/13	0.81	75.95	119
13/07/13 to 19/07/13	0.17	75.92	119
20/07/13 to 26/07/13	0.16	75.96	119
27/07/13 to 02/08/13	0.56	74.84	118
03/08/13 to 09/08/13	0.48	74.79	118
10/08/13 to 16/08/13	0.82	75.49	118

Negotiable medium-term notes

(daily data, EUR billions)

- issues (left-hand scale)
- outstanding amounts (right-hand scale)

a) Issues in euro are cumulative over the reference period. Outstanding amounts are calculated from the cut-off date (the last day of the period under review).
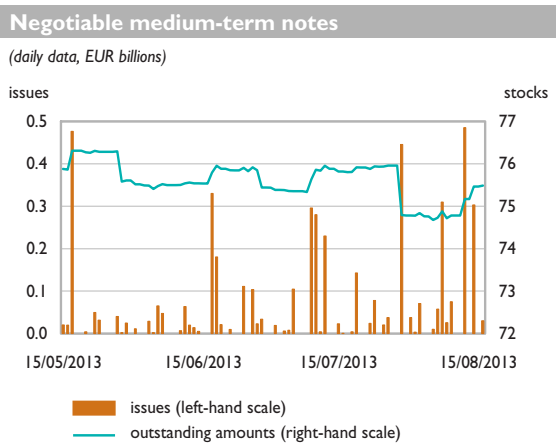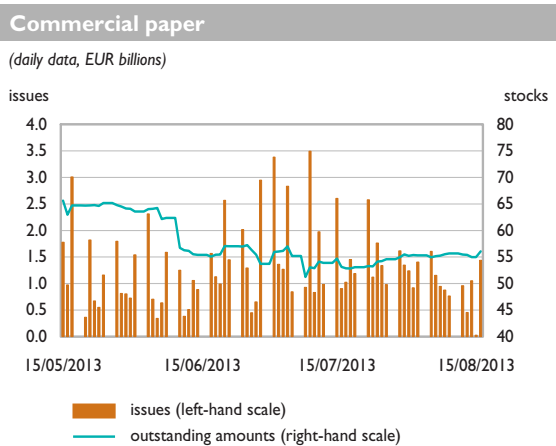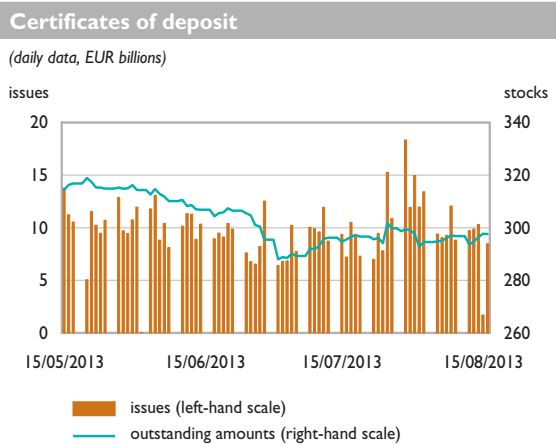
Table 29
Negotiable debt securities – France
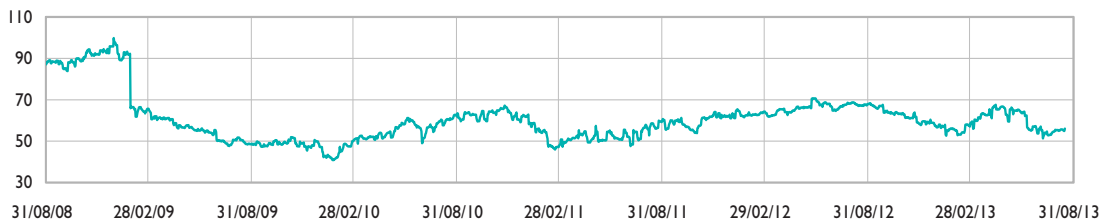
Certificates of deposit

(daily outstanding amounts in EUR billions)
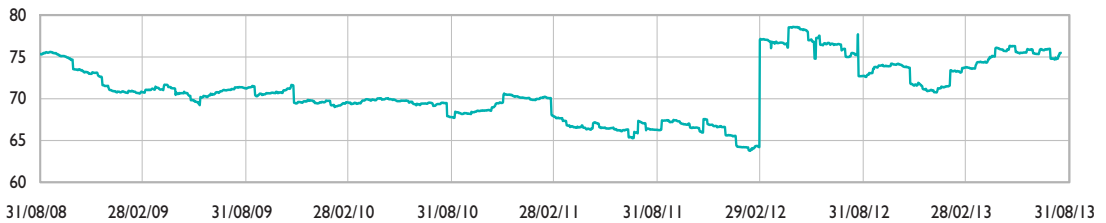

Commercial paper

(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)

Source: Banque de France.

Produced 20 August 2013

Table 30
Mutual fund shares/units – France

(EUR billions)

	2012		2013	2013
	Sept.	**Dec.**	**March**	**June**
Net assets of mutual fund shares/units by category				
Money-market funds	374.01	365.76	373.17	335.85
Bond mutual funds	207.95	212.83	205.41	
Equity mutual funds	230.22	234.76	247.20	
Mixed funds	248.26	256.41	260.03	
Funds of alternative funds	14.61	14.24	14.12	
Guaranteed-performance mutual funds	0.00	0.00	0.00	
Structured funds ("fonds à formule")	48.73	47.83	49.56	

Net assets of money-market funds

(EUR billions)
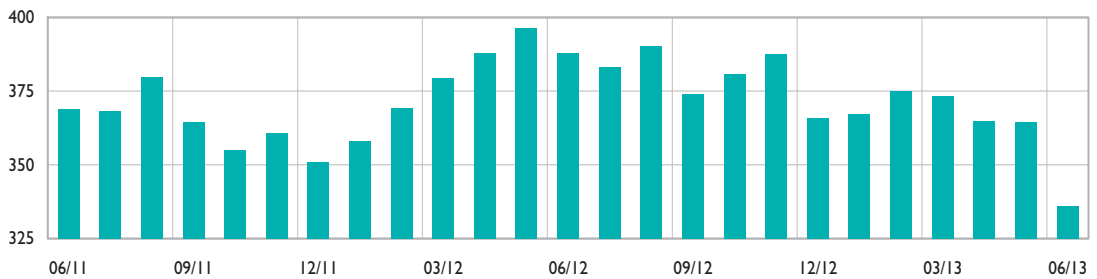
Table 31
Debt securities and quoted shares issued by French residents

(EUR billions)

	Outstanding amounts [a]		Net issues [b]			
	2012	2013	12-month	2013		
	June [c]	June [c]	total	April [c]	May [c]	June [c]
Debt securities issued by French residents						
Total	**3,358.1**	**3,374.8**	**16.7**	**34.3**	**1.8**	**-4.4**
Non-financial corporations	468.2	492.1	23.9	2.6	-1.2	-1.5
Short-term (≤ 1 year)	*44.4*	*37.7*	*-6.7*	*0.6*	*1.0*	*-3.7*
Long-term (> 1 year)	*423.8*	*454.4*	*30.6*	*2.1*	*-2.2*	*2.2*
General government	1,567.8	1,620.7	52.9	10.2	9.1	2.0
Short-term (≤ 1 year)	*225.7*	*204.3*	*-21.4*	*-0.2*	*-1.0*	*-2.9*
Long-term (> 1 year)	*1,342.1*	*1,416.4*	*74.3*	*10.4*	*10.1*	*4.9*
Monetary financial institutions [d]	1,176.9	1,119.7	-57.2	22.9	-6.8	-7.0
Short-term (≤ 1 year)	*338.9*	*270.9*	*-68.0*	*5.9*	*-2.1*	*-8.2*
Long-term (> 1 year) [d]	*838.1*	*848.8*	*10.8*	*17.0*	*-4.7*	*1.2*
Non-monetary financial institutions [e]	145.2	142.3	-2.9	-1.4	0.6	2.2

(EUR billions)

	Outstanding amounts [f]		Net issues [b]			Gross issues [g]	Repurchases [g]
	2012	2013	12-month	2013		12-month	12-month
	June	June	total	May	June	total	total
French quoted shares							
Total	**1,128.5**	**1,333.1**	**12.7**	**1.3**	**0.4**	**16.8**	**4.1**
Non-financial corporations	1,014.3	1,170.1	11.6	0.8	1.0	15.1	3.5
Monetary financial institutions	74.4	107.3	-0.1	0.1	-0.6	0.4	0.5
Non-monetary financial institutions	39.9	55.7	1.2	0.5	0.0	1.2	0.0

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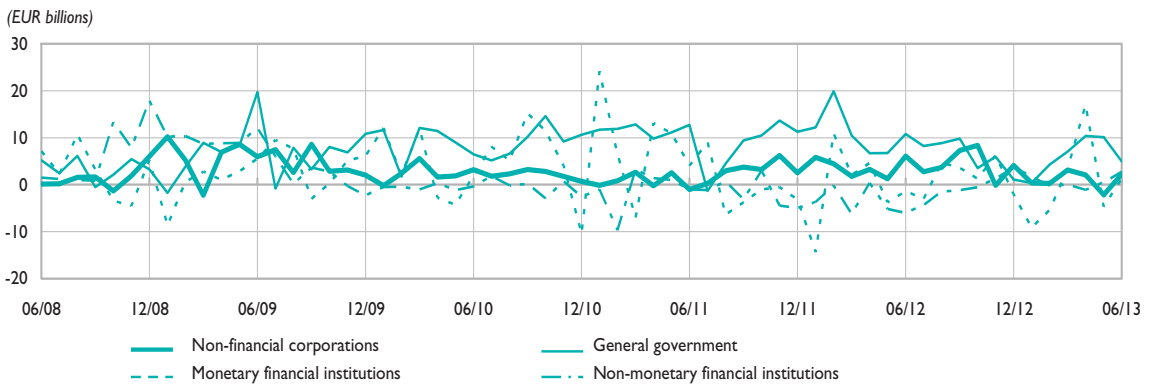e) Including units issued by SPVs.
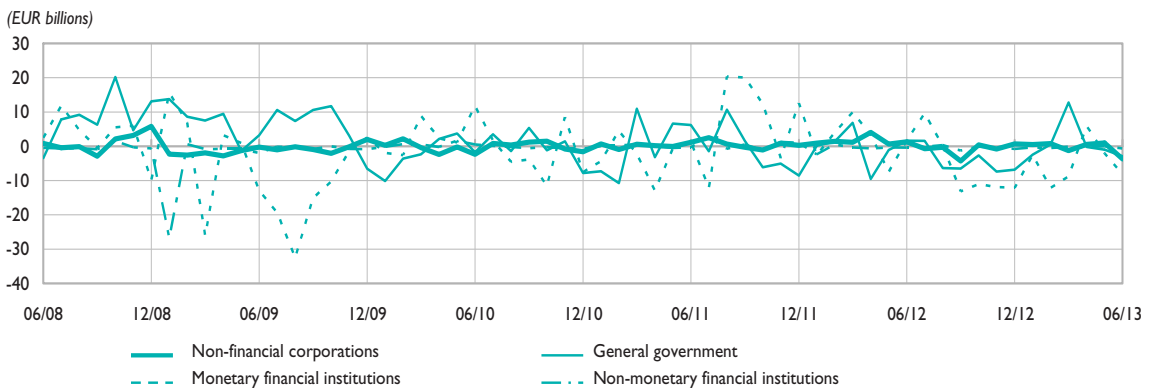f) Market values for outstanding amounts of quoted shares.
g) Non-seasonally adjusted data.

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

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

(EUR billions)

Non-financial corporations — General government
Monetary financial institutions — Non-monetary financial institutions

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

(EUR billions)

Non-financial corporations — General government
Monetary financial institutions — Non-monetary financial institutions

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

(EUR billions)

Non-financial corporations — Monetary financial institutions — Non-monetary financial institutions

Source: Banque de France.

Produced 20 August 2013
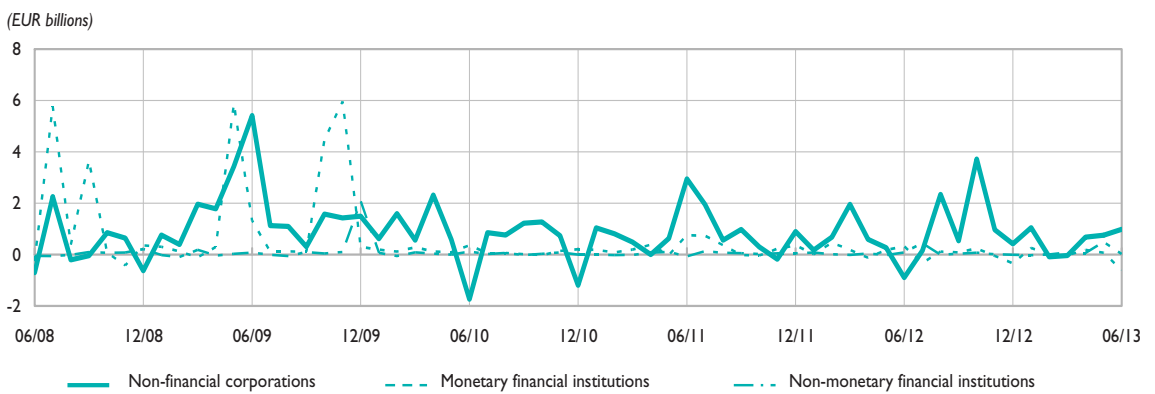
Table 33
Company failures by economic sector – France

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

	2012							2013					
	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June
Agriculture, forestry and fishing (AZ)	1,233	1,248	1,242	1,210	1,227	1,235	1,237	1,257	1,251	1,221	1,219	1,210	1,216
Industry (BE)	4,564	4,581	4,552	4,525	4,610	4,605	4,666	4,617	4,595	4,611	4,637	4,665	4,648
Construction (FZ)	15,135	15,378	15,337	15,233	15,480	15,463	15,727	15,639	15,687	15,682	15,875	15,888	15,842
Trade and automotive repair (G)	13,311	13,509	13,471	13,337	13,525	13,572	13,684	13,696	13,677	13,671	13,788	13,847	13,908
Transportation and storage (H)	1,893	1,954	1,961	1,960	2,016	2,002	2,020	1,997	1,966	1,958	1,939	1,935	1,918
Accomodation and restaurant services (I)	6,829	6,953	6,976	6,954	7,109	7,125	7,235	7,285	7,270	7,305	7,407	7,442	7,463
Information and communication sector (JZ)	1,559	1,571	1,561	1,563	1,578	1,572	1,560	1,536	1,511	1,496	1,517	1,514	1,512
Financial and insurance activities (KZ)	1,191	1,204	1,197	1,162	1,168	1,160	1,163	1,131	1,110	1,128	1,128	1,107	1,097
Real estate activities (LZ)	1,894	1,968	1,970	2,002	2,054	2,066	2,098	2,119	2,151	2,157	2,192	2,191	2,182
Business support activities (MN)	6,264	6,310	6,311	6,376	6,491	6,517	6,578	6,542	6,520	6,455	6,583	6,552	6,563
Education, human health, social work and household services (P to S)	5,049	5,073	5,079	5,080	5,123	5,173	5,197	5,209	5,158	5,073	5,114	5,101	5,099
Sector unknown	98	96	96	93	97	101	103	98	91	91	88	95	96
Total sectors	**59,020**	**59,845**	**59,753**	**59,495**	**60,478**	**60,591**	**61,268**	**61,126**	**60,987**	**60,848**	**61,487**	**61,547**	**61,544**

Company failures – 12-month total

(number of companies – unadjusted data)

(number of companies – unadjusted data)

- Construction (FZ)
- Trade and automotive repair (G)
- Accomodation and restaurant services (I)
- Industry (BE)

- Business support activities (MN)
- Education, human health, social work and household services (P to S)
- Real estate activities (LZ)
- Transportation and storage (H)
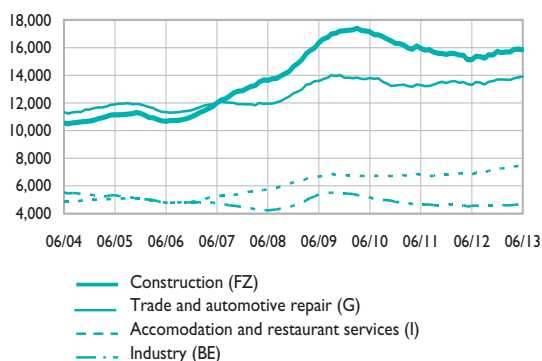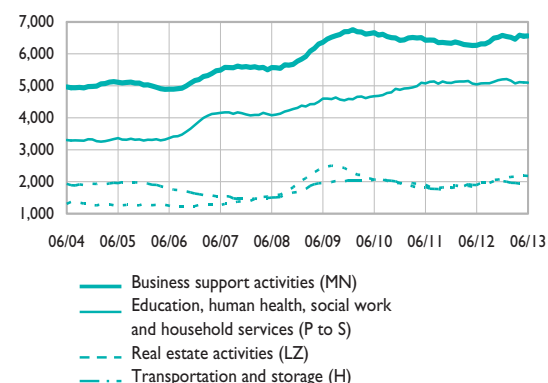
NB: The two-letter codes correspond to the aggregation level A10, and the one-letter codes to revised NAF sections 2 A21.
Data for last month are preliminary.

Source: Banque de France.   *Produced 20 August 2013*

Table 34
Retail payment systems – France

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

	2009	2010	2011	2012	2013			2013
					May	**June**	**July**	**Share**
Cheques	5,700	5,590	5,478	4,947	3,780	3,984	4,234	19.5
Credit transfers	8,473	8,865	9,646	10,167	9,869	11,625	11,458	52.6
of which SEPA credit transfers	95	683	2,555	4,130	4,864	6,183	6,317	29.0
Promissory notes	1,250	1,138	1,142	1,079	1,008	1,003	927	4.3
Direct debits	1,801	1,827	1,938	2,004	1,987	1,984	2,024	9.3
Interbank payment orders	143	133	130	131	122	60	68	0.3
Electronic payment orders	1,082	1,141	1,343	1,491	1,663	2,271	1,636	7.5
Card payments	957	1,009	1,085	1,152	1,173	1,197	1,254	5.8
ATM withdrawals	143	140	145	146	148	152	161	0.7
Total	**19,550**	**19,844**	**20,907**	**21,116**	**19,749**	**22,275**	**21,763**	**100.0**

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

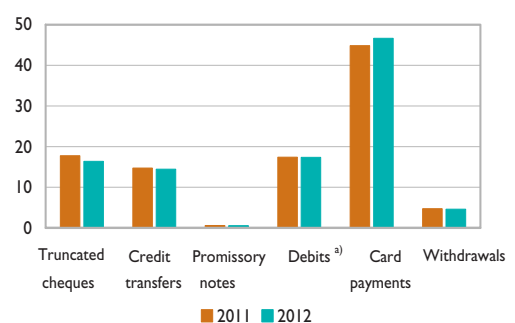|	2009	2010	2011	2012	2013			2013
					May	**June**	**July**	**Share**
Cheques	10,206	9,507	9,112	8,588	7,779	8,042	8,145	14.8
Credit transfers	7,500	7,356	7,549	7,593	7,071	8,309	7,518	13.6
of which SEPA credit transfers	39	270	1,400	2,154	2,737	3,721	3,748	6.8
Promissory notes	332	311	303	291	294	289	270	0.5
Direct debits	8,165	8,194	8,502	8,680	8,614	8,555	9,198	16.7
Interbank payment orders	394	364	342	320	267	242	255	0.5
Electronic payment orders	56	66	76	101	140	87	135	0.2
Card payments	20,420	21,505	22,969	24,489	25,436	25,908	27,050	49.1
ATM withdrawals	2,456	2,375	2,422	2,407	2,416	2,530	2,550	4.6
Total	**49,530**	**49,677**	**51,275**	**52,469**	**52,017**	**53,961**	**55,121**	**100.0**

Market share developments for main non-cash means of payment

(% of amounts exchanged)
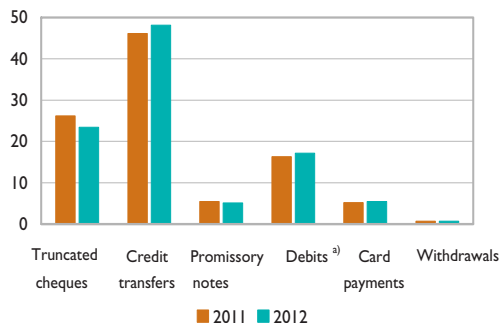
Market share developments for main non-cash means of payment

(% of volumes exchanged)

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

Table 35
Large-value payment systems – EU

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

	2009	2010	2011	2012	2013 May	2013 June	2013 July	2013 Share
France	367	365	398	431	354	370	362	18.8
Germany	669	829	818	764	599	611	576	30.0
Austria	28	27	27	25	20	21	20	1.0
Belgium	106	95	106	104	87	90	84	4.4
Cyprus	2	2	2	3	1	1	1	0.0
Spain	356	342	367	345	249	236	251	13.0
Estonia	–	–	1	1	1	1	1	0.1
Finland	28	35	47	85	42	39	38	2.0
Greece	29	28	23	20	37	36	33	1.7
Ireland	30	30	21	17	15	15	15	0.8
Italy	126	129	129	128	151	160	141	7.3
Luxembourg	40	40	57	70	77	73	69	3.6
Malta	0	0	0	1	0	0	0	0.0
Netherlands [a]	287	300	308	412	283	272	272	14.2
Portugal	17	20	22	14	11	11	10	0.5
Slovakia	3	3	3	3	2	2	2	0.1
Slovenia	2	2	2	3	3	2	2	0.1
EPM-ECB	47	37	36	35	27	29	28	1.5
Total TARGET2 euro area [b]	**2,137**	**2,283**	**2,368**	**2,462**	**1,962**	**1,967**	**1,906**	**99.2**
Non-euro area	16	16	15	15	16	16	16	0.8
Total TARGET2 EU [b]	**2,153**	**2,299**	**2,383**	**2,477**	**1,978**	**1,983**	**1,922**	**100.0**
Euro1 [c]	**255**	**241**	**249**	**226**	**189**	**204**	**na**	

Market share of each financial centre in the TARGET2 system

(% of turnover)
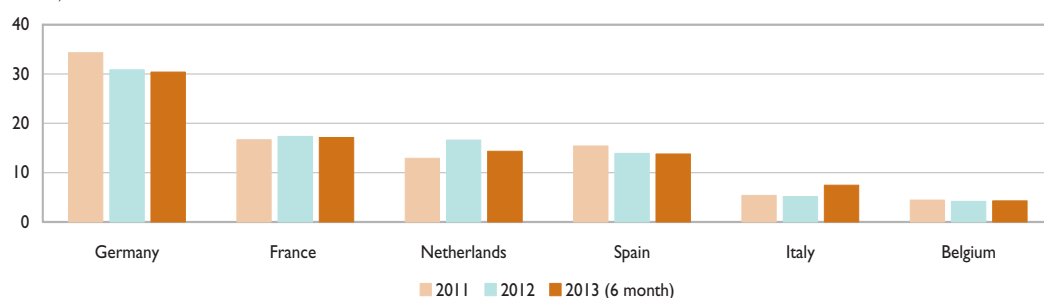
Legend: 2011, 2012, 2013 (6 month)

The sum of the components may not be equal to the total (or to 100) due to rounding.
Since January 2009, a new methodology for collecting and reporting statistics has been established on the TARGET2 data to improve data quality.
This must be taken into account when comparing 2009 data with previous data.
a) Since 19 May 2008, the operations of the United Kingdom pass in transit by this country.
b) Variable composition according to the countries which participate in the systems of payment in euro.
c) Euro1 (EBA): clearing system of the Euro Banking Association. Euro1 data include retail payments recorded in STEP1.

Sources: Banque de France, European Central Bank.

Produced 20 August 2013

Table 36
Large-value payment systems – EU

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

	2009	2010	2011	2012	2013 May	2013 June	2013 July	2013 Share
France	29,761	31,850	34,141	33,830	34,516	38,474	37,269	10.2
Germany	174,602	173,218	172,884	175,611	174,852	185,541	178,430	49.0
Austria	6,539	5,266	6,294	6,711	4,652	4,909	4,741	1.3
Belgium	8,517	9,454	10,265	9,955	9,180	9,830	9,325	2.6
Cyprus	389	466	515	613	1,000	940	1,038	0.3
Spain	29,580	29,195	29,509	29,760	30,883	32,281	30,170	8.3
Estonia	–	–	329	360	394	435	452	0.1
Finland	1,652	1,589	1,571	1,611	1,559	1,641	1,532	0.4
Greece	5,692	5,904	5,861	4,335	3,853	4,866	5,082	1.4
Ireland	4,824	4,961	4,376	4,012	3,611	3,589	3,538	1.0
Italy	33,824	33,649	33,643	34,837	42,332	41,934	40,490	11.1
Luxembourg	2,847	3,033	3,229	3,509	4,294	4,677	4,422	1.2
Malta	59	65	72	157	225	223	248	0.1
Netherlands [a]	36,930	33,304	32,490	33,144	32,428	32,236	30,948	8.5
Portugal	4,190	4,206	4,165	4,166	4,203	4,282	4,236	1.2
Slovakia	606	582	730	1,090	1,275	1,332	1,254	0.3
Slovenia	3,073	3,023	3,039	2,786	2,607	2,669	2,706	0.7
EPM-ECB	312	333	379	553	559	565	564	0.2
Total TARGET2 euro area [b]	**343,396**	**340,099**	**343,490**	**347,040**	**352,422**	**370,424**	**356,448**	**97.9**
Non-euro area	2,376	3,281	5,015	7,145	7,012	7,463	7,482	2.1
Total TARGET2 EU [b]	**345,772**	**343,380**	**348,505**	**354,185**	**359,434**	**377,887**	**363,930**	**100.0**
Euro1 [c]	**227,674**	**230,124**	**242,499**	**260,135**	**255,728**	**260,804**	**na**	

Market share of each financial centre in the TARGET2 system

(% of volumes exchanged)

■ 2012 ■ 2013 (6 month)
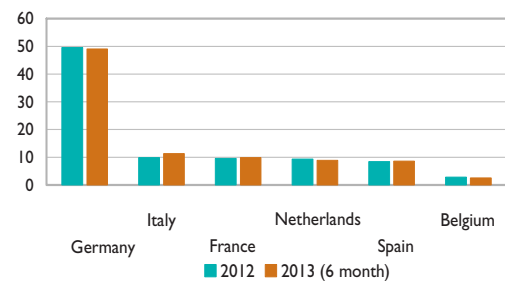
Average transaction amount in the TARGET2 system

(EUR millions)
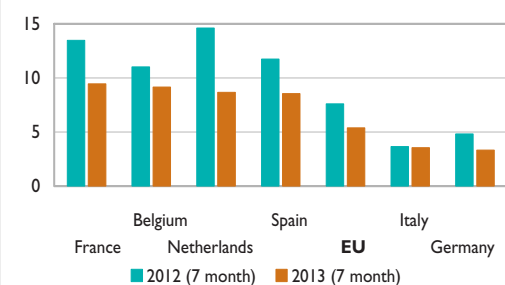
■ 2012 (7 month) ■ 2013 (7 month)

The sum of the components may not be equal to the total (or to 100) due to rounding.
Since January 2009, a new methodology for collecting and reporting statistics has been established on the TARGET2 data to improve data quality. This must be taken into account when comparing 2009 data with previous data.
a) Since 19 May 2008, the operations of the United Kingdom pass in transit by this country.
b) Variable composition according to the countries which participate in the systems of payment in euro.
c) Euro1 (EBA): clearing system of the Euro Banking Association. Euro1 data include retail payments recorded in STEP1.
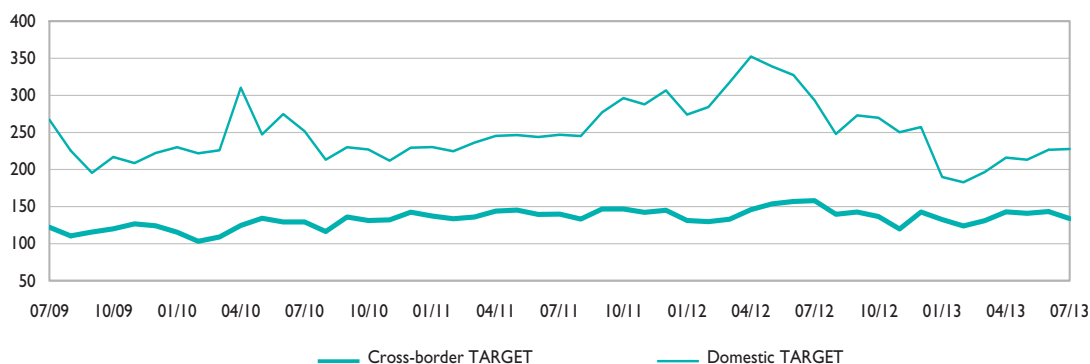
Sources: Banque de France, European Central Bank.

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Table 37
Large-value payment systems – France

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

	2009	2010	2011	2012	2013			2013
					May	June	July	Share
Collateral used in domestic TARGET [b]								
French negotiable securities	114.6	105.7	81.6	127.3	104.7	109.9	127.7	35.6
Private claims	129.0	149.8	146.4	188.7	180.0	184.8	169.0	47.1
Securities collateralised through CCBM	79.9	76.9	60.5	53.9	64.4	62.8	58.3	16.3
Other securities [c]	7.9	5.9	3.5	2.7	2.6	3.3	3.7	1.0
Total	**331.3**	**338.3**	**292.0**	**372.6**	**351.7**	**360.8**	**358.7**	**100.0**

Monthly change in amounts exchanged in French payment systems [a]

(EUR billions, daily average)

Legend: Cross-border TARGET — Domestic TARGET

Monthly change in collateral [b]

(EUR billions, daily average)

Legend:
— Negotiable securities
— Private claims
······· Securities collateralised through CCBM
– · – Other securities [c]
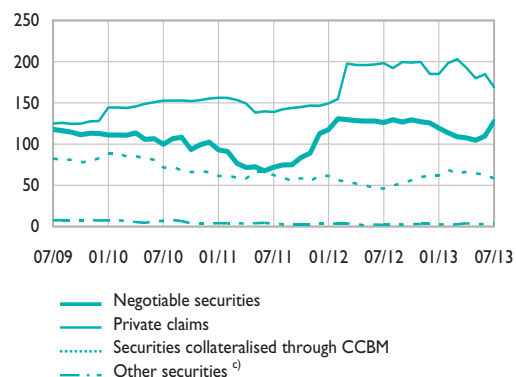
Collateral used in July 2013 [b]

Securities collateralised through CCBM 16%
Other foreign securities [c] 1%
French negotiable securities 36%
Private claims 47%
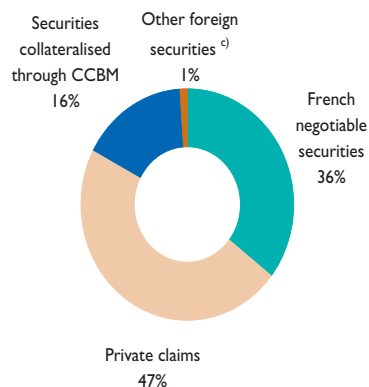
a) Since 18 February 2008, TBF (the French component of TARGET) and PNS systems have been replaced by TARGET2-Banque de France, the single French large-value payment system.
b) Until 15 February 2008, the indicated amounts corresponded to collateral used for intraday credit in TBF. Since the go-live 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.

Source: Banque de France.

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